

- d) Its belief that the present degree structures in chemistry, mathematics and physics and in geological and geophysical engineering have proven and are proving of substantial and unusual value to the Mines graduates in those fields.

curriculum. As implied below, science instruction in this context is defined to mean the instruction optimally appropriate to the present undergraduate and graduate degree structure.

3. It is the decision of the Board that the offering of undergraduate degrees in science, either in place of or in addition to the present degrees in mathematics, physics and chemistry and in geological and geophysical engineering, is not to be further considered at this time.

The Board takes this decision in view of:

- a) Its having heard no cogent argument for the offering of such degrees.
- b) Its understanding that science degrees of range and quality adequate to the need are presently being offered at other Colorado public and private institutions.
- c) Its judgment that pursuing permission to offer undergraduate science degrees through the necessary routines and procedures at CCHE would be uncertain in outcome and would consume energy and goodwill urgently needed for other matters, and

Draft of Proposed Trustee Statement  
on Science Instruction and Science Degrees  
at the Colorado School of Mines

9/22/82

The related questions of the breadth and depth of science instruction at Mines and the possibility of the granting of undergraduate degrees in science by the School were raised as discussion points at the 1981 Keystone Trustee Conference. Since that time, the Board has heard comments on these points and has discussed the issues both formally and informally. This extended consideration culminated in an open meeting on the campus prior to the regularly scheduled Board of Trustee meeting on Friday, September 10 last.

In order to permit and facilitate orderly planning for the future, the Board wishes to make known its views and decisions as follows:

1. The Board believes the issues of science instruction at Mines and of undergraduate degrees in science at Mines to be separable but related issues with the latter a subset of the former.
2. With regard to the breadth and depth of science instruction, the Board recognizes the critical role of instruction in the sciences in the Mines curriculum and encourages free and full discussion of this important point in the light of the future graduate profile and the proposed revised

## RECORD OF PROCEEDINGS

5

Request to CSMF Board for Transfer of Raytheon's Unrestricted Gift to Student Financial Aid. The administration requests Board approval to utilize Raytheon's unrestricted gift for student financial aid and to request this earmarking of funds from the CSMF Board. Raytheon has prior knowledge of this decision.

Mr. Wilson said that if there is no objection, this request has Board approval.

Bank Resolution. Mr. Scott presented bank resolution which establishes banking relationship with United Bank of Arapahoe. It will be a depository for funds collected by our student loan collection agency.

It was moved, seconded and passed to approve the resolution. Signed copies of the resolution are appended hereto.

Proposed Trustee Statement on Science Instruction and Science Degrees at the Colorado School of Mines. Mr. Wilson stated that the Board members have had an opportunity to review this matter with some members of the faculty. At this time he invited comments.

Dr. Copeland, Head of the Metallurgy Department, stated that he was speaking as a member of the Committee on Academic Policy. This is the faculty committee which is charged with making recommendations with regard to the Future Graduate Profile. This Committee has been looking at different ways of arranging the curriculum, one possibility being to put in a non-engineering track. His question is if the Board approves the proposed statement, will the faculty still be able to approach the Board concerning changes. He questioned the timing of this matter.

Mr. Wilson stated that it is the intention of the Board to give rather firm guidelines. However, Mr. Coors stated that this statement does not preclude the faculty from suggesting change or from having further discussion. Mr. Wilson said that there are no phrases regarding long-term commitments or specified time period.

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Mr. Pascoe entered the meeting at this time.

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Dr. Daniel, Acting Head of the Chemistry Department, said that he and the other members of his department do not consider their graduates to be engineers. That department does have some problems concerning semantics. He feels that it would be of benefit to that program to have the Board recognize that a science degree is offered in that department.

Discussion ensued, during which it was moved, seconded and passed to approve the proposed statement, which is appended hereto.

Mr. Coors inquired how the faculty will interpret this action on the part of the Board and asked whether the door is still open. President McBride indicated that the door is always open with regard to curriculum, etc.

Mr. Wilson stated that point number 2 in the statement indicates the Board's desire and hope that there will continue to be an ongoing discussion of this important point in the light of the future graduate profile and the proposed revised curriculum.

The meeting was adjourned at 10:30 a.m., and the Board went into executive session.

  
Secretary

October 8, 1982

## RECORD OF PROCEEDINGS

4

Dr. Chevront, Registrar, reviewed the Registrar's Report for fall 1982. In response to questions regarding retention, Dr. Chevront said that the attrition between the freshman and sophomore year is about 14 percent. Approximately 65 percent of all entering freshmen graduate from Mines. This figure includes both minorities and non-minorities. He stated that there are more women on campus than last year, and that there is an increase in the number of minority students. Generally, the rate for women is lower than it is for men.

Mr. Schwartzberg complimented the Admissions staff on the improvement in minority enrollment shown over the past five years. Mr. Young and President McBride both indicated that this has been an institutional commitment.

CCHE Student Credit Hour Study. The JBC provided funds for the CCHE to conduct a study at all state institutions of higher education to determine whether or not students are earning excessive amounts of student credit hours, i.e., are students earnings hours over those required for completion of study programs and are there conclusions to be drawn which indicate possible cost savings to the state.

Dr. Nyikos served as a member of the consulting committee which advised the contractor conducting the study. He reported to the Board that the study found some institutions and programs which produced credit hours in excess of requirements, but those instances were of specific intent and did not bear out any cost savings potentials. At CSM, the study showed that although some students exceed the required credit hours none were excessive and well within the study design.

Mr. Wilson suggested a neutral to positive response.

Legislative Council Public Hearing on CCHE Sunset Review. Mr. Schwartzberg reported on this hearing which was held on September 28, noticing that he gave a summary review of the Mines position letter dated March 8, 1982 which the Board had validated. The letter reflects the feeling of the Board that the Commission's functions are appropriate, the principal functions being program review and new program coordination and approval, that the Commission is doing a satisfactory job of its statutory responsibilities, and that the Commission is the proper agency to do this work.

Mr. Schwartzberg also stated at the hearing, as also contained in the letter of March 8, that he feels there are two things that could be considered to further the effectiveness of the Commission: the first is that the Commission should be a better advocate for the institutions; the second is that some friction exists between the CCHE staff and the institutions because it is not quite clear whom the Commission is serving or whom it represents; a better job of identifying position would likely relieve some of the difficulty.

Mr. Schwartzberg stated that there are two recommendations in the auditor's report to the Committee, one of which is the endorsement of a "super board", and the other is that the setting of tuition should not be in the hands of the institutions. He said that two of the Senators present took issue with the second recommendation, indicating that it threatened the Memorandum of Understanding.

Mr. Schwartzberg recommended that our staff follow very closely what happens in the Legislature with regard to these comments. He pointed out that the final comment in the March 8 letter is the recommendation of continuation of the Commission in essentially the same fashion as it has been structured.

Mr. Wilson thanked Mr. Schwartzberg for his report.

Final Approval of 1983-84 Budget. Mr. Scott stated that the budget was prepared in conformance with the parameters approved in July. The budget needs final Board approval.

It was moved, seconded and passed to approve the budget.

October 8, 1982

## RECORD OF PROCEEDINGS

3

President McBride called the Board's attention to the following salary adjustments and asked for its approval.

John A. Cordes Associate Professor of Mineral Economics	From \$27,710 to \$29,900 for the 1982-83 academic year
John V. Kline Professor of Physics	From \$35,625 to \$38,000 for the 1982-83 academic year
Frank S. Mathews Professor of Physics	From \$36,845 to \$38,000 for the 1982-83 academic year

Mr. Wilson asked that the minutes reflect that the Board approved the salary adjustments.

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the Three Months Ending September 30, 1982; Colorado School of Mines Current Funds - Summary by Fund for the Three Months Ending September 30, 1982; and Colorado School of Mines Time Deposits and Investment Report, dated September 30, 1982. He said that the School is operating within its financial plan. The ERL's expenses continue to exceed its income.

Mr. Scott reported on the budget status as conformed to by the Governor's action ordering a two percent reduction in general funding for most agencies, including all higher education institutions and agencies. The immediate impact on CSM is the loss of the two percent general fund amount of \$171,403 and the possible loss of any capital construction or controlled maintenance projects not encumbered as of this date. He said that it is estimated that an additional two percent rescission may be effected in January 1983. We have carried forward an amount of approximately \$230,000 from FY 1982. \$258,598 of the 1982-83 budget has not been allocated to the departments. There are two or three obligations against the latter plus the rescission, leaving us with an unallocated balance of approximately \$67,000.

President McBride noted that what is being proposed by the administration is to continue in unallocated but appropriated status the \$258,598 and to allocate from it minimal amounts internally as needs arise. This procedure will meet the first two percent fund reduction. He proposed a hiring freeze as of this date. He said that with the freeze in effect, arrangements for hiring may not be made without advance arrangements. There are very few openings unfilled at the moment. We will still be holding a reserve amount of approximately \$230,000 until later in the fiscal year.

The Board indicated its understanding of and consensus in these fiscal measures.

CSM Federal Credit Union. Mr. Scott reviewed letter dated October 7, 1982 from Mr. Warner M. Straley, Jr., Manager of the credit union, describing its operation. The credit union is being moved to 1020-19th Street effective October 22. The credit union is a separately chartered, separately insured organization and does not impose any shared responsibility on the part of the Board.

Green Center Roof Litigation. Mr. Scott reported that the settlement is proceeding as agreed to by the Board at the September meeting, at the settlement level of \$250,000. The settlement papers are being circulated among the numerous defendants, and payment is expected within the next 30 days. The Board will be asked at a subsequent meeting to approve finally the expenditure of gift funds in an amount sufficient to cover expenditures made and not recovered.

Admissions. Mr. Young, Director of Admissions, reported that we are accepting students for fall 1983.

October 8, 1982

# RECORD OF PROCEEDINGS

2

Barbara M. Olds  
Part-time Instructor in Humanities and  
Social Sciences \$ 5,000 for the fall semester of  
the 1982-83 academic year

Guy H. Towle  
Associate Professor of Geophysics 33,000 for the 1982-83 academic  
year

Norman B. Wilson  
Visiting Assistant Professor of  
Humanities and Social Sciences 10,000 for the fall semester of  
the 1982-83 academic year

## Continuation of Appointments:

Martin B. Goldhaber  
Advisory Scientist for the Department  
of Chemistry and Geochemistry No salary for the 1982-83 academic  
year

Samuel S. Goldich  
Adjunct Professor of Geology No salary for the 1982-83 academic  
year

Jerald E. Jones  
Assistant Research Professor of Metallurgical  
Engineering and Acting Assistant Director of  
the Center for Welding Research 5,445 for the 1982-83 academic  
year

Hossein Kazemi  
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Engineering 5,000 for the fall semester of  
the 1982-83 academic year

Gregory R. McArthur  
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Sciences and Engineering Ecology 5,900 for the 1982-83 academic  
year

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and Social Sciences 10,000 for the fall semester of  
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October 8, 1982

# RECORD OF PROCEEDINGS

Golden, Colorado  
October 8, 1982

The Board of Trustees met in regular session on October 8, 1982, at 9:00 a.m.

Trustees present: Messrs. Coors, Henderson, Pascoe, Rosenzweig, Schwartzberg, Wilson and Wood.

Absent: Mr. Warren.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Nyikos, Robbins and Scott, Dean Golden, and other staff members, visitors and a representative of the press.

President McBride introduced Shelly Billinger of the 1982 Prospector staff, who distributed a copy of the yearbook to each member of the Board. Mr. Rosenzweig, on behalf of the Board, thanked Shelly and the rest of the Prospector staff for a job well done.

Previous Minutes. The minutes of the meeting held on September 10, 1982 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Philip R. Calhoun Adjunct Associate Professor of Basic Engineering	\$ 3,600 for the fall semester of the 1982-83 academic year
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Secretary

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October 8, 1982

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October 8, 1982

# RECORD OF PROCEEDINGS

Golden, Colorado  
October 8, 1982

The Board of Trustees met in regular session on October 8, 1982, at 9:00 a.m.

Trustees present: Messrs. Coors, Henderson, Pascoe, Rosenzweig, Schwartzberg, Wilson and Wood.

Absent: Mr. Warren.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Nyikos, Robbins and Scott, Dean Golden, and other staff members, visitors and a representative of the press.

President McBride introduced Shelly Billinger of the 1982 Prospector staff, who distributed a copy of the yearbook to each member of the Board. Mr. Rosenzweig, on behalf of the Board, thanked Shelly and the rest of the Prospector staff for a job well done.

Previous Minutes. The minutes of the meeting held on September 10, 1982 were approved as distributed.

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COLORADO SCHOOL OF MINES (CSM)

HISTORICAL BACKGROUND:

The Colorado School of Mines was founded by the Episcopal Bishop and accepted as a Colorado Territorial school in 1874. Since its inception CSM has been dedicated to education in mineral engineering and the earth sciences. Enabling legislation directs that the institution is "responsible for the furnishing of such instruction as is provided for in like technical schools of high grade".

The Colorado Energy Research Institute was established by the Colorado Legislature at the Colorado School of Mines in June 1974, to serve the State as a coordinating agency for the promotion of both technological and policy-related research and education in all areas related to energy. When this legislation expired in June 1982, the Legislature contracted with CSM to continue CERI in 1982-83.

INSTITUTIONAL TYPE:

Current: School of Engineering and Technology (Carnegie)  
 Special Purpose Research University and Doctoral Granting Institution  
 -- School of Engineering and Technology (Colorado Descriptor)

CCHE

Planned: School of Engineering and Technology (Carnegie)  
 Special Purpose Research University and Doctoral Granting Institution  
 -- School of Engineering and Technology (Colorado Descriptor)

ROLE FOR THE PLANNING PERIOD: (1982-83 through 1986-87)

The Colorado School of Mines shall continue to serve its special role as an institution dedicated to education in mineral and energy-related engineering and science. CSM shall provide undergraduate programs of instruction in the applied earth sciences, and programs in chemical and petroleum, geological, geophysical, metallurgical, basic, and mining engineering. Instruction in the liberal arts and sciences shall continue to the extent that the activity is appropriate in support of the role of the institution.

The Colorado School of Mines shall continue to develop graduate programs in engineering, earth sciences, and mineral economics as appropriate to the mineral and energy resources communities. Careful coordination with CSU and UC-B shall continue in engineering instructional programs.

In its major areas of expertise, it is expected that the school will continue to engage in sponsored research programs.

The Colorado School of Mines should remain basically a full-time resident campus.

SERVICE AREA:

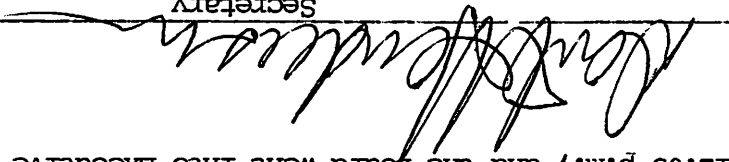
Colorado School of Mines is a national and international resource.

September 10, 1982

Session.

The meeting was adjourned at 12:05 p.m., and the Board went into Executive

Secretary



**RECORD OF PROCEEDINGS**

## RECORD OF PROCEEDINGS

4

Request to CSM Foundation Board for Approval of Transfer of Funds. President McBride called the Board's attention to memorandum dated August 17, 1982, to Martin Robbins from Dr. Mueller, requesting that funds held in two unrestricted accounts be transferred to account under Dr. Mueller's management for use as supplemental salaries for faculty in the Department of Mining Engineering. He requested that the matter be placed on the CSMF agenda at its meeting of September 15.

Discussion ensued, during which it was moved, seconded and passed to approve the request to transfer the funds.

Settlement Resolution on Green Center Roof Litigation. Mr. Scott stated that this case is currently scheduled for trial in April 1983. He explained that recently there had been a non-binding settlement conference in a setting which did not provide a basis for evidentiary use in a trial setting and, and a settlement had been recommended at \$220,000. He further reported that the School's attorney believes we are in a position now to come to a settlement at the level of \$250,000, and he distributed a proposed implementing resolution for Board approval. Total expenses are approximately \$386,000. Each party will have approximately 65% of its outlay reimbursed. He introduced Thomas Gillooly, Assistant Attorney General, who spoke to the proposed resolution and said that it meets his recommendations and requirements.

It was moved, seconded and passed to approve the proposed resolution which reads as follows:

The President and legal counsel are authorized to extend to all defendants in the case of State of Colorado, Colorado School of Mines v. The Dow Chemical Company, et al. (No. 79CV2273 in Jefferson County District Court) an offer to accept \$250,000 in settlement of the case. The President and legal counsel are authorized to set a time and date by which this offer must be accepted as well as a deadline and specific terms regarding the cash funding of the settlement, and to specify the manner in which defendants shall confirm acceptance of the offer. The President and legal counsel are further authorized to execute a settlement agreement in conformity with this resolution and containing such other terms and conditions as they find necessary, including a mutual release by the Colorado School of Mines and the defendants, and provision for dismissal of all claims in the civil action referred to above.

Request for Approval of Capital Construction Requests for 1983-84. Mr. Scott reviewed a memorandum, dated September 10, 1982, which contains the amounts requested. He explained that we need to have a facilities master plan in order to obtain funds for capital construction. He stated that there are substantial problems with Berthoud and Coolbaugh Halls. He said that the consulting fees for Alderson Hall are included in the costs.

\$313,000 is needed to produce a facilities master plan within the next 12 to 18 months. It is believed that approximately \$133,000 of that meets the criteria for inclusion in the capital construction budget. The request needs to be submitted prior to October 1.

There was a favorable consensus on the part of the Board to request \$313,000.

Alumni Fund Raising Program. Mr. David Crawford, Executive Director of the Alumni Association, gave a report on the fund raising efforts of the Association. He called the Board's attention to the meeting to be held on September 17-18 for alumni. He said that the administration will provide information regarding the new planning program, and there will be a dinner on Friday, September 17 for all of these people. Saturday morning, September 18, will be devoted to the Mines Annual Fund "pitch." There is expected to be another meeting of this type on Homecoming weekend.

## RECORD OF PROCEEDINGS

3

Robert H. King  
Associate Professor of Mining Engineering

\$4,456 from Exxon Education Foundation in equal payments, September 1982-May 1983

David K. Matlock  
Charles F. Fogarty Professor in Metallurgical Engineering

\$6,000 from the Armco Foundation in equal payments, September 1982--August 1983

Catherine A. Skokan  
Assistant Professor of Geophysics

\$6,000 from Union Oil Company in equal payments, September 1982--August 1983

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the Two Months Ending August 31, 1982; Colorado School of Mines Current Funds - Summary by Fund for the Two Months Ending August 31, 1982; Colorado School of Mines Time Deposits and Investment Report, dated August 31, 1982. He said that the School is operating within its financial plan. He told the Board that there will be a carry forward amount, from 1981-82 to 1982-83, of approximately \$260,000 after obligations are met.

Admissions and Enrollment. Dr. Chevront, Registrar, reviewed his memorandum dated September 9, 1982, regarding fall 1982-83 statistics. Total enrollment as of 5:00 p.m., September 9, is 2945. He pointed out that non-degree students are now being reported as outreach students not included in the above; that figure is 192.

Mr. Young, Director of Admissions, distributed the following memoranda: Characteristics of Freshmen Entering in Fall 1982, dated August 31, 1982; Committed Students Not Coming for Fall 1982, dated September 9, 1982; and Cost Data for Engineering Schools, 1982-83, dated September 9, 1982.

He answered questions and discussed the reasons why people were unable to commit or were committed and did not actually enter. He considers that increased costs are a factor and that the non-resident student is most severely impacted by those costs.

Report on Mining Museum and Hall of Fame. Mr. Douglas V. Watrous, President of the National Mining Hall of Fame and Museum, Inc., distributed a Progress Report and stated to the Board that the Museum now has cash on hand of \$202,261.00. He said that he is in the process of interviewing architects for preliminary design of the museum facility. He stated that a meeting will be held soon to decide if the economic climate is such that a date could be set to start the major fund drive.

Mr. Watrous introduced Mr. Frank Coolbaugh, who is a member of the Board of Governors of the Museum. Mr. Coolbaugh answered questions and stated that they may have to ask the Board of the School for an extension of their December 1984 deadline to have 5 million dollars in cash, donations and pledges on hand. He stated that earlier he had not anticipated that the

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Mr. Pascoe entered the meeting at this time.

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organization would encounter this much difficulty in the fund raising effort for the Museum; he now believes they will have to request an extension from CSM Board.

It was agreed that if a written proposal for an extension of time is presented, it will be given to Mr. Scott for review.

Mr. Wilson stated that the Board will be glad to consider a specific proposal.

Mr. Wood requested to be sent some background information on the Museum, and Mr. Coolbaugh indicated that he will comply with this request.

Mr. Wilson thanked Messrs. Watrous and Coolbaugh for their report.

September 10, 1982

# RECORD OF PROCEEDINGS

2

Archie M. Richardson Instructor in Mining Engineering	\$16,000 for the 1982-83 academic year
M. Sami Selim Associate Professor of Chemical and Petroleum-Refining Engineering	\$30,000 for the 1982-83 academic year
Ian E. Shalek Director of Research Administration	\$33,500 for the period September 1, 1982 through August 31, 1983
Randall E. Stross Instructor in Humanities and Social Sciences	\$20,000 for the 1982-83 academic year
T. Wayne Wall Part-time Instructor in Mathematics	\$8,000 for the 1982-83 academic year
Continuation of Appointments:	
Earl K. Madsen Adjunct Associate Professor of Mineral Economics	\$4,350 for the 1982-83 academic year
Jerome M. Morse Adjunct Professor of Physics	\$2,000 for the 1982-83 academic year
Reuben J. Ross, Jr. Adjunct Professor of Geology	\$13,500 for the 1982-83 academic year
Reappointments:	
Roger P. Hansen Adjunct Associate Professor of Environmental Sciences and Engineering Ecology	\$3,400 for the 1982-83 academic year
Barry B. Hughes Adjunct Professor of Humanities and Social Sciences	\$2,750 for the fall semester of the 1982-83 academic year
O. B. Sholders Adjunct Associate Professor of Basic Engineering	\$4,200 for the fall semester of the 1982-83 academic year
Linden E. Snyder Adjunct Assistant Professor of Basic Engineering	\$1,800 for the fall semester of the 1982-83 academic year
Leave of Absence:	
Jerrold J. Burnett Professor of Physics	On leave without pay for the 1982-83 academic year
Salary Supplements:	
Robert M. Baldwin Associate Professor of Chemical and Petroleum-Refining Engineering	\$6,000 from Exxon Education Foundation in equal payments, September 1982--August 1983

September 10, 1982

# RECORD OF PROCEEDINGS

Golden, Colorado  
September 10, 1982

The Board of Trustees met in regular session on September 10, 1982, at 9:00 a.m.

Trustees present: Messrs. Coors, Henderson, Pascoe, Rosenzweig, Schwartzberg, Warren, Wilson and Wood.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Nyikos, Robbins, Scott and Welles, Dean Golden, and other staff members, visitors and a representative of the press.

Previous Minutes. The minutes of the meeting held on July 17, 1982 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

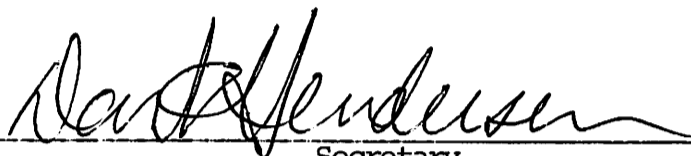
Rene N. Ballard Adjunct Professor of Management and Administration	\$7,000 for the period September 1, 1982 through August 31, 1983
Randal J. Barnes Part-time Instructor in Mining	\$6,500 for the 1982-83 academic year
Richard J. Carlson Part-time Instructor in Basic Engineering	\$2,400 for the fall semester of the 1982-83 academic year
Robert H. Gesumaria Adjunct Associate Professor of Basic Engineering	\$1,800 for the fall semester of the 1982-83 academic year
Marvin M. Johnson Phillips Visiting Professor of Chemical and Petroleum-Refining Engineering	No salary for the fall semester of the 1982-83 academic year
Connie Kenward Part-time Instructor in Mineral Economics	\$3,300 for the 1982-83 academic year
Thomas R. LaFehr Professor of Geophysics	\$42,000 for the 1982-83 academic year
William E. Marlatt Visiting Professor and Acting Head Environmental Sciences and Engineering Ecology Department	\$42,000 for the 1982-83 academic year
Thomas D. Martin Instructor in Physics	\$19,000 for the 1982-83 academic year

## RECORD OF PROCEEDINGS

5

Mr. Crawford of the Alumni Association stated that on September 17-18, 50 to 75 fund raising volunteers will be on the campus. There will be a banquet for those people on Friday, September 17. The Board will be receiving more information and an invitation to attend the banquet.

The meeting was adjourned at 4:00 p.m., and the Board went into executive session.



A handwritten signature in cursive script, appearing to read "David Henderson", is written over a horizontal line.

Secretary

## RECORD OF PROCEEDINGS

4

Mr. Welles discussed the Role and Mission Statement, page 1-3, and indicated that this is the statement which is reproduced in the plan. Mr. Henderson said that he feels that some reference should be made to the Future Graduate Profile. Discussion ensued during which it was agreed that President McBride will rewrite the Role and Mission Statement to include the thrust of the Future Graduate Profile.

President McBride answered questions with regard to pages 2-5, 2-6 and 2-14.

Dr. Burgess will submit to President McBride a short description of the Institute for Minerals and Energy Management for inclusion in Section 7.

President McBride called the Board's attention to Section 2-1, Discrimination in Employment. This section is totally revised and corresponds exactly with the Affirmative Action Plan which the Board adopted in October. Mr. Schwartzberg suggested editing the last paragraph on 2-30 by changing the word "man" to "person."

Mr. Scott participated in the discussion on the sick leave policy, page 2-36, for faculty. President McBride explained the sick leave policy to the Board and answered questions. Mr. Scott answered questions concerning the disability retirement policy.

Dr. Golden discussed Appendix E, which is the patent policy. He explained that the new policy is a liberalization, an attempt to generate activity. Mr. Pascoe asked that the minutes reflect that Dr. Golden stated that there is a three-fold increase in activity since this policy has been implemented. Dr. Golden explained that there is a committee which passes on the proposed patents, but that CSM does not have a patent attorney. Mr. Schwartzberg suggested some specificity with regard to patents done in line with work-related projects.

It was moved, seconded and passed to approve the draft of the Faculty Handbook with the revisions that President McBride will make.

President McBride commented that if all goes according to plan, the Board should receive a copy of the printed Handbook in September.

Role and Mission Statement. President McBride suggested that it may not be quite appropriate to approve the statement at this time.

The Board indicated that it has no objection to deferring action on this.

Board Study Session for September, and List of Suggested Topics for Future Board Study Sessions. President McBride recommended that the Board have a study session in September on fund raising. He said that he, Mr. Crawford, Mr. Robbins and Mr. Welles recommend to the Board that it allow them to jointly prepare a study session for the Board on fund raising in September. The President further called the Board's attention to a list of suggested topics for other later study sessions.

It was the consensus that the Board will deal with fund raising in September, which will be an afternoon session. The Board will react later to a schedule for future study sessions.

Announcements. Dr. Mueller invited the Board to the Faculty Conference on August 23 at 8:30 a.m. in the Green Center.

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Mr. Scott stated that he will have a property inventory completed in August and will report later to the Board.

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July 17, 1982



## RECORD OF PROCEEDINGS

3

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the twelve months ending June 30, 1982 "preliminary"; Colorado School of Mines Current Funds - Summary by Fund for the twelve months ending June 30, 1982 "preliminary"; Colorado School of Mines Time Deposits and Investment Report, June 30, 1982 "preliminary." He reviewed these reports and said that he expects no difficulty with the carry forward amount of approximately \$240,000.

Admissions. Dr. Nyikos told the Board that the fall class is now set. He said that he expects a slightly lower number of first-time entering freshmen students. He will report to the Board in September or October concerning the "no shows." Dr. Nyikos answered questions.

Salary Revision, Robert L. Case. President McBride explained that Mr. Case's salary appears in the salary schedule made a part of the June minutes just approved as \$54,600, whereas the salary schedule presented to the June meeting showed \$52,500. This discrepancy is an error in the President's Office, the correct salary being the higher number.

Mr. Wilson said that if there is no objection, the minutes should reflect approval of the salary of \$54,600.

Ratification of Land Acquisition at 1812 Illinois Street. Mr. Scott said that in accordance with the consensus of the Board at its June 11, 1982 meeting, the School has acquired the property located at 1812 Illinois from Mrs. Berta Schweizer for the sum of \$90,000. The purchase was arranged within the guidelines approved by the Board.

It was moved, seconded and passed to ratify the acquisition of the property.

Survey Field Water Line Easement. President McBride told the Board that the City of Golden plans to install a 16-inch water line to connect to an existing pipeline along Colorado Highway 93, the preferred route being directly across the Mines survey field west of Highway U.S. 6. The difficulty is that the easement might possibly interfere with future development planning. In order to meet this objection, the City of Golden has proposed that the easement be portable, at CSM's sole request, and the City shall pay up to \$20,000 of the costs for the desired relocation. President McBride recommended approval.

It was moved, seconded and passed to accept the administration's recommendation with respect to the City's request for the pipeline, subject to the preparation of proper legal documents.

Approval of Budget Parameters, 1983-84. President McBride explained that CSM is required to submit its budget request for 1983-84 by September 10, 1982. It is in order for the Board to review and approve the budget parameters.

Mr. Scott reviewed the recommended budget and said that the parameters are consistent with the five-year plan under discussion at the Keystone Conference.

Dr. Nyikos expressed concern about the increase in tuition, and Mr. Rosenzweig suggested that the students be further enlightened as to why tuition is rising at the present rate. He expressed a desire to help in this kind of campaign. President McBride suggested scheduling student budget sessions in the future. Mr. Schwartzberg said that one of the concerns of the State Legislature is limiting access at CSM consequent upon rising tuition.

It was moved, seconded and passed to approve the recommended budget parameters for 1983-84.

Faculty Handbook. President McBride told the Board that this issue of the Handbook has been prepared by the administration and is not in his opinion a substantial revision. The document needs to be approved by the Board in draft form today so that it can be printed in time for distribution at the Faculty Conference, August 23.

# RECORD OF PROCEEDINGS

2

## Continuation of Appointment:

Leanne Baker Part-time Instructor in Mineral Economics	\$ 6,300 for the 1982-83 academic year
Donald G. Davis Adjunct Associate Professor of Petroleum Engineering	3,100 for the fall semester of the 1982-83 academic year
Robert D. Knecht Adjunct Associate Professor of Chemical & Petroleum-Refining Engineering	4,400 for the 1982-83 academic year

## Leave:

Harry W. Peterson Professor of Basic Engineering	On leave without pay 45% of time for the 1982-83 academic year
Beatrice E. Willard Professor of Environmental Sciences & Engineering Ecology and Head of Department	On leave without pay for the 1982-83 academic year

## Change in Status:

Matthew J. Hrebar  
Mining Engineering Department

Professor Hrebar's title is changed from Associate Professor to Instructor. He will enroll at CSM as a candidate for the Ph.D.

## Salary Supplements:

Annette L. Bunge Assistant Professor of Chemical and Petroleum-Refining Engineering	\$6,000 from Exxon Education Foundation in equal payments, September 1982-August 1983.
Thomas L. Davis Associate Professor of Geophysics	7,500 from Atlantic Richfield Foundation in equal payments, September 1982-August 1983.
Gregory S. Holden Assistant Professor of Geology	7,500 from Atlantic Richfield Foundation in equal payments, September 1982-August 1983.
P. James LeAnderson Assistant Professor of Geology	7,500 from Atlantic Richfield Foundation in equal payments, September 1982-August 1983.
Charles H. Stoyer Assistant Professor of Geophysics	7,500 from Atlantic Richfield Foundation in equal payments, September 1982-August 1983.

July 17, 1982

# RECORD OF PROCEEDINGS

Golden, Colorado  
July 17, 1982

The Board of Trustees met in regular session on July 17, 1982 at 1:30 p.m., in Keystone Lodge, Keystone, Colorado.

Trustees present: Messrs. Coors, Henderson, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Trustee Designate present: Mr. Rosenzweig.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Nyikos, Robbins, Scott and Welles, Dean Golden, and other staff members, visitors and a representative of the press.

Oath of office was administered to student Trustee Rosenzweig and was properly executed by him. Mr. Wilson welcomed him.

Previous Minutes. The minutes of the meeting held on June 11, 1982, were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Abdelwahid Ibrahim Associate Professor of Geophysics	\$30,000 for the 1982-83 academic year
Sanford W. Krolick Assistant Professor of Humanities and Social Sciences	20,000 for the 1982-83 academic year
Ann Lerew Librarian	18,000 for the period September 1, 1982 through August 31, 1983
Charles E. Lienert Assistant Professor of Mineral Economics	28,000 for the 1982-83 academic year
John M. Moore Part-time Instructor in Mineral Economics	6,300 for the 1982-83 academic year
Robert C. Murphy Part-time Instructor in Mineral Economics	6,300 for the 1982-83 academic year
Catherine A. Skokan Assistant Professor of Geophysics	24,000 for the 1982-83 academic year
Garon C. Smith Instructor in Chemistry and Geochemistry	10,000 for the 1982-83 academic year
Robert S. Thompson Assistant Professor of Petroleum Engineering	30,000 for the 1982-83 academic year

PLEASE PRINT OR TYPE NAMES IN THIS COLUMN	ROOM	SIGNATURE OF PERSONS AUTHORIZED TO SIGN	SIGS. REQ.
*Any authorized representative of depositor may contract regarding transfer of funds relating to this account.			

Colorado School of Mines  
 NAME OF BUSINESS  
1500 Illinois  
 ADDRESS  
Golden, CO      80401  
 CITY-STATE      ZIP  
273-3000  
 PHONE  
Higher Education  
 TYPE OF BUSINESS  
 BANK REFERENCE  
 BY  
 (1) OFFICER REFERENCE      (2)  
 DATE THIS CARD REC'D  
 OTHER CNB SERVICES      EMPLOYER ID NO.

C A  
C C

Colorado School of Mines      ACCOUNT NO. \_\_\_\_\_  
 NAME OF CUSTOMER       CHECKING       SAVINGS  
 The undersigned, being the Secretary of Customer, certifies that Customer is a validly existing  corporation  unincorporated association organized under the laws of the State of Colorado doing business under the name and style of Colorado School of Mines located at Golden, CO 80401 that a meeting of Customer's Board of Directors was duly held on June 11, 1982 which a quorum was present and acting throughout and adopted the following resolution which is in conformity with the provisions of articles of incorporation and by-laws of Customer and that such resolution is now in full force and effect:  
 "RESOLVED, the Colorado National Bank (Bank), is designated a depository bank of this (corporation) (association) and is authorized to recognize the signature(s) of the representative(s) of this (corporation) (association) designated below in paying funds or transacting business relating to such  checking  savings Account No. \_\_\_\_\_ maintained with Bank, which authority shall remain in effect until further order, in writing, of this (corporation) (association) and that all monies and items deposited to such account are received by Bank on the following terms and conditions:  
 \*This (corporation) (association) shall have the sole right, title and interest in the ownership of such account.  
 \*Checks, drafts or orders for the payment of money withdrawing funds from such accounts are to be signed by Guy T. McBride, Jr., as President or \_\_\_\_\_ and countersigned by W. G. Scott as Treasurer or \_\_\_\_\_ (Designate names and titles of officers or others authorized to sign and countersign. Specimen signatures on reverse side.)

\*Bank is authorized to pay any such checks, drafts or orders when bearing the signatures of such authorized representatives without inquiry as to the circumstances of their issue or disposition of their proceeds, whether drawn to bearer, or cash, or the order of any such representative signing the same or tendered by such representative for cashing or in payment of an individual obligation of such representative's personal account. Any one of the representatives designated above may endorse any items for deposit in the name of this (corporation) (association) and such endorsements may be made by stamp, in which case Bank shall be under no duty to determine who may have affixed the stamp.  
 \*All items deposited to such account by or on behalf of this (corporation) (association) are purchased or received by Bank for collection only and credited on condition that the proceeds thereof actually be received by Bank, and until such actual receipt, said items or proceeds thereof are handled at the risk of (corporation) (association). Bank shall not be liable for the loss of items in the mails or by reason of the conduct or omissions of correspondent banks or others into whose possession or control such items may be delivered. This (corporation) (association) acknowledges that credit for any deposit in such account is given conditionally by Bank, with Bank reserving the right to charge back to this (corporation) (association) any unpaid item or return therefor which is unpaid, although the unpaid item itself is not returned to Bank. Such account is subject to all rules and regulations now or hereafter adopted by Bank. This (corporation) (association) shall indemnify Bank for all expenses incurred by Bank involving such account, including attorneys fees and any court costs, in connection with any deposited item returned to Bank unpaid, any adverse claim made, or any other dispute pertaining to such account, and for all loss or liability, including attorneys fees and any court costs, in any way related to the deposit in such account of any item drawn to the order of or endorsed in the name of the (corporation) (association) or any trade name used by it. Bank's responsibilities pertaining to such account, or any monies or items deposited in it, are limited solely to customary banking practices, as determined by Bank, followed by national banking associations in Bank's community.  
**\*See Reverse Side for Additional Authority**

The undersigned further certifies that the signatures appearing on the reverse side hereof are the signatures of the above-designated representatives duly authorized by the foregoing resolution.  
 Witness my hand and the seal of Customer this 11th day of June, 1982  
 (SEAL) Secretary Don K. Henderson  
 Confirmed: James C. Wilson  
 (CHIEF EXECUTIVE OFFICER) President of Board

CORPORATION (ASSOCIATION)  
Colorado School of Mines Payroll  
 NAME OF ACCOUNT       CHECKING       SAVINGS  
 DATE June 11, 1982  
 (1) Guy T. McBride, Jr.      No. Sigs. Required 2

W. G. Scott

## RECORD OF PROCEEDINGS

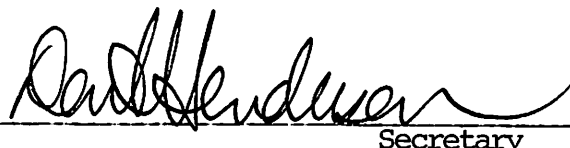
21

unrestricted funds from the Foundation which will be allocated to loans. He referred to his memorandum dated May 5, 1982, which presents guidelines for use in the loan program. He stated that he and Dr. Nyikos recommend the adoption of them by the School for all loans.

President McBride stated that he does not anticipate that the often-discussed Foundation loan program proposed to supplement the above programs will be needed, at the worst, until the opening of the second semester 1983. If it appears to be needed in January, the Board will be requested to approve implementation for that date. He said that he is asking for approval in principle for the School to borrow money under conditions outlined by Mr. Robbins and Dr. Nyikos. Specific arrangements for borrowing have not been worked out, but would have to be approved by the Board. He stated that it will be a rigidly controlled loan program not subject to abuse.

It was moved, seconded and passed to approve in principle subject to details at a later date.

The meeting was adjourned at 11:00 a.m., and the Board went into executive session.



Secretary

June 11, 1982

## RECORD OF PROCEEDINGS

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Keystone Arrangements. Mr. Welles told the Board that some of the guests who will be attending the Keystone Conference are Dr. Lee Kerschner, Executive Director of CCHE, James Lichtenberg of Hill and Knowlton, Charles Meyers, former Dean of the Stanford Law School, Thomas Sawyer, Treasurer of AMAX, Bill Moffett of Gulf Oil Corp., and State Representatives Chris Paulson and William Artist.

Mr. Welles reviewed the agenda for the Keystone Conference and stated that some of the materials will be mailed to the Board on July 2. A revised table of needs will be presented to the Board for Keystone discussion only and will come to the Board for its approval in September or October.

Interim Mines Master Plan. Mr. Welles presented a resolution concerning the CSM Master Plan for approval. He explained that when CSM requests capital construction funds it is required to have on file with CCHE an approved Master Plan. He asked for approval of the interim plan so that Mines will not get "hung up" in the budgetary process.

It was moved, seconded and passed to approve the resolution as follows:

WHEREAS the Colorado School of Mines is in the final phases of a long range planning process begun in September, 1980 to produce a master plan for the period 1981-82 through 1986-87, and

WHEREAS three documents have been serving as the planning basis for our actions since 1978, to wit:

1. "Long Range Master Plan for Colorado School of Mines, Golden, Colorado", Warnecke/Painter May 1971,
2. "Academic and Facilities Planning for the Colorado School of Mines 1976-1985", a report prepared by the ad hoc sub-committee of the Planning Committee, April 1976, and
3. Those portions pertaining to the Colorado School of Mines of "A Plan and a Process for Post Secondary Education in Colorado, 1978-79 through 1982-83", Colorado Commission on Higher Education, February 1978;

NOW THEREFORE BE IT RESOLVED that the Board of Trustees of the Colorado School of Mines declares that these previously named documents combine to serve as the interim master plan for the School in budgetary and capital construction matters until the new master plan is completed.

CSM Student Loan Program. Dr. Nyikos distributed and reviewed a document entitled Summary of CSM Loan Funds by Source and Status of Availability for Distribution 1982-83. He introduced Warren Mason and Carol Thompson of the Financial Aid Office, who offered to answer questions. He reviewed sources of loans for need based and no-need students. Since CSM Agency Funds and CSM Foundation Inc. funds are considered last resort, the Financial Aid Director exercises discretion in making loans for both need and no-need students. This is the first year for such availability.

Mr. Martin Robbins of the CSM Foundation stated that while the CSM Foundation has not activated a major loan program, Mr. Mason has several funds from which he will be drawing within the next few months. These include loan funds such as the Parsons Foundation and the Al Cohen Construction Company Loan Fund, as well as any portion of the

# RECORD OF PROCEEDINGS

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Joseph C. Weber Assistant Dean for Research Development and Associate Professor of Mineral Economics	\$36,000
John G. Welles Vice President for Planning and Public Affairs	62,500
A. William Young Director of Admissions	31,900

Report from CERI, Approval of CERI Budget for 1982-83. President McBride introduced Robert Case, the new Director of CERI. Mr. Case discussed the recent legislative action which enables the continuation of CERI. He distributed and reviewed the contract between the State of Colorado and CSM and the proposed CERI budget for 1982-83. He reported on work in progress and indicated that the staff has been reduced from 10.2 to 8 FTE.

It was moved, seconded and passed to adopt the budget as presented.

Robert L. Case Director, Colorado Energy Research Institute	54,600
Carol L. Etter Research Associate, Colorado Energy Research Institute	21,700
Carolyn Ann Lowery Program Manager, Colorado Energy Research Institute	35,500
Gennifer M. Sussman Program Manager, Colorado Energy Research Institute	35,500
Graham C. Taylor Director of Research Operations, Colorado Energy Research Institute	43,400
Peter Warren Director of Research Planning, Colorado Energy Research Institute	43,400

President McBride stated that he would like an opportunity to discuss the individual salaries with Mr. Case before implementing the budget.

Mr. Wilson thanked Mr. Case for his report.

Bank Resolution. Mr. Scott stated that he is asking for Board approval to establish a Colorado School of Mines payroll checking account at the Colorado National Bank in Golden. He indicated that it is a standard resolution which needs to be signed by Mr. Wilson and Mr. Henderson.

It was moved, seconded and passed to approve the resolution, copy of which is appended hereto.

Request to Change Date of March 1983 Board Meeting. President McBride requested that the March 1983 Board meeting be changed from March 11 to March 4 inasmuch as the CCEH is meeting on the CSM campus on March 3 and 4 and spring break begins the week of March 6.

It was moved, seconded and passed to change the March 1983 Board meeting from March 11 to March 4.

June 11, 1982

# RECORD OF PROCEEDINGS

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Robert J. Hensley Admissions Counselor	\$21,900
Janice C. Hepworth Director of Special Programs and Associate Research Professor	39,000
William T. Hill Director of Student Activities	21,000
William A. Ingels Administrative Services Officer	35,500
Kathryn Jens Director of Student Development	23,000
Andrew M. Lopez Affirmative Action/Contract Review Officer	25,800
* Warren J. Mason Director of Financial Aid	30,000
Charles S. Morris Director of Public Relations	31,500
William M. Mueller Vice President for Academic Affairs and Dean of the Faculty and Professor of Metallurgical Engineering	67,200
Michael S. Nyikos Vice President for Student Affairs and Dean of Students	48,000
Judith O'Brien Personnel Officer	28,700
Jon W. Raese Director of Publications	28,200
Martin D. Robbins Vice President for Development and Executive Director of the Colorado School of Mines Foundation	60,000
W. Gordon Scott Vice President for Business Affairs	58,900
Warren A. Spaulding Director of Cooperative Education and Placement	25,000
Carolyn Sudermann Departmental Assistant	26,000
Richard Sudermann Director of Plant Facilities	41,500
Frank Waterous Admissions Counselor	20,500
*Guy T. McBride, Jr. President	75,000

June 11, 1982



PLEASE PRINT OR TYPE  
 NAMES IN THIS COLUMN

CO  
 DE

SIGNATURE OF PERSONS  
 AUTHORIZED TO SIGN

SIGS.  
 REQ.

\*Any authorized representative of depositor may contract regarding  
 transfer of funds relating to this account.

Colorado School of Mines

ACCOUNT NO.

NAME OF CUSTOMER

CHECKING

SAVINGS

The undersigned, being the Secretary of Customer, certifies that Customer is a validly existing  corporation  unincorporated associati  
 organized under the laws of the State of Colorado doing business under the name and style of Colo  
 rado School of Mines located at Golden, CO 80401

that a meeting of Customer's Board of Directors was duly held on June 11, 1982  
 which a quorum was present and acting throughout and adopted the following resolution which is in conformity with the provisions of t  
 articles of incorporation and by-laws of Customer and that such resolution is now in full force and effect:

"RESOLVED, the Colorado National Bank (Bank), is designated a depository bank of this (corporation) (association) and is au  
 thorized to recognize the signature(s) of the representative(s) of this (corporation) (association) designated below in paying funds

or transacting business relating to such  checking  savings Account No. \_\_\_\_\_ maintained with  
 Bank, which authority shall remain in effect until further order, in writing, of this (corporation) (association) and that all monies and  
 items deposited to such account are received by Bank on the following terms and conditions:

"This (corporation) (association) shall have the sole right, title and interest in the ownership of such account.

"Checks, drafts or orders for the payment of money withdrawing funds from such accounts are to be signed by Guy T.  
 McBride, Jr., as President

and countersigned by W. G. Scott as Treasurer

(Designate names and titles of officers or others authorized  
 to sign and countersign. Specimen signatures on reverse side.)

"Bank is authorized to pay any such checks, drafts or orders when bearing the signatures of such authorized representatives without  
 inquiry as to the circumstances of their issue or disposition of their proceeds, whether drawn to bearer, or cash, or the order of any  
 such representative signing the same or tendered by such representative for cashing or in payment of an individual obligation of such  
 representative's personal account. Any one of the representatives designated above may endorse any items for deposit in the name of  
 this (corporation) (association) and such endorsements may be made by stamp, in which case Bank shall be under no duty to deter  
 mine who may have affixed the stamp.

"All items deposited to such account by or on behalf of this (corporation) (association) are purchased or received by Bank for collec  
 tion only and credited on condition that the proceeds thereof actually be received by Bank, and until such actual receipt, said items  
 or proceeds thereof are handled at the risk of (corporation) (association). Bank shall not be liable for the loss of items in the  
 mails or by reason of the conduct or omissions of correspondent banks or others into whose possession or control such items  
 may be delivered. This (corporation) (association) acknowledges that credit for any deposit in such account is given conditionally  
 by Bank, with Bank reserving the right to charge back to this (corporation) (association) any unpaid item or return therefor  
 which is unpaid, although the unpaid item itself is not returned to Bank. Such account is subject to all rules and regulations now  
 or hereafter adopted by Bank. This (corporation) (association) shall indemnify Bank for all expenses incurred by Bank involving  
 such account, including attorneys fees and any court costs, in connection with any deposited item returned to Bank unpaid, any  
 adverse claim made, or any other dispute pertaining to such account, and for all loss or liability, including attorneys fees and any  
 court costs, in any way related to the deposit in such account of any item drawn to the order of or endorsed in the name of the  
 (corporation) (association) or any trade name used by it. Bank's responsibilities pertaining to such account, or any monies or items  
 deposited in it, are limited solely to customary banking practices, as determined by Bank, followed by national banking associations  
 in Bank's community.

\*See Reverse Side for Additional Authority

The undersigned further certifies that the signatures appearing on the reverse side hereof are the signatures of the above-designated ro  
 sentatives duly authorized by the foregoing resolution.

Witness my hand and the seal of Customer this 11th day of June, 1982

(SEAL)

Secretary

Confirmed:

DKH  
Don K. Henderson

(CHIEF EXECUTIVE OFFICER)  
Jeffrey C. Wilson  
President of Board

CORPORATION (ASSOCIATION)

Colorado School of Mines

NAME OF BUSINESS

1500 Illinois

ADDRESS

Golden, CO

80401

CITY-STATE

ZIP

ACCOUNT NUMBER

MAIL ADDRESS IF DIFF.

PHONE 273-3000

Higher Education

TYPE OF BUSINESS

DATE OPENED

BANK REFERENCE

BY

(1)

OFFICER REFERENCE

(2)

DATE THIS CARD REC'D

OTHER CNB SERVICES

EMPLOYER ID NO.

Colorado School of Mines Payroll

NAME OF ACCOUNT

Acct. No.

CHECKING

SAVINGS

June 11, 198

DATE

(1)

Guy T. McBride, Jr.

2

No. Sigs. Required

W.G. Scott

# RECORD OF PROCEEDINGS

17

Karen B. Wiley Assistant Professor of Humanities and Social Sciences	\$21,770
Beatrice E. Willard Professor of Environmental Sciences and Engineering Ecology and Head of the Department (will be on leave without pay for the academic year)	34,000
John T. Williams Professor of Chemistry and Geochemistry	43,030
Don L. Williamson Associate Professor of Physics	28,065
Derek J. Wilson Assistant Director for Systems and Operations of the Computing Center	36,750
Robert D. Witters Professor of Chemistry and Geochemistry	33,660
Robert E. D. Woolsey Professor of Mineral Economics (MAPCO Foundation Professor of Mineral and Resource Management)	46,920
John D. Wright Instructor in Petroleum Engineering	33,175
Baki Yarar Associate Professor of Metallurgical Engineering	30,115
Frank R. Yeatts Professor of Physics	31,150
Victor Yesavage Professor of Chemical and Petroleum-Refining Engineering	33,390

## ADMINISTRATION

Harold R. Chevront Registrar	31,900
Brodie D. Farquhar Public Information Officer	23,500
Carl A. Fawcett Director of Housing, Student Center, and Green Center	33,500
Daniel R. Frelund Controller	34,000
John O. Golden Dean of Graduate Studies and Research and Professor of Chemical and Petroleum-Refining Engineering	57,500

June 11, 1982

# RECORD OF PROCEEDINGS

16

Charles H. Stoyer Assistant Professor of Geophysics	\$28,450
Harold D. Taylor Assistant Professor of Mathematics	21,640
Robert J. Taylor Associate Professor of Basic Engineering	30,780
John U. Trefny Associate Professor of Physics	28,400
Robert H. Trent Associate Professor of Mining Engineering	28,260
A. Keith Turner Associate Professor of Geology	30,930
Robert Underwood Associate Professor of Mathematics	26,580
David M. Updegraff Professor of Chemistry and Geochemistry	33,780
Mary Beth Vanderpoorten Librarian	26,740
Samuel E. Vandiver Professor of Humanities and Social Sciences	33,895
Craig W. Van Kirk Associate Professor of Petroleum Engineering and Head of the Department (additional \$3,720 will be paid for summer work as Department Head)	33,370
Kent J. Voorhees Associate Professor of Chemistry and Geochemistry	27,745
Fun-Den Wang Professor of Mining Engineering	37,910
John E. Warne Professor of Geology (will be on leave without pay during fall semester)	41,205
Robert J. Weimer Getty Professor (Professor of Geology)	52,860
J. Edward White Professor of Geophysics (Charles Henry Green Professor of Exploration Geophysics)	46,250
Ronald Wiedenhoft Associate Professor of Humanities and Social Sciences	32,760
Thomas Wildeman Professor of Chemistry and Geochemistry	34,980

June 11, 1982

# RECORD OF PROCEEDINGS

15

Samuel B. Romberger Professor of Geology	\$32,910
Philip R. Romig Professor of Geophysics	34,290
Oded Rudawsky Professor of Mineral Economics	31,070
Arthur Y. Sakakura Associate Professor of Physics (will be on leave without pay during spring semester)	32,210
Dave Ray Schmitz Assistant Professor of Mathematics	21,475
William A. Schneider Professor of Geophysics (George R. Brown Professor of Geophysics)	47,930
Franklin D. Schowengerdt Professor of Physics and Head of the Department (additional \$3,610 will be paid for summer work as Department Head)	32,490
John M. Shannon Assistant Professor of Geology and Director of the Geology Museum	26,110
E. Craig Simmons Assistant Professor of Chemistry and Geochemistry	22,425
Maynard Slaughter Professor of Chemistry and Geochemistry	32,355
E. Dendy Sloan, Jr. Associate Professor of Chemical and Petroleum- Refining Engineering	29,740
Margaret Smart Librarian	28,225
Joseph D. Sneed Atlantic Richfield Foundation Professor in the Humanities	43,720
David J. Spottiswood Professor of Metallurgical Engineering	35,990
Richard E. Stapp, Jr. Associate Professor of Physical Education and Athletics	29,480
Marilyn Stark Librarian	25,720
Franklin J. Stemple Professor of Chemical and Petroleum-Refining Engineering (assigned to the Department of Mineral Economics)	41,000

# RECORD OF PROCEEDINGS

14

Fred E. Moore Professor of Geology	\$37,905
* Raymond K. Mueller Associate Professor of Mathematics	30,980
Eric Nelson Assistant Professor of Geology	20,270
Karl R. Nelson Associate Professor of Basic Engineering	27,985
Gabriel M. Neunzert Associate Professor of Basic Engineering	28,795
Karl R. Newman Professor of Geology	31,990
Kathleen H. Ochs Assistant Professor of Humanities and Social Sciences	21,385
David L. Olson Professor of Metallurgical Engineering	39,030
Sally Oslund Assistant Director of the Computing Center and Assistant Professor of Mathematics	38,300
Mark A. Passler Assistant Professor of Physics	20,580
Michael J. Pavelich Associate Professor of Chemistry and Geochemistry	27,430
Robert W. Pearson Assistant Professor of Physical Education and Athletics	24,370
Harry C. Peterson Professor of Basic Engineering	36,785
Alfred Petrick, Jr. Coulter Professor of Mineral Economics (will be on leave at three-fourths pay during fall semester)	42,060
Thomas Philipose Professor of Humanities and Social Sciences	29,000
Hartley K. Phinney, Jr. Director of the Library	46,230
Wayne K. Richmond Adjunct Assistant Professor of Humanities and Social Sciences and Director of Chorus (approximately three hours per week)	4,500
*Charles A. Natalie Assistant Professor of Metallurgical Engineering	26,260

June 11, 1982

# RECORD OF PROCEEDINGS

13

John L. Lufkin Associate Professor of Geology and Assistant to the Head of the Department	\$28,930
Patrick MacCarthy Associate Professor of Chemistry and Geochemistry	27,350
Maurice Major Professor of Geophysics	45,470
Joseph A. Marcello Visiting Assistant Professor of Chemistry and Geochemistry (temporary appointment for one academic year)	20,360
Donald C. B. Marsh Professor of Mathematics	30,615
Scott J. Marshall Associate Professor of Basic Engineering	33,660
James W. Martin Professor of Basic Engineering	37,150
Gerard P. Martins Professor of Metallurgical Engineering	36,100
Virginia A. Mast Assistant Museum Curator (12-month contract)	17,890
Frank S. Mathews Professor of Physics	36,845
David K. Matlock Charles F. Fogarty Professor of Metallurgical Engineering	35,380
William A. Mattingly Associate Professor of English	21,320
Ruth A. Maurer Assistant Professor of Mineral Economics	26,030
Robert W. McAllister Associate Professor of Physics	30,960
Robert S. McCandless Associate Professor of Physical Education and Athletics (10-month contract)	30,485
Michael B. McGrath Director of Computing Center and Associate Professor of Basic Engineering	47,270
C. Samuel Miller Associate Professor of Basic Engineering	29,525
B. J. Mitchell Professor of Petroleum Engineering	47,000

June 11, 1982

# RECORD OF PROCEEDINGS

12

Harry C. Kent Professor of Geology and Director, Potential Gas Agency	\$45,450
Arthur J. Kidnay Phillips Petroleum Professor of Chemical and Petroleum-Refining Engineering	40,435
Robert H. King Associate Professor of Mining Engineering	31,240
John V. Kline Professor of Physics	35,625
Gail Klock Assistant Professor of Physical Education and Athletics	22,500
Ronald W. Klusman Professor of Chemistry and Geochemistry	37,520
Frank Kowalski Assistant Professor of Physics	22,040
George Krauss AMAX Foundation Professor of Physical Metallurgy	45,265
Charles R. Kroll Assistant Professor of Physical Education and Athletics	19,450
Donald Langmuir Professor of Chemistry and Geochemistry	44,925
Mary Larsgaard Librarian	26,810
William B. Law Associate Professor of Physics	29,500
P. James LeAnderson Assistant Professor of Geology	22,005
Keenan Lee Professor of Geology	33,125
Fred R. Leffler Associate Professor of Electrical Engineering assigned to Basic Engineering	31,480
Mark W. Ljungvall Instructor in Basic Engineering	18,490
James M. Lockhart Assistant Professor of Physics (on leave without pay during fall semester)	24,230
George B. Lucas Professor of Chemistry and Geochemistry	40,980

# RECORD OF PROCEEDINGS

11

<p>Gunther U. Holzer Assistant Professor of Chemistry and Geochemistry</p>	\$23,210
<p>Matthew J. Hrebar III Instructor in Mining Engineering</p>	32,280
<p>Joan R. Hundhausen Associate Professor of Mathematics</p>	24,885
<p>William A. Hustrulid Professor of Mining Engineering</p>	42,530
<p>Robert M. Hutchinson Professor of Geology</p>	31,995
<p>Robert E. Jeffrey Band Director (temporary appointment for one academic year)</p>	4,500
<p>Thys B. Johnson Professor of Mining Engineering and Head of the Department (additional \$4,670 will be paid for summer work as Department Head)</p>	42,000
<p>James G. Johnstone Professor of Basic Engineering</p>	40,940
<p>Michael C. Jones Associate Professor of Chemical and Petroleum-Refining Engineering</p>	30,465
<p>Leonard Kalal Associate Professor of Philosophy</p>	29,640
<p>Alexander A. Kaufman Professor of Geophysics</p>	35,180
<p>Thomas D. Kaufmann Philipp Brothers Professor of Mineral Economics</p>	44,625
<p>Marvin L. Kay Associate Professor of Physical Education and Athletics and Head Football Coach (11-month contract)</p>	35,760
<p>George V. Keller Professor of Geophysics and Head of the Department (additional \$5,435 will be paid for summer work as Department Head)</p>	48,925
<p>Thomas E. Kelley Assistant Professor of Mathematics</p>	22,670
<p>George H. Kennedy Professor of Chemistry and Geochemistry and Head of Department (additional \$3,970 will be paid for summer work as Department Head). (Will be on leave at one-half salary for the academic year).</p>	One-half of ----- 35,740



# RECORD OF PROCEEDINGS

10

<p>Michael S. Graboski Associate Professor of Chemical and Petroleum- Refining Engineering</p>	<p>\$27,215</p>
<p>Ramona M. Graves Assistant Professor of Petroleum Engineering</p>	<p>22,500</p>
<p>L. Trowbridge Grose Professor of Geology</p>	<p>40,465</p>
<p>Charles R. Groves Associate Professor of Basic Engineering</p>	<p>30,080</p>
<p>Raymond R. Gutzman Professor of Mathematics</p>	<p>30,250</p>
<p>JoAnn T. Hackos Assistant Professor of Humanities and Social Sciences</p>	<p>23,980</p>
<p>Frank A. Hadsell Professor of Geophysics</p>	<p>42,020</p>
<p>John P. Hager Professor of Metallurgical Engineering</p>	<p>46,900</p>
<p>James J. Halavin Assistant Professor of Mathematics</p>	<p>23,650</p>
<p>Robert D. Hamilton Assistant Professor of Geology</p>	<p>21,470</p>
<p>John W. Hancock Associate Professor of Physical Education and Athletics (9-month contract)</p>	<p>30,000</p>
<p>Robert C. Hansen Associate Professor of Basic Engineering</p>	<p>30,965</p>
<p>Peter E. Hartley Associate Professor of Humanities and Social Sciences</p>	<p>27,110</p>
<p>John D. Haun Professor of Geology (October 1, 1982 through May 7, 1983 at 25% of his salary)</p>	<p>25% of----41,510</p>
<p>T. Graham Hereford Professor of Humanities and Social Sciences and Head of the Department (additional \$5,080 will be paid for summer work as Department Head)</p>	<p>45,740</p>
<p>John A. Hogan Associate Professor of English</p>	<p>29,500</p>
<p>Gregory S. Holden Assistant Professor of Geology</p>	<p>21,885</p>

June 11, 1982

# RECORD OF PROCEEDINGS

9

Rudy C. Epis Professor of Geology	\$43,955
Elsie Christine Ericson Librarian	19,860
Robert R. Faddick Professor of Basic Engineering	32,000
Paul Fasching Assistant Director of the Computing Center	42,020
Joseph J. Finney Professor of Geology and Head of the Department (additional \$4,660 will be paid for summer work as Department Head)	41,955
Robert S. Fisk Assistant Professor of Mathematics	27,160
S. Dale Foreman Professor of Basic Engineering	34,070
Robert H. Frost Assistant Professor of Metallurgical Engineering	26,960
Anshumali Gangwar Associate Professor of Mineral Economics	35,110
James H. Gary Professor of Chemical and Petroleum-Refining Engineering (on leave for the fall semester at three-fourths pay)	54,950
John M. Gary Professor of Mathematics	39,810
Richard D. Gauthier Associate Professor of Basic Engineering	34,190
John W. Geissman Assistant Professor of Geology	21,385
Donald W. Gentry Professor of Mining Engineering	39,060
Elizabeth Gibbs Assistant Professor of Basic Engineering	22,775
Jay E. Gillette Instructor in Humanities and Social Sciences	21,770
Lynde O. Gilliam Assistant Professor of Mineral Economics	24,000
James L. Giulianelli Assistant Professor of Chemistry and Geochemistry	22,470

June 11, 1982

# RECORD OF PROCEEDINGS

8

L. Graham Closs Associate Professor of Geology	\$26,715
William D. Copeland Professor of Metallurgical Engineering & Head of the Department (additional \$4,850 will be paid for summer work as Department Head)	43,650
John A. Cordes Associate Professor of Mineral Economics	27,710
Scott W. Cowley Assistant Professor of Chemistry and Geochemistry	22,515
Richard S. Culver Professor of Basic Engineering	32,960
Stephen R. Daniel Professor of Chemistry and Geochemistry	32,940
James Darden Professor of Physical Education and Athletics	31,585
Thomas L. Davis Associate Professor of Geophysics	27,915
Richard H. DeVoto Professor of Geology	33,890
Dean W. Dickerhoof Professor of Chemistry and Geochemistry	31,005
Donald I. Dickinson Associate Professor of English	30,050
Philip F. Dickson Professor of Chemical and Petroleum-Refining Engineering and Head of the Department (additional \$4,920 will be paid for summer work as Department Head)	44,300
John P. Dyer Assistant Professor of Physical Education and Athletic Trainer	24,370
Glen R. Edwards Professor of Metallurgical Engineering	36,420
Kenneth W. Edwards Associate Professor of Chemistry and Geochemistry	26,725
John C. Emerick Assistant Professor of Environmental Sciences	21,970
Harry W. Emrick Associate Professor of Basic Engineering and Head of the Department (additional \$4,135 will be paid for summer work as Department Head)	37,205

June 11, 1982

# RECORD OF PROCEEDINGS

7

Charles W. Berry Professor of Mineral Economics and Head of the Department (additional \$5,100 will be paid for summer work as Department Head)	\$45,960
Ramon E. Bisque Adjunct Professor of Chemistry and Geochemistry (60% basis)	23,840
Ardel J. Boes Professor of Mathematics and Head of the Department (additional \$3,800 will be paid for summer work as Department Head)	34,175
Emmy Booy Associate Professor of Geology	27,350
Joan N. Brooks Assistant Professor of Basic Engineering	25,425
A. R. Brown, Jr. Professor of Mathematics	39,445
Diane Brown Boettcher Librarian	19,545
James T. Brown Professor of Physics	33,690
W. Rex Bull Professor of Metallurgical Engineering	36,200
Annette L. Bunge Assistant Professor of Chemical and Petroleum Refining Engineering	23,570
Jerrold J. Burnett Professor of Physics	33,110
Nicholas P. Callas Associate Professor of Mathematics	29,880
Betty Jo Cannon Assistant Professor of Humanities and Social Sciences	22,540
Debra Carnell Assistant Professor of Basic Engineering	22,400
F. Edward Cecil Associate Professor of Physics	27,090
Jin S. Chung Professor of Basic Engineering	35,920
W. John Cieslewicz Associate Professor of Humanities and Social Sciences and Associate Professor of Mineral Economics	26,220

June 11, 1982

# RECORD OF PROCEEDINGS

6

<u>Mines Park</u> (monthly rate)	PRESENT RATE PER STUDENT	NEW RATE PER STUDENT
Buffet Apartment	\$210 util. incl.	\$225
1-bedroom Apartment	280 " "	300
2-bedroom Apartment	330 " "	355
2-bedroom House (37, 38, 39)	365 " exc. water	390
2-bedroom House (25, 26, 27, 28)	435 " exc. water	465
2-bedroom House (30, 31, 34, 35)	310 + all utilities	330
3-bedroom House	340 + all utilities	365

Residents are not responsible for irrigation of yards.

Faculty and Administrative Salary Schedules. President McBride stated that faculty and staff salary schedules have been prepared showing names and amounts. Copies of the schedules were made available to the Board.

Mr. Pascoe commented that he is pleased that the Board has been able to raise faculty salaries to the present level.

Upon motion made, seconded and passed, the Board approved the schedules.

In accordance with past practices, contracts for teaching faculty have been prepared and are to be mailed promptly following Board approval. The salary schedules forming the basis for these contracts are being presented to the Board for information and approval if desired.

The Board took cognizance of the faculty and administrative salary schedules as presented and instructed the administration to proceed. These salary schedules have been reduced for minute purposes to the following alphabetic listing:

### FACULTY

John F. Abel, Jr. Professor of Mining Engineering	\$38,425
Charles S. Aldrich Assistant Professor of Petroleum Engineering	22,500
R. Bruce Allison Professor and Head of Department of Physical Education (A.D.) (10-month contract)	42,180
William R. Astle Associate Professor of Mathematics	33,075
Charles R. Baer Assistant Professor of Mathematics	24,180
Robert M. Baldwin Associate Professor of Chemical and Petroleum- Refining Engineering	28,025
Frederick B. Bart Assistant Professor of Humanities and Social Sciences	21,260
Daniel M. Bass, Jr. Kerr-McGee Corporation Professor of Petroleum Engineering	47,690

June 11, 1982

# RECORD OF PROCEEDINGS

FY 1982-83 - ROOM AND BOARD CHARGES

<u>Academic Year</u>	PRESENT RATE PER STUDENT	NEW RATE PER STUDENT
<u>Residence Halls*</u>		
Bradford, Randall, Morgan, and Thomas		
Double Room	\$1180	\$1270
Single Room	1280	1370
<u>Twin Towers</u>		
Double Room	1400	1500
Single Room	1450	1550
<u>Meal Plans, Academic Year*</u>		
18-meal Plan	1100	1200
15-meal Plan	1000	1090
10-meal Plan	940	1020
Residence Hall Activity Fee	6	6
<u>Field Session</u>		
Randall Hall		
Room Only		
Double Room	225	245
Single Room	250	270
<u>Summer Session</u>		
Randall Hall*		
Double Room	300	325
Single Room	330	355
Twin Towers*		
Double Room	355	
Single Room	375	
<u>Meal Plans, Summer Session</u>		
18-meal Plan	280	305
15-meal Plan	255	275
10-meal Plan	240	260
<u>Prospector Village (monthly rate)</u>		
Married Student Apartments		
1-bedroom	200	215
2-bedroom	225	240
3-bedroom	250	265
Furnished	Add 30	Add 30

\*Residence Hall Students must choose either the 5-day 15-meal Plan or the 6-day 18-meal Plan.

June 11, 1982

# RECORD OF PROCEEDINGS

4

## Mandatory Accident Ins.

Mining 318, Semester	\$ 7.50
Mining 318, Field Session	3.50

## Intensive English Course

Tuition, 11 weeks		EN 01	1568
Infirmary Fee	\$12.00	EN 02	784
Student Center Fee	17.50		
Summer Activity Fee	60.00		

## Graduate Sessions

Fees are the same as for undergraduate students, with the following exceptions:

## Thesis Research - Summer

Tuition, Min. 3 sem/hrs  
(Tuition is same for  
14 weeks as 8 weeks)

*Infirmary Fee	
14 weeks	\$12.00
8 weeks	9.00
Stu Center Fee, if on campus	17.50

## Thesis Fees

The charges for the binding of theses are included in the graduation fee.

## Graduation Fees

Bachelors	\$25.00
Professional Engineers	25.00
Masters	76.00
Doctors	96.00

## \*Student Health Insurance Plan (nonmandatory)

	<u>Annual Fee. Entire Year Coverage</u>
Student	\$138.00
Spouse	151.52
Spouse & Child(ren)	288.61
Child(ren) Only	137.16
Optional Maternity	220.00

Insurance also available for  
Summer Session only, \$35.

June 11, 1982

# RECORD OF PROCEEDINGS

3

Further, Mr. Scott distributed and reviewed the following additional material: Proposed Budget Summary, 1962 Bond Issue for FY 1982-83; Proposed Budget Summary, 1966 Bond Issue for FY 1982-83; Proposed Budget Summary, New Dormitory for FY 1982-83; Proposed Budget Summary, State Rental Properties for FY 1982-83; Proposed Budget Summary, Health and Accident for FY 1982-83; Proposed Budget Summary, Athletic Association for FY 1982-83; Proposed Budget Summary, Sponsored Programs for FY 1982-83; Proposed Budget Summary, Associated Students for FY 1982-83; Proposed Budget Summary, CSM Publications for FY 1982-83; Proposed Budget Summary, Special Programs for FY 1982-83; Proposed Budget Summary, Green Center for FY 1982-83; Proposed Budget Summary, Exploration Research Lab for FY 1982-83; and Proposed Budget Summary, Plant Facilities Revolving Fund for FY 1982-83.

It was moved, seconded and passed to approve tuition, fees and dorm charges, including requested increase in athletic fees, and the Associated Students Budget for 1982-83.

### TUITION AND FEES FY 1982-83

#### Tuition

<u>Student Load</u> <u>Semester Hrs</u>	<u>Res.</u>	<u>Nonres.</u>
9.5 & over	1050	2944
8.5 - 9.0	630	1764
7.5 - 8.0	560	1568
6.5 - 7.0	490	1372
5.5 - 6.0	420	1176
4.5 - 5.0	350	980
3.5 - 4.0	280	784
2.5 - 3.0	210	588
1.5 - 2.0	140	392
.5 - 1.0	70	196

#### Fees

Infirmary	\$18.00
*Student Health Insurance	
Associated Students	13.25
Athletic	20.00
Student Center	35.00
Total	\$86.25

Orientation, New Stu                             \$ 3.50

#### Summer Session Field Courses

Tuition, 6 weeks	420	1176
Infirmary Fee, on-campus	\$ 5.00	
Stu Ctr, on-campus	13.25	

#### Summer Session Academic Courses

Tuition, same as regular academic sem.	
Infirmary Fee	\$ 9.00
Student Center Fee	17.50

\* Student Health Insurance Plan (nonmandatory)

June 11, 1982



# RECORD OF PROCEEDINGS

2

## Continuation of Appointment:

Russell F. Heckman Adjunct Professor of Chemical and Petroleum-Refining Engineering	\$10,000 for the 1982-83 academic year
Kenneth E. Kolm Visiting Assistant Professor of Geology	\$5,500 for the fall semester of the 1982-83 academic year

## Reappointment:

Harold G. Pippin Visiting Assistant Professor of Chemistry and Geochemistry	\$22,000 for the 1982-83 academic year
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## Leave:

John E. Warne  
Professor of Geology

Dr. Warne will be on leave without pay for the fall semester of the 1982-83 academic year in order to carry out exploration work in Australia.

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the eleven months ending May 31, 1982; Colorado School of Mines Current Funds - Summary by Fund for the eleven months ending May 31, 1982; Colorado School of Mines Time Deposits and Investment Report, May 31, 1982. Mr. Scott stated that the School is operating within the financial plan.

With reference to the Exploration Research Laboratory, Dr. Golden thanked the Board for having accepted the risk to continue the operation of ERL in a deficit mode. The ERL is currently budgeted to finish the year with a \$90,000 deficit. This deficit position is backed up by the expected gift from the Keck Foundation, which should be received in July. The deficit is also backed with assets of equipment in the department and over \$100,000 in departmental resources. He asked the Board's permission to continue operating in the budgeted deficit mode until the Keck gift is received.

President McBride stated that the administration recommends this approach. He asked that the minutes reflect that the Board received Dr. Golden's report and gave consensus approval.

An affirmative consensus was given by the Board.

Mr. Scott discussed the Time Deposits and Investment Report and reported that the Colorado Court of Appeals upheld the condemnation award of value to the ATO Fraternity of \$207,648 for its property. He is awaiting word from the Attorney General's office to determine if there is a legal basis for further action. He said that our initial appraisal of the property was \$125,000 and ATO's highest initial appraisal was \$177,000.

Admissions. Mr. Young stated that admissions are now closed. Discussion ensued during which Dr. Nyikos and Mr. Young answered questions.

Budgets for 1982-83 (including establishment of tuition, fees, dorm charges, Student Association, etc.). Mr. Scott stated that this is essentially the same budget which the Board saw at the May 7 Board meeting, but this budget shows the average increase in administrative compensation.

Discussion followed, during which it was moved, seconded and passed to accept the recommended budget for 1982-83, noting that the budgeted 1981-82 surplus of \$237,857 is not budgeted to be spent in 1982-83.

June 11, 1982

# RECORD OF PROCEEDINGS

Golden, Colorado  
June 11, 1982

The Board of Trustees met in regular session on June 11, 1982, at 9:00 a.m.

Trustees present: Mr. Coors, Miss Craig, Messrs. Henderson, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Nyikos, Robbins, Scott and Welles, Dean Golden, and other staff members, visitors and a representative of the press.

Recognition of Miss Craig. Mr. Wilson asked that the minutes reflect the recognition of the Board for the meritorious service performed by Miss Craig on behalf of the Colorado School of Mines and for her very valuable contributions to the School through the Board. He presented a silver Certificate of Appreciation to student Trustee Emerita Sandra Craig. The Certificate reads:

In recognition of her  
loyal and meritorious service as  
a member of the Board of Trustees,  
this certificate is presented to  
SANDRA J. CRAIG  
by the Board of Trustees upon the  
occasion of  
expiration of the term  
June thirtieth, One thousand nine hundred and eighty-two.

Previous Minutes. The minutes of the meeting held on May 7, 1982, were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

David E. Fletcher Professor of Mineral Economics	\$38,000 for the 1982-83 academic year
Choro Kitsunezaki Visiting Associate Professor of Physics	Appointed for the period April 1 to August 31, 1982 at no salary.
Donald L. Macalady Associate Professor of Chemistry and Geochemistry	\$28,500 for the period March 23, 1982 to May 7, 1983
Richard S. Passamaneck Associate Professor of Basic Engineering	\$30,000 for the 1982-83 academic year
Walter W. Whitman Visiting Professor of Geophysics	\$32,000 for the 1982-83 academic year
Thomas M. Zamis Instructor in Chemistry and Geochemistry	\$20,500 for the 1982-83 academic year

# RECORD OF PROCEEDINGS

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The meeting was adjourned at 3:30 p.m., and the Board went into executive session.



Secretary

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Legislative Report. Mr. Welles reported that the general fund increase for all of higher education is 4.4 percent per resident student FTE.

Mr. Welles stated that the Legislative Council charged the Colorado School of Mines with continuing to operate CERI under the present mode. The agreement will run for one year.

The Governor signed the Long Bill today with some vetoes.

Foundation Real Estate Purchases. Mr. Robbins told the Board that the Foundation has purchased the property at 1706 Illinois Street for \$110,000 and that there are several other properties available.

President McBride stated that there are two questions. The first is to request that Mr. Coors and Mr. Warren allow their guaranty to be moved from one house to another at approximately the same purchase price with approximately their same contribution. The second question is whether the Board wishes the Foundation to move to purchase the additional available properties. He said that the available properties are 17th and Maple, across from the Brown Building, 1706 Illinois, which has been purchased, 1710 Illinois, which has been offered, and the Burger house, which is located at 1112 18th Street.

Mr. Pascoe moved that the Board request of the Foundation that it approve the purchase of two additional homes in addition to the two subject to the Coors/Warren guaranty in the hope that these two houses can be used as Foundation offices. The motion was seconded and passed.

Mr. Coors told the Board that his and Mr. Warren's commitments on the first two houses are transferable.

Discussion of June Information Session. Dr. Mueller stated that he would like Board approval of subject matter for the June information session. He said that it is his understanding that the June session will be a discussion of how we attempt to implement improvement in faculty quality. He stated that there has been a series of educational teaching seminars during the year for faculty members. The administration is looking more closely at the quality of an individual brought into the faculty and that individual's potential for enhancing the Future Graduate Profile activity. He indicated that the merit point system is being utilized for faculty promotions.

Mr. Wilson said that the Board is also interested in revisiting some of the subject matter of the Keystone Conference last year, some of which dealt with the department heads focusing on faculty management. Mr. Henderson said that he would like to hear how some department heads view their current problems and how curriculum changes evolve.

President McBride suggested that he and Dr. Mueller discuss the review processes for promotion and salary adjustments.

DOE Report. Dr. Golden stated that he had recently received a letter from the DOE indicating that it will not file a formal report in the Earth Mechanics Institute matter. It may look into some other issues during our annual federal audit. This letter does not preclude further action.

Mr. Henderson expressed appreciation to the administration for its handling of this matter.

May 7, 1982

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### BACHELOR OF SCIENCE (CHEMICAL AND PETROLEUM-REFINING ENGINEERING) - AUGUST

Hurley, James Allen

### BACHELOR OF SCIENCE (PETROLEUM ENGINEERING) - AUGUST

Roberts, Nancy Lynne

Steam Line. President McBride stated that after telephone contact with Mr. Wilson he signed the contract substantially as noticed to the Board at the April 1982 meeting. Mr. Scott reviewed the Executive Summary of the Coors Steam Line Contract and said that construction began April 26.

Mr. Wilson requested that the minutes reflect that the contract was reviewed and affirmed by the Board, and also referred to Mr. Coors' letter dated April 20, 1982, containing public disclosure of a potential conflict of interest.

Mr. Wilson, on behalf of the Board, expressed appreciation to Mr. Coors and Adolph Coors Company.

Revised Pro Forma Budget, 1981-82. President McBride explained that one of the purposes in presenting the budget is to call the Board's attention to the \$220,000 figure being carried forward. He recommended to the Board that it not authorize the spending of that reserve prior to the determination of tuition income for next year.

It was moved, seconded and passed to adopt revised budget, including carry forward figure of \$220,000.

President's Discretionary Fund Request. President McBride asked the Board to authorize request to CSMF for the usual President's Discretionary Fund, in the amount of \$50,000, at the Foundation's next regular meeting.

It was moved, seconded and passed to authorize the request.

Preliminary Budget, 1982-83. President McBride stated that a complete budget, including the proposed salaries for all contract employees, will be presented at the June meeting. He said that the Trustees may wish to discuss resident tuition of \$2,100 and nonresident tuition of \$5,944.

Mr. Schwartzberg expressed concern about the magnitude of tuition for 1982-83.

Mr. Henderson feels that the Board should focus on faculty retention problem, and wants to determine by the June Board meeting what it will take to increase support staff.

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Mr. Pascoe entered the meeting at this time.

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President McBride stated that a 1982-83 recommended budget will be resubmitted in detail at the June meeting.

It was moved, seconded and passed to adopt the preliminary 1982-83 Recommended Budget, as presented and as corrected to show the average increase in administrative compensation.

Opposed: Mr. Schwartzberg.

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## RECORD OF PROCEEDINGS

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Resolution. Mr. Wilson asked the Board to affirm the Resolution presented at the Medalist Luncheon, which expresses appreciation to the Newmont Mining Corp. and Ingersoll-Rand Company for their contributions to the Colorado School of Mines.

It was moved, seconded and passed to adopt the Resolution, which reads as follows:

WHEREAS, the Colorado School of Mines is the largest and second oldest institution in the United States devoted exclusively to mineral engineering education,

AND WHEREAS the School is determined to continue to produce such outstanding young men and women mining engineers as it has for the past 108 years,

AND WHEREAS the impacts of limited State funding, continually rising education and operation costs, and a decade of inflation have combined to severely restrict the purchase and maintenance of necessary laboratory equipment,

AND WHEREAS the Newmont Mining Corporation and the Ingersoll-Rand Company have come forth and donated rock mechanics and rock fragmentation equipment of such value and quality to place these laboratories foremost among the mining schools of the world,

NOW THEREFORE the Board of Trustees of the Colorado School of Mines, meeting this day in Denver, expresses its gratitude and deep appreciation to the donors for their contributions to quality mining engineering education and for their continued support of the School, its faculty, and its students.

Additional Candidates for Degrees. Distribution was made of list of additional candidates for May and August graduation as recommended by the faculty.

Upon motion made, seconded and unanimously passed, the following were approved for degrees on the dates specified, subject to the completion of all academic requirements and continued compliance with school requirements and regulations.

BACHELOR OF SCIENCE (CHEMICAL AND PETROLEUM-REFINING ENGINEERING) - MAY

Ackermann, Peter Benedict

BACHELOR OF SCIENCE (MINERAL ENGINEERING) - MAY

Green, Linda Hall

BACHELOR OF SCIENCE (MINERAL ENGINEERING MATHEMATICS) - MAY

Wallace, Preston James, Jr.

## RECORD OF PROCEEDINGS

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Golden, Colorado  
May 7, 1982

The Board of Trustees met in regular session at 1:30 p.m., May 7, 1982, at the Brown Palace Hotel, Denver.

Trustees present: Mr. Coors, Miss Craig, Messrs. Henderson, Pascoe, Schwartzberg, Wilson and Wood.

Absent: Mr. Warren.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Robbins, Scott, Welles, Nyikos and Dean Golden and other staff members, visitors, and a representative of the press.

Mr. Wilson welcomed Lon Rosenzweig, newly elected student Trustee.

Senior Day. President McBride stated that the administration intends, with the approval of the Board, to treat the outcome of Senior Day as an encumbrance on the record of each student. The money collected will be used to pay for the cleanup and repairs, and the matter will not be mentioned at Commencement.

Miss Craig introduced Senior Class officers Roger Hutson, Jim Larson and John Hadley, who offered to answer questions concerning the activities of Senior Day. Senior Class President Larson expressed thanks to the Dean of Students and the administration for handling the situation in a fair manner.

Discussion followed, during which Mr. Wilson thanked the students for attending the meeting, for their comments and for their willingness to answer questions.

Previous Minutes. The minutes of the meeting held on April 9, 1982, were approved as distributed.

Faculty Appointments. Dr. Mueller told the Board that there are no new regular faculty appointments to report. He reported the death of Dr. George R. Pickett, Professor of Geophysics.

President McBride notified the Board of the appointment of Dr. Philip M. Burgess to head the Management Institute. The Board asked that the record reflect that his salary will be \$55,000 for a 12-month year beginning September 1. He will begin work on June 1 at a monthly salary corresponding to that yearly figure.

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the ten months ending April 30, 1982; Colorado School of Mines Current Funds - Summary by Fund for the ten months ending April 30, 1982; and Colorado School of Mines Time Deposits and Investment Report, April 30, 1982. He stated that an additional \$75,000 was received from the Kipfer Estate. The School is operating within the financial plan.

Admissions. Mr. Young offered to answer questions concerning the May 5, 1982 Admissions Report. He stated that within two weeks he will recommend that admissions be closed.

## RECORD OF PROCEEDINGS

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Preliminary Budgets, 1982-83. President McBride said that three proposed budgets have been prepared and tabled for discussion by the Board. The minimum budget corresponds to the Long Bill as reported and contains 4.0 percent contract personnel compensation increase; the median budget contains an 8.0 percent increase and the maximum budget a 12 percent contract personnel compensation increase. He stated that a proposed final budget will be presented for review and acceptance at the next Board meeting, assuming that the Governor has completed his action on the appropriation bill.

Extensive discussion ensued, during which Mr. Scott answered questions.

No action was requested and none was taken.

Outreach Tuition. Dr. Golden recommended to the Board that outreach tuition be set at \$85 per semester hour, or \$225.00 for a three-hour course per semester.

Dr. Janice Hepworth answered questions concerning the outreach program, and said that special program costs would vary according to the market.

President McBride explained that these are usually students who are admitted at the margin on a space available basis.

It was moved, seconded and passed to set the outreach tuition at \$85 per semester hour.

The meeting was adjourned at 11:30 a.m., and the Board went into executive session.

  
Secretary

April 9, 1982



## RECORD OF PROCEEDINGS

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Keystone Student Life Report II. Dr. Nyikos introduced Dr. Kathryn S. Jens, Director of Student Development, and Mr. William T. Hill, Director of Student Activities. Dr. Jens called the Board's attention to the tabled, printed report on the Student Development Center for the fall semester, 1981-82.

Dr. Jens stated that the general goal of the Student Development Center (SDC) at CSM is to contribute to the educational mission of the School by promoting emotional, social and career development for the students. She described the characteristics of CSM students seen for counseling at the SDC during fall semester 1981 and the reported problems of the CSM students seen for counseling at the SDC during fall semester 1981. She discussed the staffing for the SDC and fall semester 1981-82 activities, which are counseling services, the peer program, resident adviser training, the Wellness Program, the Resource Library, Outreach (educational presentations and workshops conducted by Dr. Jens), and Evaluation and Planning.

Discussion ensued, during which Dr. Jens answered questions.

Mr. Wilson complimented Dr. Nyikos and Dr. Jens on the report, and commented that remarkable progress has been made in the past two years.

Distinguished Achievement Medal Selections. President McBride explained to the Board that each of the Medalists tentatively selected by the Board at an earlier informal session has expressed his desire to accept and recommended that the Board approve the list of Medalists.

It was moved, seconded and passed to approve the list of Medalists, as follows:

Nathan M. Avery  
P. E., 1956  
David R. Cole  
E. M., 1952; M. Sc., 1956  
Nathan J. Hoffman  
M. E., 1955  
Howard W. Leaf  
Geop. E., 1950  
John P. Lockridge  
Geol. E., 1952  
Lawrence E. Smith  
Met. E., 1931

Legislative Report. Mr. Welles reported that the Long Bill has made its way through both Houses, that there are differences between the House and Senate versions, and that the bill will now proceed to conference committee prior to final passage and gubernatorial action. The only major Senate change is that the general fund increase to base of higher education was raised from 4.0 percent to 5.1 percent, with the extra funds being taken from student aid and from general fund support of one-half of student growth. Schools will have the option of applying for supplemental funding of 50 percent of student growth if state revenues exceed current estimates, with the community colleges having first preference on supplemental funding. He said that the Legislature does not want to fund higher education in total at any more than seven percent over last year. The implication is that higher education can raise tuition if its needs exceed increased general funding. He feels that Dr. Kerschner and the CCHE are deserving of our thanks in coordinating efforts of the schools.

CERI. Mr. Welles stated that the Governor vetoed the present bill to re-establish and continue funding for CERI. The Senate over-rode the veto, but the House sustained. A late bill or other emergency measure will have to be introduced in order to save CERI. The fate of CERI will be decided the early part of next week.

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# RECORD OF PROCEEDINGS

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## MASTER OF SCIENCE (MINERAL ECONOMICS)

Abreu, Rene J.  
Aguirre, Carlos A.  
Asher, David R.  
Berger, Sue Anne  
Brenimer, Randall K.  
Dias, Jorge A. Avalos  
Greening, Doran Robert  
Hughes, Eric Marshall

Melvin, Susan E.  
Parker, Joni M.  
Peterson, David R.  
Prabhaker, J. Anand Chandra  
Roberts, Patricia A.  
Snodgrass, John Bradie  
Witham, Barth Edward  
Wong C., Carlos G.

## DOCTOR OF PHILOSOPHY (METALLURGY)

Ando, Teiichi

## DOCTOR OF PHILOSOPHY (METALLURGICAL ENGINEERING)

Steinmeyer, Peter Alan

## DOCTOR OF PHILOSOPHY (GEOLOGY)

Collier, James D.  
Dodge, Rebecca Lee  
Franotovic, Davor

## DOCTOR OF PHILOSOPHY (GEOLOGICAL ENGINEERING)

Montazer, Parviz

## DOCTOR OF PHILOSOPHY (PETROLEUM ENGINEERING)

Al-Hashim, Hasan Salman  
Graves, Ramona Marie  
Labedi, Rafa Mohamed

## DOCTOR OF PHILOSOPHY (CHEMICAL AND PETROLEUM-REFINING ENGINEERING)

Al-Sahhaf, Taher Ahmed Mousa

## DOCTOR OF PHILOSOPHY (GEOPHYSICS)

Chen, Deng-Bo  
Lee, Shu Chung  
Reeves, James Jackson

## DOCTOR OF PHILOSOPHY (APPLIED CHEMISTRY)

Rees, Terry Francis

## DOCTOR OF PHILOSOPHY (GEOCHEMISTRY)

Chen, Yi Liang

## DOCTOR OF PHILOSOPHY (MINERAL ECONOMICS)

Harshman, Richard L.  
Inga, Max Hugo Batalla  
Lienert, Charles Edward

Proehl, Thomas Strenger  
Schlaks, Francine Deidre

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# RECORD OF PROCEEDINGS

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## MASTER OF SCIENCE (GEOLOGICAL ENGINEERING)

Beach, Bruce William  
Olivieri, Cesar Alfredo Borges  
Tower, Chris D.

## MASTER OF ENGINEERING (PETROLEUM ENGINEER)

Saleh, Saad Turkey  
Sharpe, George Franklin

## MASTER OF SCIENCE (CHEMICAL AND PETROLEUM-REFINING ENGINEERING)

Cerise, Kirk S.  
Elkabule, Abdallah S.  
Mohamed, Ramadan A.  
Vinciguerra, Stephen

## MASTER OF SCIENCE (GEOPHYSICS)

Anderson, Robert Campbell  
Claussen, John P.  
Gallagher, Brenda Cheryl  
Graebner, Mark J.  
Guderjahn, Charles George  
Guu, Cindy Kuei-Ding  
Ibrahim, Kamil E.  
Janak, Peter Michael

Martin, Richard Alan, Jr.  
Nicoletis, Serge  
Rimmer, Daniel Harry  
Rodriguez, Brian David  
Rossow, Joerg  
Sixta, David P.  
Wallis, Claybon Mark  
Washburne, James Clark

## MASTER OF SCIENCE (GEOPHYSICAL ENGINEERING)

Godbey, Will E.

## MASTER OF SCIENCE (CHEMISTRY)

Essed, Abdussalam M.  
Naghmush, Abdulmagid Mohamed  
Rastle, Charles Melvin

## MASTER OF SCIENCE (GEOCHEMISTRY)

Ansted, John Philip  
Henderson, Thomas  
Hickey, Thomas Hume

MacFarland, Douglas R.  
Maxwell, Leslie E.  
Tuesday, David Sheffield

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# RECORD OF PROCEEDINGS

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## BACHELOR OF SCIENCE (GEOPHYSICAL ENGINEERING) - AUGUST

Ahmad, Mobashir Noman  
Burkholder, Scott Kristian  
Morrow, Michael Jay

## BACHELOR OF SCIENCE (MINERAL ENGINEERING MATHEMATICS) - AUGUST

Read, Robert Fred

## MASTER OF ENGINEERING (ENGINEER OF MINES)

Brunner, Federico Montes de Oca

## MASTER OF SCIENCE (MINING ENGINEERING)

Barnes, Randal J.  
El Rabaa, Abdel Wadood M.A.  
Ryan, Michael James  
Senocak, Ahmet T.

## MASTER OF SCIENCE (MINE HEALTH AND SAFETY)

Douglas, Kenneth E.  
Richen, Michael J.

## MASTER OF ENGINEERING (METALLURGICAL ENGINEER)

Maxwell, Douglas Keith

## MASTER OF SCIENCE (METALLURGICAL ENGINEERING)

Ketcham, Alan Blaine  
Patsos, Harilaos S.  
Turney, Vicki  
Wilkinson, Bruce Daryl

## MASTER OF ENGINEERING (GEOLOGICAL ENGINEER)

Kline, John Harold

## MASTER OF SCIENCE (GEOLOGY)

Alatorre-Campos, Armando E.  
Audemard, Mennessier Felipe E.  
Aulia, Karsani  
Boreck, Donna L.  
Donaldson, James Charles  
Engstrom, Dale Alan  
Gaffke, Thresa M.  
Kubik, West Tyler  
Morrison, Gregory B.

Pasternack, Ira  
Peck, Charles W.  
Pincus, William J.  
Reese, Ronald S.  
Runnels, Tyson Dean  
Torbert, Barton Jacob  
Walker, Robert James  
Wellborn, Jewel E. F.

April 9, 1982

# RECORD OF PROCEEDINGS

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## BACHELOR OF SCIENCE (CHEMICAL AND PETROLEUM-REFINING ENGINEERING) - JUNE

Gray, David Edward  
Harrison, Stephen Lee  
Kim, Hiemi  
Lira, Gonzalo Alberto  
Matthews, Sandra Ann

## BACHELOR OF SCIENCE (GEOPHYSICAL ENGINEERING) - JUNE

Zachary, Karl Scott

## BACHELOR OF SCIENCE (MINERAL ENGINEERING MATHEMATICS) - JUNE

Akalin, Mehmet Ferruh

## BACHELOR OF SCIENCE (MINING ENGINEERING) - AUGUST

Aldridge, Bruce Thomas  
Beckett, Stanley Foster  
Estus, Jay Melvin  
Gent, Jonny Lee  
Howard, Terry Wayne

Johnson, Dennis David  
Meendering, David Nels  
Workman, Loren Ray  
Zuege, Michael Allen

## BACHELOR OF SCIENCE (METALLURGICAL ENGINEERING) - AUGUST

Barker, Brice Wesley

## BACHELOR OF SCIENCE (GEOLOGICAL ENGINEERING) - AUGUST

Shaw, Donald Raymond  
Simpson, Jeffrey Jay  
Talvitie, Marcia Lynn  
Werfelli, Ramadan Ali

## BACHELOR OF SCIENCE (PETROLEUM ENGINEERING) - AUGUST

Lawless, James Alan  
Peters, William Roger  
Rooney, George B. IV  
Sahr, Kevin Scott  
Schwein, Michael Timothy

## BACHELOR OF SCIENCE (CHEMICAL AND PETROLEUM-REFINING ENGINEERING) - AUGUST

Hafertepen, Ernie  
Nandjui, Danho Pierre

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# RECORD OF PROCEEDINGS

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## BACHELOR OF SCIENCE (GEOPHYSICAL ENGINEERING) - MAY

Abel, Scott Michael  
Akalin, Mehmet Ferruh  
Berg, Timothy Andrew  
Cline, Harold James  
Cook, Steven Meredith  
Dronin, Sherri Roth  
Emch, Stephen Robert  
Enns, Donnie Ray  
Erickson, Kevin Edward  
Fischl, Hans D.  
Fockler, Todd John  
Foley, Michael John  
Foss, Maureen Michele  
Galbavy, John Naylor  
Gray, Curtis William  
Harris, Mark Steven  
Hewitt, Richard Loren  
Hopkins, John Charles

Jim, Sing-Lit  
LeMieux, Vincent Jerome  
Lewis, Dana Kay  
Maguire, Daniel Lewis  
Muzal, Mark J.  
Oravetz, Joseph J.  
Phariss, Tracy Van  
Powell, John Wesley  
Reford, Lewis Tewksbury  
Sandarusi, Kamal Aref  
Soolman, David Andrew  
Sinks, H. Daniel  
Sirtautas, Anthony Albin  
Smith, Kevin Laurence  
Spongberg, Martin Edward  
Williamson, Richard Glen  
Wycoff, Gary Lynn  
Zmerzlikar, Keith Gavin

## BACHELOR OF SCIENCE (MINERAL ENGINEERING CHEMISTRY) - May

De Moraes, Luis Ermirio  
Lee, Timothy Joseph

## BACHELOR OF SCIENCE (MINERAL ENGINEERING MATHEMATICS) - MAY

Galvin, Michael Ormond  
Heinlein, Katherine Joan

## BACHELOR OF SCIENCE (MINERAL ENGINEERING PHYSICS) - MAY

Baumbaertel, Walter Theodore  
Childers, Winthrop De  
Cole, David Mitchell  
Dombrowski, Duane Charles  
Gallagher, Douglas V.

Neev, Joseph  
Schuman, Robert Christopher  
Seidel, Ruth Ann  
Thomas, Dean Cameron

## BACHELOR OF SCIENCE (MINERAL ENGINEERING) - MAY

Brezina, Stephan Gerald  
Hamre, Mikele Lyn  
Ion, Kevin Dale  
Larrabee, Greg D.  
McCord, Andrew Wayne  
Miller, Kirk Allen  
Montoya, Anthony Henry

Murphy, Harlan Deon  
Nord, Mark Allison  
Pierce, Bradley Alan  
Pigue, John Paul  
Schultz, William Michael  
Tunget, Bruce Arnold  
Worwag, Randall Scott

## BACHELOR OF SCIENCE (MINING ENGINEERING) - JUNE

Escobar, Ricardo Jose  
Swartz, Douglas William  
Willoughby, Richard Brent

April 9, 1982

# RECORD OF PROCEEDINGS

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## BACHELOR OF SCIENCE (PETROLEUM ENGINEERING) - MAY

Albi, Joseph Ralph, Jr.  
Bergamo, Ernest James  
Bingham, Mark David  
Brayton, James Frank  
Bush, Mark Edward  
Clouatre, Michael David  
Disney, Brian Richard  
Eisele, John LeFevre II  
Flahive, Roger Michael  
Fuhr, Kris John  
Gallagher, Patrick Francis  
Ganong, Barbara Lyn  
Gillis, Russell Eugene  
Kelly, Daniel Edward  
Kennedy, Michael Ralph  
Kervin, William Martin Joseph  
Ladd, John William  
Lee, David Thomas, Jr.

Linroth, Mark Andrew  
Luebke, Peter James  
McClure, Richard Forrest  
McElduff, William Albert, Jr.  
McLean, Alexander Mark  
McLeland, Gerald Rodney  
Monahan, Janet Elizabeth Foley  
Nelson, Christopher Claude  
Palmer, Lynn M.  
Pape, William Charles  
Peterson, Eric Follett  
Randolph, Stephen Edward  
Riebe, Charles Richard  
Stracke, Alan Wayne  
Swisher, Anthony Eugene  
Szymanski, Henryk Czeslaw  
Tran, Dzung Xuan  
Wissbaum, Rebecca Lynn

## BACHELOR OF SCIENCE (CHEMICAL AND PETROLEUM-REFINING ENGINEERING - MAY

Andrews, Daniel Walter  
Barker, Allen Lee  
Barnhardt, Lisa Marie  
Bennett, David Patrick  
Berghorn, Matthew Todd  
Berti, Douglas Anthony  
Bissett, Bruce Francis  
Borruso, Robert W.  
Buss, Rebecca Lynn  
Carter, Thomas Edward  
Castellano, Ali Alberto  
Christensen, Tim A.  
Clasquin, James Louis  
Cook, Victoria Anne  
Craig, Sandra Jeanne  
Dershteller, Yuri  
Duey, William Guy  
Edrich, Richard Alan  
Farhar, Cully Robert  
Freeman, Karen Sue  
Freytag, Andrew Allan  
Griffith, Patricia Louise

Gully, Mark Timothy  
Hubis, Mark J.  
Jerome, David Hugh  
Johnson, Keith Bradley  
Keanini, David Daniel  
Kennedy, Gregory Brian  
Kirchner, James Francis  
Lauber, Eric James  
Mango, Mario  
McCall, Patrick Columkille  
Muhic, Tamara Jo  
Ormsbee, Kristin Jean  
Ringhofer, Barbara Ann  
Sandlin, Kenneth Harold  
Schweser, Charles Michael  
Shaw, Richard Barry  
Sparks, Kevin Alan  
Takacs, Frank J.  
Ullerich, Jeffrey William  
Winterfield, Louis Allen  
Woods, Pamela Lynn

## RECORD OF PROCEEDINGS 3

Admissions. Dr. Nyikos called the Board's attention to the April 1, 1982, Admissions Report, which reflects in a separate table the number of women and ethnic minority students who have applied for admission in the fall 1982 semester.

Mr. Young said that we are where we expected to be at this time with regard to applications for admission.

Candidates for Degrees. Distribution was made of lists of candidates for degrees as recommended by the regular and graduate faculties.

Upon motion made, seconded and unanimously passed, the following were approved for degrees on the dates specified, subject to the completion of all academic requirements and continued compliance with school requirements and regulations.

### BACHELOR OF SCIENCE (MINING ENGINEERING) - MAY

Adee, Gregory Lynn	Jones, Robert Lloyd
Alter, Charles Eugene	Kearney, Stephen Victor
Bessinger, Stephen Lee	Knight, Thomas Jay
Bolis, Judith Louise	Matteson, Curtis Ray
Brescia, Fortunato	Metheny, Michael Wayne
Briggs, Michael Robert	Molberg, John M.
Brunso, Torkild Peter	Neunzert, Michael G.
Burch, Roger Lewis	Poulos, John Carral
Clark, Graham William	Reeder, Susan Elizabeth
Fish, Roger Williams	Robles, Ronald Rudolph
Gilbert, Harry William III	Smaldone, James Edward
Hawkins, William Morgan	Troyer, Michael Lawrence
Hunter, Miles McCray	Vetterling, John Michael
Johnson, Donald Gerald	

### BACHELOR OF SCIENCE (METALLURGICAL ENGINEERING) - MAY

Bates, Julianne	Fleming, Porter Farrar
Bremner, Jean Elizabeth	Gudeczauskas, Donald
Burford, Dwight Aaron	Lanham, Gregory Evans
Carpenter, Brent Lee	Lockett, Phillip Scott
Chapman, Deborah Ann	Majewski, Thomas John
Cheney, Brian A.	Mokray, Jenni Ann
Earlam, Matthew Robert	Rubio, Bernardo Miguel
Eberhard, Brian Austen	Schwab, Stephen Michael
Erk, Donna Marie	Simons, Stephanie Jo
Evans, James Frederick	Strangways, Bradley Dean
Fleck, Norbert Anthony	Woldow, Fredric Allan

### BACHELOR OF SCIENCE (GEOLOGICAL ENGINEERING) - MAY

Buelter, Donald Paul	Makowski, Kevin Paul
Cohee, James Roy	McFadden, Leslie Ann
Doremus, Llyn Adele	Murray, Michael William
Einberger, Carl Martin	Nelson, John P.
Evans, Lauren Elizabeth	Ostrander, David Alan
Foss, Richard Louis Jr.	Rahm, Kathleen Joanne
Fromme, Scott Wade	Reimer, David John
Hadley, John Thomas	Remmers, Michael Alvin
Hellner, Karen Ann	Rodriguez, Jaime F.
Hermann, Timothy Louis	Shipley, Scott Eugene
Huston, David Lowell	Sour, Leslie Ellen
Hutson, Roger Lowell	Stank, Kevin R.
Jacques, Mark Matthew	Stites, Robert Lynn
Joyce, Lisa Ann	Towle, Diana Susi
Kirby, Robert Rudolph	Trousil, Edward P.
Larson, James William	Wolski, Michael Vincent



## RECORD OF PROCEEDINGS

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### Retirement and Resignations:

Anton G. Pegis Professor of Humanities and Social Sciences	Retirement effective May 8, 1982
Douglas W. Hilchie Professor of Petroleum Engineering	Resignation effective May 8, 1982
Terence K. Young Assistant Professor of Geophysics	Resignation effective May 8, 1982

### New Appointment:

President McBride recommended to the Board that Martin Robbins, who is currently Executive Director of the CSM Foundation, be appointed Vice-President for Development of the Colorado School of Mines.

### Change of Title:

President McBride recommended to the Board that John Welles' title be changed to Vice-President for Planning and Public/Affairs of the Colorado School of Mines.

These changes in assignment do not require changes in salary.

It was moved, seconded and passed to approve the above recommendations.

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the nine months ending March 31, 1982; Colorado School of Mines Current Funds - Summary by Fund for the nine months ending March 31, 1982; and Colorado School of Mines Time Deposits and Investment Report, March 31, 1982. He reported that the School is operating within the financial plan. He expects the School to receive a supplemental appropriation of \$227,000. Mr. Scott said that he will bring a revised budget before the Board in May for approval as we bank supplemental funds.

Mr. Scott reviewed the reports and called the Board's attention to the Exploration Research Laboratory situation, which has been closely monitored. In this connection, Dr. Golden and Dr. Keller distributed to the Board members three cash flow outlines reflecting the laboratory's projected cash position (worst case, realistic case and optimistic case). None of the three cases includes the \$500,000 reasonably expected to be received in fulfillment of the Keck Foundation pledge; the differences among the cases are due to varying assumptions about yet-to-be-contracted research. Deficits at July 1, 1982, are projected to be \$94,190; \$94,190 and \$84,190, respectively.

President McBride recommended that the Board accept the July 1, 1982, deficit arising from the "worst case," and stated that he will come back to the Board no later than the June Board meeting with a further report. President McBride stated further that he believes the Keck money, which is a pledge, will be paid, but that he could be wrong about the assumption.

It was moved, seconded and passed to accept the "worst case" cash flow outline with the assumption that at the June meeting the situation will be reviewed again.

Mr. Scott called the Board's attention to the Capital Equipment Inventory written report. The oral report was given last month, and a further report will be presented to the Board in six months per its request.

April 9, 1982

# RECORD OF PROCEEDINGS

Golden, Colorado  
April 9, 1982

The Board of Trustees met in regular session on April 9, 1982, at 9:00 a.m.

Trustees present: Mr. Coors, Miss Craig, Messrs. Henderson, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice-Presidents Mueller, Scott, Welles, Nyikos and Dean Golden and other staff members, visitors, and a representative of the press.

Previous Minutes. The minutes of the meeting held on March 5, 1982, were approved as distributed.

Introduction. Miss Craig introduced Lon Rosenzweig, one of two student candidates for the Board of Trustees.

Commencement, May 1982. President McBride called the Board's attention to the Commencement Events calendar, which lists the events which he feels the Trustees will wish to attend. He reminded the Board that the May Board meeting will be held on Friday, May 7, at 1:30 p.m., at the Brown Palace Hotel.

Messrs. Wilson and Pascoe entered the meeting at this time.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Keith M. Crouch Visiting lecturer in Environmental Sciences and Engineering Ecology	\$500 for the spring semester of the 1981-82 academic year
Charles B. White Visiting lecturer in Environmental Sciences and Engineering Ecology	\$500 for the spring semester of the 1981-82 academic year
John L. Watson Adjunct Assistant Professor of Environmental Sciences and Engineering Ecology	\$1,000 for the spring semester of the 1981-82 academic year

Reappointment:

Robert D. Mager Visiting Assistant Professor of Geophysics	\$3,500 for the spring semester of the 1981-82 academic year
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Continuation of appointment:

Carl N. Kallansrud Adjunct Assistant Professor of Mineral Economics	\$3,400 for the spring semester of the 1981-82 academic year
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## RECORD OF PROCEEDINGS

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Sunset Review Committee. President McBride stated that the CCHE is undergoing review by the Sunset Review Committee under the chairmanship of Mr. Steven Durham. The Committee has asked for Mines' testimony regarding this matter. President McBride showed the Board the document which he has prepared, and stated that this is essentially what he said at the meeting of the Western Slope Legislators. He would like to submit it as approved by the Trustees.

The Board authorized President McBride to proceed with the letter and to mark it "Approved by the Board."

Deaths, Emeritus Faculty. The Board was informed of the deaths on Friday, February 19, 1982 of Dean of Students Emeritus William V. Burger and of the death on Thursday, March 4, 1982 of Professor of Mining Engineering Albert M. Keenan, retired.

The members of the Board responded by voicing their regret and sorrow at the news, by expressing gratitude for the distinguished service to the School rendered by these men, and by directing that written statements of sympathy and condolence be sent to the close survivors.

The meeting was adjourned at 11:05 a.m., and the Board went into executive session.

  
Secretary

March 5, 1982

## RECORD OF PROCEEDINGS

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Mr. Ingels explained how the School accounts for research equipment. He stated that equipment is defined as any durable item with a life of two years or more and a value of \$500.00 or more. Most equipment is CSM purchased and owned, and some equipment on inventory is received through gifts. There is some research equipment not owned by CSM for which the School is responsible for maintenance. He explained how, once CSM equipment is purchased, it is assigned an inventory control number. This is entered into the computer and the number is put on the item of equipment. He said that his office has started a physical inventory based on a five-year cycle. With regard to equipment not owned by CSM, there are government regulations which have certain requirements on how to maintain it, etc.

Mr. Schwartzberg expressed his pleasure with the report and asked about the accountability of consumable items. Mr. Ingels replied that if, after the use of these items the end product costs more than \$500.00, it must be inventoried.

Mr. Coors questioned Mr. Kallansrud about disposal of items. Mr. Kallansrud said that ownership of the residuals would vest in the School or in the government. Once it becomes CSM property, we would use state requirements. If it remains in the title of the government, we can request that it be scheduled out through government procedures.

The Board indicated that it would like to have a report in writing and would like to have a followup report in about six months.

Report in Affirmation of Action Taken on Memorandum of Understanding. President McBride explained that the JBC wished to revise the Memorandum of Understanding for 1982-1983 and to continue it in effect. He said that the revision abolishes both a specific general fund appropriation for "central pots" and a supplemental appropriation for utilities. The Memorandum of Understanding has now been prepared with those two provisions and thus represents serious cuts for many if not all institutions especially in the classified salary, or central pots, area.

President McBride, acting on the basis of a telephone call to Mr. Wilson, signed the Memorandum of Understanding on March 1, and it has been submitted. It is understood that all institutions have signed and submitted copies of the Memorandum of Understanding.

Mr. Wilson asked that the minutes show that the Board affirmed the action of President McBride in signing the Memorandum of Understanding both for himself and for Mr. Wilson.

Legislative Report. Mr. Welles reported on the legislative luncheons which have occurred. He said that the feedback has been favorable.

Mr. Welles stated that, with regard to the budget, we are "holding our own" and are maintaining a low profile on our request. The budgetmaking process is now in progress, and we are trying to follow it as closely as possible. The legislative advisers have been very helpful.

Mr. Schwartzberg reported that he attended the first meeting of the legislative committee. The committee feels that the CCHE does not adequately serve as the advocate for the institutions. At times it almost appears that the Commission and the institutions are adversaries. He said that the committee concluded that the Commission should be the institutions' representative. The issue that was raised was the matter of the budget and whether the Commission should be our spokesman for coming up with an increase. There was some discussion at the meeting concerning the possibility of all trustees getting together and discussing the issues.

Discussion ensued concerning presenting an appeal to the JBC regarding the budget.

The Board agreed that the matter should be tabled.

March 5, 1982

## RECORD OF PROCEEDINGS

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Mr. Pascoe entered the meeting at this time.

President McBride stated that he has signed the steam line agreement and it has been submitted to Adolph Coors Company. Mr. Welles told the Board that he and President McBride have spoken with the CCHE and the JBC regarding the steam line and there is enthusiastic acceptance. It is considered one of the better initiatives in higher education.

With reference to possible Exploration Research Laboratory financial problems, Mr. Scott stated that approximately \$425,000 will be transferred from the Foundation, which will bring the accounts into balance short-term. The situation will continue to be closely monitored by Dr. Golden.

Mr. Scott discussed the Time Deposits and Investment Report.

Admissions and Registrar's Report. Dr. Chevront reviewed the Registrar's Report, Spring 1981-82, page by page and answered questions.

Mr. Young stated that the admissions as of March 1, 1982 show the same basic trend as previously reported to the Board.

Report on Academic Leave--Dr. Donald W. Gentry. Dr. Gentry was granted academic leave by the Board at three-quarters salary for the spring semester of the 1980-81 academic year for the purpose of completing work on a textbook entitled Mine Investment Analysis. The book will be published by the Society of Mining Engineers of AIME. His co-author on the project is Dr. Thomas J. O'Neil, Manager of New Business Development (Metals) for Amoco Minerals. He worked on the book full-time with the exception of one day a week spent on campus to manage and direct the research projects under his control.

Dr. Gentry stated that he believes that this book will provide an excellent tool for teaching mine valuation concepts and procedures to undergraduate students. Also, much of the material has been presented in a manner which should enable graduate students interested in specific aspects of mine valuation to appreciate the complexity, intricacy, and interrelationships of these topics.

Dr. Gentry told the Board that he believes the work performed during the sabbatical has definitely resulted in a better course offering in mine valuation to the CSM student body. He feels that there is a need for a book of this type and that it will contribute to the profession. He stated that he has benefited both professionally and personally from the leave and expressed the hope that the institution will benefit ultimately in a similar manner. He thanked the Board for granting the leave.

Mr. Wilson thanked Dr. Gentry for his report.

Report on Property Acquisition and Accounting under Federal Contracts. Mr. Scott stated that this brief report is being presented in response to Board request for information additional to that presented earlier.

Carl Kallansrud, Director of Research Administration, explained the function of his office with regard to property acquisition generally, under federal contracts specifically. He said that the principal investigator determines the items needed, the personnel required, the amount of money required, equipment needed, etc. His office reviews every expenditure for projects over \$50.00 and determines if equipment is allowable on a particular project. His office must determine that administrative procedures are followed, and periodic reports are submitted to the sponsors itemizing the expenses on a given project. His office must report that all items purchased for a particular project are consumed in that particular project. He said that capital equipment is followed through the central system which is directed by Mr. Ingels, Budget and Administrative Services Officer.

March 5, 1982

# RECORD OF PROCEEDINGS

Golden, Colorado  
March 5, 1982

The Board of Trustees met in regular session on March 5, 1982 at 9:00 a.m.

Trustees present: Mr. Coors, Miss Craig, Messrs. Henderson, Pascoe, Schwartzberg, Warren, Wilson and Wood.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Scott, Welles, Nyikos and Dean Golden and other staff members, visitors, and a representative of the press.

Previous Minutes. The minutes of the meeting held on February 12, 1982 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Leanne M. Baker Part-time Instructor in Mineral Economics	\$1,500 for the spring semester of the 1981-82 academic year
Robert S. Belica Adjunct Assistant Professor of Mineral Economics	\$1,600 for the spring semester of the 1981-82 academic year
Terry N. Fiske Visiting Lecturer of Environmental Sciences and Engineering Ecology	\$500 for the spring semester of the 1981-82 academic year
Thomas D. Kaufman Philipp Brothers Professor of Mineral Economics	\$42,500 for the 1981-82 academic year, appointment beginning February 1, 1982
Derek J. Wilson Assistant Director for Systems and Operations of the Computing Center	\$35,000 for the calendar year, appointment beginning February 15, 1982

## Reappointments:

Thomas L. LaFehr Adjunct Professor of Geophysics	\$3,500 for the spring semester of the 1981-82 academic year
Charles E. Lienert Adjunct Assistant Professor of Mineral Economics	\$5,000 for the spring semester of the 1981-82 academic year

Monthly Financial. Mr. Scott stated that the School is operating within the accepted financial plan for the 1982 fiscal year. He said both that he is fairly certain that we will receive an enrollment supplemental of \$229,000 and that the Governor's retrenchment will probably occur. Salary savings will add to the expected net favorable difference, which could go to departments which are in need of funds. If this happens, he hopes to come to the Board in April or May with a revised budget.

## RECORD OF PROCEEDINGS

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Keystone 1982 Agenda. Mr. Welles told the Board that he would like to have a white paper prepared by CSM Public Information Officer, Brodie Farquhar, who would interview key people to obtain impressions of what those people think of the Colorado School of Mines. The paper would be completed prior to the Keystone Conference. Mr. Welles also distributed a list of possible Keystone 1982 invited guests and possible BOT seminar topics.

The Board gave approval to proceed with the white paper. Mr. Welles asked that the Board provide feedback with regard to the proposed list of invitees and the proposed seminar topics prior to the March 5 Board meeting.

Announcements. Mr. Welles said that there will be a legislative luncheon on February 15 with the El Paso and Arapahoe County Legislators. Mr. Wilson will preside.

There will be a legislative luncheon on March 1 with the Western Slope Legislators. Mr. Schwartzberg will preside, and Mr. Coors will also attend.

A legislative luncheon will be held on March 8 with the Northern Colorado Legislators. Mr. Wilson will preside, and Mr. Henderson will attend.

There will be a legislative luncheon on March 15 with Denver Legislators. Mr. Schwartzberg will preside.

Senior Management Institute. Mr. Welles reported that there are four primary candidates for Director. He said that he hopes that a tentative decision can be reached within three weeks.

Special CCHE/Governing Board Committee. Mr. Schwartzberg said that Tyler Makepeace, CCHE Commissioner, will be Chairman of the Legislative Committee and that the first meeting will be on February 24. Mr. Schwartzberg will report back to the Board at the March Board meeting.

Memorandum of Understanding, Higher Education Financing. At Mr. Wilson's request, President McBride discussed the revisions of the Memorandum of Understanding by the CCHE.

Colorado Engineering Deans' Council Action. Mr. Schwartzberg stated that at the February 5 CCHE meeting Dr. Kerschner said that the Deans' Engineering Council is advocating additional engineering schools and that there is a request for a \$14,000 increase in faculty salaries. Dr. Mueller said that these are incorrect statements. It was agreed that we will try to obtain a transcript of the February 5 CCHE meeting.

The meeting was adjourned at 11:00 a.m. and the Board went into executive session.

  
Secretary

February 12, 1982

## RECORD OF PROCEEDINGS

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Financial Aid Report and Request to CSM Foundation. Dr. Nyikos presented a proposed request for undergraduate student financial aid funds to the CSM Foundation in an amount commensurate with tuition charged. He explained that this amount includes grant support for both resident and nonresident undergraduate, need students, and support for continuation of the BOT scholarship program. He asked also that discretion be granted to him and to the Director of Financial Aid, Mr. Mason, to expand the use of the Foundation grant funds from grants only to grants, loans, and work study. He stated that this is a change in policy and called the Board's attention to a memorandum from Mr. Mason explaining the guidelines for the implementation of such loan and work study use. He said that these guidelines are consistent with established practice.

President McBride reminded the Board that the CSM Foundation is meeting Tuesday, February 16, and that we need to ask for these funds at that time. Some of the funds are to be raised by the Alumni Association through ASAP. He also said that the Foundation will be put on notice that we may have to come back and ask for supplemental funds. He stated that Mr. Paterson of the Foundation is aware of the nature of the request.

It was moved, seconded and passed to accept the administration's recommendation.

Dr. Nyikos and Mr. Mason presented, for discussion only, report on Middle and High Income Family Lender of Last Resort Loan Proposal. Dr. Nyikos explained what the policy and guidelines would be if this were adopted.

Mr. Pascoe entered the meeting at this time.

Dr. Nyikos answered questions concerning the proposal.

Mr. Wilson thanked Dr. Nyikos for his report and said that the Board will look forward to receiving more information in the future.

Emeritus Status for Retiring Faculty Member. President McBride told the Board that Professor Anton G. Pegis has notified the administration of his intent to retire at the end of the current academic year. He recommended that emeritus status be conferred on Dr. Pegis.

Miss Craig commented that she believes that Dr. Pegis deserves emeritus status.

It was moved, seconded and passed to grant Dr. Pegis the title Emeritus Professor of Humanities and Social Sciences upon his retirement.

Report on Internal Controls. Mr. Dan Frelund, Controller, presented report on internal controls, reminding the Board that the School does not have a formalized internal audit function. He explained the functions of various individuals in the Business Office. He told the Board that the audit for fiscal year 1981-82 has just been completed and the auditors will make recommendations to strengthen areas in the internal control system. He displayed book relating to internal control procedures and stated copies had been requested for the Trustees.

Discussion ensued, during which Mr. Frelund answered questions, and the Board asked for a followup report at the March Board meeting dealing with the specific points of federal project equipment and material control.

Steam Line Agreement. Mr. Scott told the Board that the Letter of Intent prepared by Coors follows many months of negotiations. He reviewed the letter and supplied a cost analysis sheet. He said that implicit in this are many estimates, and he asked for comments on the analysis.

Discussion ensued, during which the Board, Mr. Coors abstaining, agreed to approve the steam line. It was agreed that the internal administration will deal with the JBC and the CCHE.

February 12, 1982



## RECORD OF PROCEEDINGS

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Alan L. Liby Adjunct Associate Professor of Metallurgical Engineering	\$2,775 for the spring semester of the 1981-82 academic year
Thomas D. Riley Visiting Assistant Professor of Humanities and Social Sciences	\$9,350 for the spring semester of the 1981-82 academic year
Robert S. Thompson Adjunct Assistant Professor of Petroleum Engineering	\$5,000 for the spring semester of the 1981-82 academic year

### Change in Appointments:

James F. Ely Adjunct Associate Professor of Chemical & Petroleum-Refining Engineering	\$2,500 for the spring semester of the 1981-82 academic year
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Fun-Den Wang  
Professor of Mining Engineering

Dr. Wang will be engaged in research and teaching activities as a 70% assignment and will be on leave without pay for the remaining 30% of the time.

W. Rex Bull  
Professor of Metallurgical Engineering

Dr. Bull has gone from one-third time appointment to one-half time appointment.

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the Seven Months ending January 31, 1982; Colorado School of Mines Current Funds - Summary by Fund for the Seven Months ending January 31, 1982; and Colorado School of Mines Time Deposits and Investment Report, dated January 31, 1982. Mr. Scott told the Board that tuition income for the year is expected to exceed the budgeted income and that a request for supplemental funding has been made based on the number of Colorado resident FTE. He reported that the School is operating within the financial plan.

Mr. Scott stated that the Exploration Research Laboratory, as a major auxiliary enterprise with substantial cash flow problems, is being closely monitored and asked Dr. Golden to present a brief report to the Board. Dr. Golden reported that operating income threatens to lag behind expenses, the primary problem being fixed costs related to the Cyber Computer. He said that there are funds which can be transferred from the Foundation which will bring the accounts into balance short-term. The Board will be kept apprised of future management decisions concerning this matter.

Admissions and Enrollment. Mr. Young reported that the February 1 Admissions Report reflects the count of women and minority applicants for next fall. There are fewer minority students this year than last, and he said that the tuition level could have an influence on this fact. The number of nonresident applicants received exceeds the resident applications.

Dr. Chevront reviewed the spring 1981-82 enrollment statistics and reported a total of 2918 students enrolled.

February 12, 1982

# RECORD OF PROCEEDINGS

Golden, Colorado  
February 12, 1982

The Board of Trustees met in regular session on February 12, 1982 at 9:00 a.m.

Trustees present: Mr. Coors, Miss Craig, Messrs. Pascoe, Schwartzberg, Warren, Wilson and Wood.

Absent: Mr. Henderson.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Scott, Welles, Nyikos and Dean Golden and other staff members, visitors, and a representative of the press.

Previous Minutes. Dr. Mueller informed the Board that the January 8, 1982 minutes should be corrected to read as follows: Page 2, under Faculty Salary Supplements, the last sentence of the first paragraph under that section should indicate that his office does include faculty salary supplements in CSM's reports to the South Dakota School of Mines and Technology.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Donald G. Davis Adjunct Associate Professor of Petroleum Engineering	\$10,000 for the spring semester of the 1981-82 academic year
Wei-Pei Hu Visiting Professor of Metallurgical Engineering	No salary for the period January 1 through June 30, 1982
Richard Passamaneck Adjunct Associate Professor of Basic Engineering	\$4,000 for the spring semester of the 1981-82 academic year
Charles H. Reyman Adjunct Assistant Professor of Humanities and Social Sciences	\$2,500 for the spring semester of the 1981-82 academic year
Steven L. Rhodes Adjunct Assistant Professor of Humanities and Social Sciences	\$2,500 for the spring semester of the 1981-82 academic year

## Reappointments:

Jeffrey J. Daniels Adjunct Assistant Professor of Geophysics	\$3,000 for the spring semester of the 1981-82 academic year
Jerald E. Jones Assistant Research Professor of Metallurgical Engineering	\$9,855 for the spring semester of the 1981-82 academic year

## RECORD OF PROCEEDINGS

4

Colorado Energy Research Institute Operating funds	\$ 15,000
Capital construction funds (Coolbaugh lab fixtures)	\$185,000
Deferral of Alderson Hall lab ventilation planning for 1982-83	\$ 92,045

Further, deferral of \$5.5 million of controlled maintenance involving three projects for CSM.

WHEREAS the Governor has requested an acknowledgment of these actions by the Board of Trustees.

THEREFORE, be it resolved that this Board expresses its desire to cooperate in meeting the financial exigencies of Colorado and to bear a fair and proportional burden as may be finally and properly determined and that this Board does hereby indicate its willingness to make adjustments in response to financial demands up to the extent of those enumerated above, while requesting that should lesser reductions be necessary, funding be restored to Colorado School of Mines to the fullest extent possible.

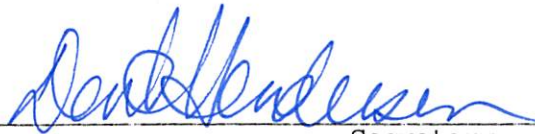
Legislative Matters. Mr. Welles said that there had been positive feedback on the meeting between the Board and the JBC on December 10.

There will be a meeting with the Jefferson County delegation on January 18. All of the Trustees are invited to attend. It will be a briefing for the delegation regarding the budget and how we may best work with them.

The CCHE is forming a new committee of representatives from the governing boards to meet once a month for legislative briefing. The new committee will meet once a month, and Mr. Welles inquired whether or not the Board would like to have a representative. Mr. Schwartzberg said that he is willing to assume the responsibility with the understanding that if he is unable to attend that someone else from the Board will attend in his place. The Board agreed that this could be accomplished.

Mr. Welles told the Board that CERI has been placed on the Governor's call.

The meeting was adjourned at 11:30 a.m. and the Board went into executive session.

  
Secretary

## RECORD OF PROCEEDINGS

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Cooperative Education--Placement Report. Mr. Warren Spaulding presented the Cooperative Education and Placement Office report. He explained that the Cooperative Education program, a study plan of six to eight months' duration with work periods in industry, is now in its fourth full year. Some 30 students are currently enrolled, and it is anticipated that an additional 50 students will participate. Funding which has been provided by four federal grants is of concern in terms of the future of the program. Each student who participates is under the supervision of a faculty adviser and must fulfill academic requirements for credit earned.

As to the Placement Office, Mr. Spaulding reported that some 200 companies come to campus conducting interviews in the fall and spring semesters and that the Placement Office has expanded its offerings for assistance to students in preparation for interviewing. Along with the Alumni Office, more workshops are being conducted on interviewing, plant trips and resume writing. Mr. Spaulding presented the current budget and complete report of operational costs. An area of concern is for future expansion in developing more and better summer job opportunities for students.

Mr. Henderson asked Mr. Spaulding to speak with him and with Mr. David Crawford of the Alumni Association regarding seeking financial assistance from industry and also assistance in finding jobs for the students.

Mr. Henderson, on the Board's behalf, thanked Mr. Spaulding for his extensive report.

General Fund Reduction, Governor's Request. President McBride reported to the Board that the Governor has predicted a \$28 million shortfall in revenues, of which higher education's share has been determined to be \$4.5 million. Our fair share of the decrease is 1.628% of the general fund amount, or \$122,000. This amount will be partially offset by an enrollment supplemental; and our net reduction is currently estimated to be \$47,200. The final amount of the shortfall is not known. The CCHE has undertaken to make recommendations to each institution as to what amount each institution may be asked willingly to give up. Each Board member was given a copy of a proposed Resolution expressing Board desire to cooperate in meeting the financial exigencies of Colorado and its willingness to respond affirmatively to the Governor's request to participate in the decreased general fund amount. President McBride and Mr. Scott recommended that the Board approve the Resolution, both being satisfied that the numbers represent a reasonable request, if the predicted shortfall materializes. Mr. Schwartzberg recommended that the words "for fiscal year 1982" be added on line 3 after "shortfall"; Mr. Wilson recommended that the words "and properly" be included in the last paragraph, line 3, following the word "finally"; and President McBride recommended that the CERI reduction of \$15,000 be included in the Resolution.

It was moved, seconded and passed to adopt the Resolution as amended.

The Resolution reads as follows:

WHEREAS the Governor of the State of Colorado has directed the impoundment of general funds in response to an anticipated revenue shortfall for fiscal year 1982 and has asked Colorado School of Mines to forego general funds allotted to it in the amounts which follow:

General operating funds	\$122,000
Offset in part by an enrollment supplemental currently estimated at	(83,000)
Student financial aid funds	<u>8,200</u>
Net reduction from general fund originally appropriated	\$ 47,200

## RECORD OF PROCEEDINGS

2

Daniel T. Teitelbaum Adjunct Associate Professor of Environmental Sciences and Engineering Ecology	\$3,200 for the spring semester of the 1981-82 academic year
Larry E. Wells Adjunct Assistant Professor of Petroleum Engineering	\$4,250 for the spring semester of the 1981-82 academic year
John L. Wray Adjunct Professor of Geology	\$3,000 for the spring semester of the 1981-82 academic year

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the six months ending December 31, 1981; Colorado School of Mines Current Funds - Summary by Fund for the six months ending December 31, 1981; and Colorado School of Mines Time Deposits and Investment Report, dated December 31, 1981. He stated that the School is operating within the original financial plan.

Mr. Coors entered the meeting at this time.

Admissions and Enrollment. Dr. Chevront reviewed the Spring 1981-82 enrollment statistics. He stated that the figures reflect totals at the close of registration on January 7, 1982.

Mr. Young answered questions concerning the Admissions Report. He said that the absolute numbers of and the ratio of acceptances of resident v. nonresident students will be examined within the next month.

Report on Academic Leave - Prof. W. John Cieslewicz. Prof. Cieslewicz reported on his professional activities during his academic leave in spring 1981. He told the Board that he translated a Russian book by Prof. Y. F. Makogon on Hydrates of Natural Gas. This translation was published in August 1981, a work which contributed to his professional development as Professor of Foreign Languages.

Prof. Cieslewicz stated further that he has been working on a reference book, two volumes on Science and Technology of Mineral Industry. He has completed a rough copy consisting of some 700 pages of text.

Prof. Cieslewicz answered questions and thanked the Board for having granted him academic leave.

Faculty Salary Supplements. President McBride asked Dr. Mueller to review for the Board non-state funding of faculty and summary of information regarding salaries at peer institutions. Dr. Mueller stated that there are four categories of faculty support: "Fully" funded professorships, partial support professorships, partial support lectureships and partial support faculty assistance grants. He said that 13% of full-time faculty receive some type of supplemental support. He reviewed information on specific lectureships and grants. He stated that the faculty supplements are not reflected in the figures received from the survey conducted by the South Dakota School of Mines and Technology.

Discussion ensued, during which the Board expressed its appreciation for having been furnished this information.

Change in Date of March 1982 Board Meeting. President McBride requested that the Board change the March Board meeting from March 12 to March 5 inasmuch as he has a serious conflict on March 12.

It was moved, seconded and passed to change the March Board meeting date.

January 8, 1982

# RECORD OF PROCEEDINGS

Golden, Colorado  
January 8, 1982

The Board of Trustees met in regular session on January 8, 1982 at 9:00 a.m.

Trustees present: Mr. Coors, Miss Craig, Messrs. Henderson, Pascoe, Schwartzberg, Wilson and Wood.

Absent: Mr. Warren.

Mr. Henderson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Scott, Welles, Nyikos and Dean Golden and other staff members, visitors, and a representative of the press.

Previous Minutes. The minutes of the meeting held on December 10, 1981 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Donald L. Baars Adjunct Professor of Geology	\$4,000 for the spring semester of the 1981-82 academic year
Karl D. Dreher Adjunct Associate Professor of Petroleum Engineering	\$4,750 for the spring semester of the 1981-82 academic year
James T. Ferguson Adjunct Associate Professor of Mining Engineering	\$2,000 for the spring semester of the 1981-82 academic year
Mark A. Friesel Instructor in Physics	\$8,700 for the spring semester of the 1981-82 academic year
Wesley G. Johnson Adjunct Associate Professor of Mining Engineering	\$750 for the period January 4-9, 1982
Kenneth E. Kolm Visiting Assistant Professor of Geology	No salary for the spring semester of the 1981-82 academic year
Stephen A. Sonnenberg Adjunct Assistant Professor of Geology	No salary for the spring semester of the 1981-82 academic year

## Reappointments

R. Theodore Hurr Adjunct Associate Professor of Geology	\$3,600 for the spring semester of the 1981-82 academic year
Hossein Kazemi Adjunct Associate Professor of Petroleum Engineering	\$4,750 for the spring semester of the 1981-82 academic year
Gregory R. McArthur Adjunct Assistant Professor of Environmental Sciences and Engineering Ecology	\$3,200 for the spring semester of the 1981-82 academic year

## RECORD OF PROCEEDINGS

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In response to a question whether it will affect the admissions process, Mr. Young stated that it was stated in the catalog two years ago that such a plan might have to be implemented. It was decided that a control of numbers is a logical position to assume to insure quality. Students prefer an opportunity to have one and one-half years to decide which option they wish to pursue.

Discussion ensued, during which it was moved, seconded and passed to approve the proposed plan.

The meeting was adjourned at 12:10 p.m. and the Board went into executive session.



Secretary

December 10, 1982

## RECORD OF PROCEEDINGS

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It was moved, seconded and passed to approve the recommendation.

President McBride commented that this is consistent with the thrust of the Master Plan. It represents no more academic leave activity in proportion to the faculty than we have experienced in the past.

Requests to CSM Foundation for FIF Funding. Dr. Mueller referred the Board to his memorandum dated December 6, 1982, recommending that the CSM Board endorse a request to the CSM Foundation Board of Directors for Faculty Improvement Funds for the 1983-84 year in the following amounts:

Professional Activities	\$ 25,000
Recruiting-Miscellaneous	15,000
Research	90,000
	<u>\$130,000</u>

It was moved, seconded and passed to approve the recommendation.

Request for Right-of-Way, Experimental Mine Property. Mr. Scott reported that, with regard to the tract of land immediately east of the mine property, Mr. Leland James has requested permission of the Board to improve the road that now exists alongside the School's building and the trailer at the lower end of our property and to build a new 500 feet of road on our property. He will pave the lower 600 feet of the road, install a gate at the "Y", and install culverts, all in compliance with BLM standards. He has agreed with the Mining Department to limit travel on the road. He has also agreed to provide an adequate legal description of the right-of-way.

It was established that the road will be for mining use only and that Mr. James will be responsible for the maintenance of the road.

It was moved, seconded and passed to approve the request.

Option Enrollment Management Plan, Report. Dr. Nyikos referred the Board to his memorandum dated December 6, 1982, addressed to President McBride, transmitting the final draft of the Plan which has been developed as an administrative management procedure to maintain quality in undergraduate education by providing a method for degree granting departments to determine the number of students for study in the particular option.

Dr. Nyikos explained that this is the product of an effort by a committee composed of him, Dr. Mueller, Dr. Chevront and Mr. Young. It is a method of controlling overloading in an option.

Dr. Mueller emphasized that there is a need for this in order to maintain high academic quality in those areas where we have a great number of students who want the option, but also for departments where it is most difficult to bring in new faculty. He believes that the plan is most important to us for a continuation of high academic quality. President McBride pointed out that it is an attempt to eliminate gross fluctuations.

Several Board members expressed concern about putting students in competition with one another and placing some students in options which they do not particularly want.

President McBride said that option management of some kind is almost universal in engineering schools. In the past we have been able to stand the surges in different options, but we can no longer do so and assure the quality we want to achieve.

December 10, 1982



## RECORD OF PROCEEDINGS

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July 1, 1985. Mr. Ellickson maintains that he has improved the appearance of the existing property, and he would like to continue to use these facilities until the delayed date.

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Mr. Pascoe entered the meeting at this time.

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Mr. Henderson expressed his concern regarding the safety of the structures.

Mr. Scott made available to the Board a copy of Mr. Ellickson's letter dated June 21, 1982, which he is using as his request for an extension to 1985 to remove the buildings.

Mr. Schwartzberg suggested that the matter be tabled until the January meeting, and that it be determined whether the present buildings satisfy the City of Golden's safety codes and whether there are certain modifications that can be made within existing usage which the Board can use as a club to extend the covenants.

It was moved, seconded and passed to defer consideration of the matter until the January meeting and to follow Mr. Schwartzberg's suggestions. Mr. Scott or the appropriate people will report at that time. It was further suggested that Mr. Ellickson tell the Board why he is asking for these extensions.

CSM Buildings Proposed for Historic Designation, Report. President McBride stated that several of our alumni felt and feel that a greater effort ought to be made by the School to preserve its older buildings as historic buildings. The specific buildings to be included have varied from time to time. He referred the Board to letter dated November 12, 1982, from Arthur C. Townsend, State Historic Preservation Officer, which lists the following structures: Engineering Hall (1894), Guggenheim Building (1906), Chauvenet Hall (1902), Stratton Hall of Metallurgy (1902), Berthoud Hall (1938), and Volk Gymnasium (excluding the modern addition).

Unless the Board disapproves, Mr. Townsend will present these buildings for nomination to the National Register at the February 11, 1983 meeting of the Historical Society. It was recognized that Mr. Townsend should not be allowed to proceed without specific Board approval, for such designation entails certain encumbrances.

Mr. Scott discussed the state and federal regulations involved and said that to some extent the problem of the Board is clouded by the fact that the regulations designed to prevent "adverse impact" can change and become different in time. Destruction of a designated building would be considered an adverse impact.

President McBride asked for Board approval to tell Mr. Townsend that the Board feels it is unable to assent to this designation without a great deal of further discussion concerning the results of such a designation and to ask for continued negotiation on the subject.

The Board accepted this recommendation.

Sabbatical Leave Request and Recommendation. Dr. Mueller reviewed his memorandum dated November 22, 1982, which details academic leave requests for Professor Ronald W. Klusman, Department of Chemistry and Geochemistry, Professor Keenan Lee, Department of Geology, Professor James W. Martin, Department of Basic Engineering, and Professor Bill J. Mitchell, Department of Petroleum Engineering. He said that these individuals satisfy the conditions in terms of period of service, time of application, and each of them has an ongoing project or research activity that qualifies him. Our arrangement is that we pay one-half salary for the academic year. Dr. Mueller indicated that these leaves can be granted at no cost to the institution, and he recommends that these requests be granted.

December 10, 1982

## RECORD OF PROCEEDINGS

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Request for UAA and SPS Book Sales. Mr. Rosenzweig said that there are two organizations on campus that are interested in selling books. These are the Undergraduate Alumni Association (UAA) and the Society of Physics Students (SPS). The Alumni Association has informally offered some financial support to the former. He said that the UAA would like to buy and sell used books and ultimately expand to new book sales, and this can be done with the support of the Alumni Association but without bringing the School into the bookstore business. He stated that SPS will be selling new physics books. He does not have a detailed future operational plan, but when this has been accomplished, the request will be brought back to the Board for its approval of a book operation. He said that he is asking for an informal nod of encouragement from the Board to proceed.

President McBride stated that he feels it is a move in the right direction and one which he can recommend to the Board. He said that Mr. Rosenzweig has been working closely with Dr. Nyikos, and is now asking for specific approval to proceed with book sales at the opening of the semester in January, which precedes the next BOT meeting.

Mr. Rosenzweig said that the money made from this venture will go back to the Alumni Association. He stated that the books will be stored in the Alumni Association building and the Association's insurance will cover the inventory. The Alumni Association will assist with accounting.

Dr. Nyikos said that the major entity here is the Student Council, as it has pledged its support. He said that future planning will be provided by the Alumni Association, and the UAA will constitute an umbrella under which other student organizations can move. He expressed his support for this effort, which is not intended to establish a college or campus bookstore. This will be student organized, student operated, and student supported.

Mr. Henderson moved to authorize a pilot sale of books next semester, and to direct the group to return to the Board with a full-scale plan. No sales beyond January 1983 will be made without Board approval.

The above motion was seconded and passed.

Suggested Keystone Agenda, for Approval. President McBride recalled Board comment in November that an interesting item would be diversity among and an appraisal of the departments. The administration recommends to the Board that this subject be the main topic for the Keystone meeting in 1983. We shall have the benefit of comments by NCA and ABET and of Dr. Golden's survey of what departments are in a takeoff position vis-a-vis research and what departments are moving closer toward Type II status. All department heads will be invited to participate in the planning of the Keystone meeting and the meeting itself.

It was moved, seconded and passed to approve the subject matter for Keystone 1983.

Dates for Keystone 1984. Mr. Welles requested Board approval of dates for the Keystone 1984 meeting.

It was moved, seconded and passed to have the Keystone meeting July 12-15, 1984.

Mr. Welles reminded the Board that the dates for Keystone 1983 are July 14-17.

Mr. Lyle L. Ellickson's Request for Modification of Covenants. Mr. Scott reviewed the history of this matter. Mr. Ellickson purchased Prospector Park from CSM and agreed to remove half of the structures by July 1, 1982 and the remaining structures by July 1983. In January 1982, Mr. Ellickson asked that a delay be granted to remove the structures and asked if a phased removal might be favorably considered. Now Mr. Ellickson has asked for waiver of phased removal, and says that all buildings could be removed by

## RECORD OF PROCEEDINGS

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Dr. Nyikos called the Board's attention to the name of Morgan Wells Steele, deceased, who, prior to his death, completed substantially all of the requirements for a Bachelor of Science Degree (Mining Engineering). Dr. Nyikos recommended that as provided by academic policy Mr. Steele receive the degree posthumously.

It was moved, seconded and passed to award the degree to Mr. Steele posthumously.

Request for Approval of Editorial Changes to Master Plan. Mr. Welles distributed selected CSM Master Plan pages revised in response to the Board's suggestions at the November meeting. Mr. Welles discussed these changes, and President McBride stated that this version of the Master Plan will be published unless the Board objects.

Mr. Wilson said that the Board considers the Master Plan ready for publication, and indicated that the Board will "revisit" it from time to time.

Mr. Welles distributed for information and review a recently prepared CSM Planning Time-Line chart. He noted further that although OCHE will receive a copy of Draft 2 of the Master Plan, it may be advisable to prepare an abstract of the Plan for the CCHE. He also suggested that perhaps it could be published for distribution to alumni and industry people. Mr. Henderson suggested consideration be given to working up a brief presentation to alumni to elicit comments.

Legislative Report. Having represented the Board at the CCHE Hearing on Higher Education on December 7, Mr. Schwartzberg first reviewed the agenda: 1) a discussion of the Memorandum of Understanding and how the boards are using it; 2) mandated classified salary survey and how the boards are dealing with it; 3) raising enrollment caps at UCB and CSU; 4) comments on Auditor's report of CCHE Sunset activity; 5) enrollment management study; 6) how the governing boards have responded to the initial 2% rescission; and 7) an opportunity in closing for the boards to make general comments.

Mr. Schwartzberg said that it was the general agreement that everybody endorsed the Memorandum of Understanding. The institutions appreciate the flexibility and want to continue the present policy; with regard to the classified salary survey, the institutions are concerned over lack of control, and the 12% increase given to classified employees had a very detrimental effect at many institutions due to the fact that faculty members received less; some institutions went on record as being opposed to raising enrollment caps at UCB and CSU; with regard to the student transfer program, the guaranteed program does not affect CSM as we have student transfer arrangements with other institutions.

Mr. Schwartzberg said that his response to question of how CSM would handle additional cuts in the general fund was that we do have reserves that would take care of a small additional cut. Most other institutions are not in that position and do have to look at eliminating jobs. Some classified staff jobs will probably be eliminated as the institutions cannot eliminate faculty people in mid-year.

Mr. Schwartzberg, in the closing remarks, expressed our need to continue with the Memorandum of Understanding. It has resulted in helping our Board to gain a higher level of financial understanding due to being able to handle our own budget. He commented on the impact of access due to increased tuition. Thus far the increases have not affected access, but he does not know how long this can go on.

President McBride reported that Rep. Wilma Webb, a member of the JBC, asked each institution to respond to her as to what it is doing about budgeting for minority recruiting of both faculty and students; Dr. Nyikos will respond to her inquiry.

December 10, 1982

# RECORD OF PROCEEDINGS

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## MASTER OF SCIENCE (MINERAL ECONOMICS) - DECEMBER

Bernard, Paul Leland	Neville, Thomas A.
Gibbs, Deborah L.	Delard, Dario Perez
Good, Linda Lee	Snow, Stuart Evans
Gustafsson, Roy B.	Tsuda, Masao
Kuestermeyer, Alva L.	Ulloa Chaverri, Franz

## DOCTOR OF PHILOSOPHY (METALLURGY) - DECEMBER

Ando, Teiicho  
Zia-Ebrahimi, Fereshteh

## DOCTOR OF PHILOSOPHY (METALLURGICAL ENGINEERING) - DECEMBER

Sumner, Kenneth Edward

## DOCTOR OF PHILOSOPHY (GEOLOGY) - DECEMBER

Briceno, Henry O.

## DOCTOR OF PHILOSOPHY (GEOLOGICAL ENGINEERING) - DECEMBER

Montazer, Parviz

## DOCTOR OF PHILOSOPHY (PETROLEUM ENGINEERING) - DECEMBER

Al-Hashim, Hasan Salman  
Labedi, Rafa Mohamed

## DOCTOR OF PHILOSOPHY (CHEMICAL & PETROLEUM-REFINING ENGINEERING) - DECEMBER

Miller, Ronald Lee

## DOCTOR OF PHILOSOPHY (GEOPHYSICS) - DECEMBER

Lee, Shu-Schung  
Tongtaow, Chalemkiat

## DOCTOR OF PHILOSOPHY (APPLIED CHEMISTRY) - DECEMBER

Rees, Terry Francis

## DOCTOR OF PHILOSOPHY (GEOCHEMISTRY) - DECEMBER

Catts, John Gleason	Northrop, Harold Roy
Lambert, David Dillon	Riese, Arthur Carl

## DOCTOR OF PHILOSOPHY (MINERAL ECONOMICS) - DECEMBER

Abduljawad, Abdulrahman Asaad  
Harshman, Richard L.  
Schlaks, Francine Deidre

December 10, 1982

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## MASTER OF SCIENCE (METALLURGICAL ENGINEERING) - DECEMBER

Fenicle, Theodore William	Patsos, Harilaos S.
Flower-Bruno, Elane	Turney, Vicki
Ketcham, Alan Blaine	Wilkinson, Bruce Daryl
Oldani, James Joseph	

## MASTER OF SCIENCE (GEOLOGY) - DECEMBER

Alatorre, Armando E.	Kelly, Anne O.
Ball, Theodore Thomas	Kubik, West Tyler
Budge, Suzanne	Smith, Larry B.
Clark, Reino F.	

## MASTER OF SCIENCE (GEOLOGICAL ENGINEERING) - DECEMBER

Borges, Cesar A.

## MASTER OF ENGINEERING (PETROLEUM ENGINEER) - DECEMBER

de Araujo, Paulo Fernando  
Hernandez, Francisco Garcia  
Sharpe, George Franklin

## MASTER OF SCIENCE (PETROLEUM ENGINEERING) - DECEMBER

Goodrich, Jeffrey L.  
Santos, Otto Luiz A.  
Yousif, Majeed H.

## MASTER OF SCIENCE (CHEMICAL & PETROLEUM-REFINING ENGINEERING) - DECEMBER

Clawson, Donald Francis	El-Gezawi, Sead Mabruk
Dughri, Omar Salem	Pings, Keith Douglas
El-Behlil, Mohamed Ali	

## MASTER OF SCIENCE (GEOPHYSICS) - DECEMBER

Claussen, John Preston	Kidney, Robert L.
Graebner, Mark J.	Martin, Richard Alan, Jr.
Guderjahn, Charles George	Rossow, Joerg
Ibrahim, Kamil E.	Wallis, Claybon Mark
Katahira, Yo	Zeisloft, Timothy D.
	Saito, Akira

## MASTER OF SCIENCE (CHEMISTRY) - DECEMBER

Naghmush, Abdulmagid Mohamed  
Rastle, Charles Melvin

## MASTER OF SCIENCE (GEOCHEMISTRY) - DECEMBER

Brown, Douglas G.	Rice, James A.
Maxwell, Leslie E.	Shepard, Cathryn A.
Naftz, Dave	

December 10, 1982

# RECORD OF PROCEEDINGS

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## BACHELOR OF SCIENCE (GEOPHYSICAL ENGINEERING) - DECEMBER

Boltz, Daniel Rolland	Marcum, David Worth
Fleure, Thomas John	Mullin, Brian Terry
French, Marvin David	Nilsson, Mark Hamilton
Gebhardt, Carol Sue	Papke, Steven Charles
Graham, James Campbell	Vandenburgh, Steven York
Harrington, Brett Charles	Wagoner, Colin Huntington
Harris, Clifford	Walker, Jon Gamble
Huff, Paul Edward	Westerberg, Robert Gehrig
Klein, James Warren	Wieduwilt, Eric William
Magnusson, Stefan Gunnar	Wilson, Amanda Kay
Makris, Thomas Wayne	

## BACHELOR OF SCIENCE (MINERAL ENGINEERING CHEMISTRY) - DECEMBER

Butler, Craig David  
Jones, Thomas Arthur

## BACHELOR OF SCIENCE (MINERAL ENGINEERING MATHEMATICS) - DECEMBER

Harrington, Brett Charles	Vandenburgh, Steven York
Mason, Michael John	White, Robert J.
Parr, Tracie Kay	

## BACHELOR OF SCIENCE (MINERAL ENGINEERING PHYSICS) - DECEMBER

Castor, Beverly Ann  
Kincaid, Teena Lee  
Wichmann, Marcus Theodore

## BACHELOR OF SCIENCE (MINERAL ENGINEERING) - DECEMBER

Bartow, Donald Wayne	McCoury, John Mark
Corkill, David William	Pomeroy, Glen Wade
Ion, Kevin Dale	

## MASTER OF ENGINEERING (ENGINEER OF MINES) - DECEMBER

de Oca, Federico E. Brunner Montes

## MASTER OF SCIENCE (MINING ENGINEERING) - DECEMBER

Chitombo, Gideon Fungai  
Ness, Michael Sigurd  
Pesce, Ernesto L.  
Sherer, Hubert Erik

## MASTER OF SCIENCE (MINE HEALTH AND SAFETY) - DECEMBER

Engleman, Steven D.  
Richen, Michael J.

## MASTER OF SCIENCE (METALLURGY) - DECEMBER

Jacobs, Florence Andrea

December 10, 1982

# RECORD OF PROCEEDINGS

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## BACHELOR OF SCIENCE (GEOLOGICAL ENGINEERING) - DECEMBER

Agapito, Debra Ann Hamilton	Jones, James Kenneth
Allery, Bryan Keith	McGinnis, Brian Matthew
Barovich, Karin Marie	Nash, Carol Diane
Bosco, Timmy Joe	Piper, James Brandon
Caruso, Dennis Albert	Roadifer, John William
Erdman, Robert G.	Shine, Brendan F.
Gordon, Mitchell Robert	Sutphin, John Dirk
Hansen, John Trygve	Taylor, Paul Edmond
Hartfelder, Theodore Thomas	Wheeler, John Loyd
Hessel, Robert Max	Yasutake, Shawn Michael
Huskie, William Webster	

## BACHELOR OF SCIENCE (PETROLEUM ENGINEERING - DECEMBER

Bair, Steven Kurt	Kelly, William Charles, III
Buresh, Kent Charles	Kervin, William Martin Joseph
Conrad, Brett	Lasnik, Todd Michael
Corum, Jerry Wayne	Low, David John
Cupit-Humiston, Cynthia Mary	Manelis, Robert John
DeBerard, Michael Emmons	Mozingo, Nadine Ann
Forcade, Kirk Charles	Murphy, Daniel Joseph
Gruver, Steven Mark	O'Brien, Erin Colleen
Hadzeriga, Pablo, Jr.	Peters, William Roger
Hanslip, Gregory Steven	Rooney, George B., IV
Held, Erin Marie	Smith, Gerald Carleton, Jr.
Housman, Brian Wigton	Smith, Kyle Blaine
Inks, Timothy John	Vaughan, Jeffrey Roy
Keller, Larry Lynn	Zellitti, John

## BACHELOR OF SCIENCE (CHEMICAL & PETROLEUM-REFINING ENGINEERING) - DECEMBER

Asher, Gregory Brian	Nemeth, Michael Philip
Avery, Mark Stiles	Noxon, Robert Paul
Beck, Christopher Allen	Pearce, William Richard
Boone, Lynn Ellen	Rhodes, Cathy Jean Lund
Borders, Mark Owen	Rhodes, Jeffrey Warner
Bourrie, Mark Stephen	Santi, Dana Jordan
Chapin, Thomas B.	Schaber, John Richard
Conroy, Kevin William	Schantz, Sean Scott
Darnell, Robert Keith	Schulte, Susan Marie
Dempsey, Peter John	Skinner, Douglas Robert
Gerze, Eddie Eugene	Stroud, Gregory Paul
Grey, Allen Michael	Sweeney, Raymond Michael
Hansen, Paul Laverne	Sykes, Carl Raymond
Hill, Homer Edward, Jr.	Tadder, David William
Hirsch, William Enrique R.	Unruh, Kelli Rene
Keegan, Nancy Alison	Williams, Charles Alan
Kosley, Alan Kent	Wrobel, Sandra Jean
McIntyre, Ann Rhoads	

## RECORD OF PROCEEDINGS

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Admissions. Mr. Young reviewed the Admissions Report for Fall Semester 1983, dated December 1, 1982. This report reflects a decrease in applications from last year. He said that his office expects to receive between 1700 and 2000 applications for next fall. Mr. Young feels that this is an adequate applicant pool, although a decrease from last year. In response to a question concerning pattern of in-state v. out of state applications received, Mr. Young stated that the number of in-state applications received has decreased. He believes that we are seeing the effects of the minerals industry difficulties within the state.

Dr. Nyikos responded to a question concerning transfer students by saying that transfer students are admitted based on departmental evaluation of credit. He said that the majority of transfer students are from within the state, discussing briefly also the guaranteed student transfer program.

Dr. Nyikos referred to the memorandum dated December 7, 1982 from Mr. Warren Spaulding, Placement Director, concerning job placement activity for fall 1982. Mr. Spaulding summarized the report and answered questions.

Candidates for Degrees. Distribution was made of lists of candidates for degrees as recommended by the regular and graduate faculties.

Upon motion made, seconded and unanimously passed, the following were approved for degrees on the dates specified, subject to the completion of all academic requirements and continued compliance with school requirements and regulations.

### BACHELOR OF SCIENCE (MINING ENGINEERING) - DECEMBER

Bartow, Donald Wayne	Lightsey, Daniel Robert
Beckett, Stanley Foster	Mastor, Michael Martin
Beecham, Charlie Faye	McManus, John Wallace
Broser, Rudolf Christian	Merritt, Leslie Allison
Burch, Roger Lewis	Mikesell, Tony Frank
Burton, Jeffrey Lee	Montoya, Jose Julian Betancur
Carlberg, Bruce Charles	Moseley, George Wallace
Cooper, Joseph Dean	O'Connor, Roger Thomas
Eurich, Leslie Duane	Ovian, Jeffrey Stuart
Gibson, Herbert Clark, Jr.	Patten, Andrew Timothy
Graff, Bruce Allen	Philipp, Christopher Charles
Hansen, Sidney Lawrence	Rice, Thomas Owen
Harvey, David Charles	Savage, Brian Charles
Howard, Terry Wayne	Steele, Morgan Wells (posthumously awarded)
Hulse, Donald Edward	Stevens, Jeffrey L.
Jenkins, Martin Robert	Wagner, Anne Maureen
Kuchta, Frederick Albert	Wayment, Kevin Ross
Leidich, Thomas Elmer	Wright, Kim W.
	Zuege, Michael Allen

### BACHELOR OF SCIENCE (METALLURGICAL ENGINEERING) - DECEMBER

Cadwell, Kerry Lynn	Kautz, Douglas Dean
Carpenter, Bernard Frank	Tschanz, Tor C.
Fehringer, John Phillip	Turner, Robert Dean
Humiston, Timothy James	

December 10, 1982



# RECORD OF PROCEEDINGS

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Golden, Colorado  
December 10, 1982

The Board of Trustees met in regular session on December 10, 1982, at 9:00 a.m.

Trustees present: Messrs. Coors, Henderson, Pascoe, Rosenzweig, Schwartzberg, Warren, Wilson and Wood.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Nyikos, Robbins, Scott and Welles, Dean Golden and other staff members, visitors, and a representative of the press.

Previous Minutes. The minutes of the meeting held on November 12, 1982 were approved as distributed.

Faculty Appointments. Dr. Mueller stated that due to the hiring freeze, there are no new appointments to the faculty. He did report that Dr. George V. Keller, Head of Department of Geophysics, is stepping down voluntarily at the end of the 1982-83 academic year; the administration is searching for a successor. Dr. Keller, who was present, said that he feels that a person should not remain in that position for too long and that he is anxious for someone younger to assume the position of Department Head.

Monthly Financial. Mr. Scott made available and reviewed the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the Five Months Ending November 30, 1982; Colorado School of Mines Current Funds - Summary by Fund for the Five Months Ending November 30, 1982; and Colorado School of Mines Time Deposits and Investment Report, November 30, 1982. He stated that the School is operating within the adjusted financial plan but that he anticipates a further rescission in the general fund. President McBride noted that rumors placed the rescission at up to 5%; our reserve is adequate to cover up to a 3% rescission.

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Mr. Henderson entered the meeting at this time.

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Mr. Scott reminded the Board that he had promised to come back to the Board in December with a report on the financial situation of the Exploration Research Laboratory (ERL). Dr. Golden gave a brief history of the situation and reminded the Board that it had agreed to permit ERL to operate in a deficit mode in anticipation of receipt of the \$500,000 Keck Foundation pledge payment.

Dr. Applegate of the Geophysics Department reviewed the ERL Statement of Position through November 30, 1982, which had been made available to the Board, and answered questions.

President McBride assured the Board in the most confident terms, based upon confidential personal information, that the \$500,000 gift will be received by the end of the year.

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Mr. Wilson entered the meeting at this time.

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# RECORD OF PROCEEDINGS

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\*Lon Rosenzweig - Student, Colorado School of Mines

## CSM Administrative Officers

John G. Welles - Vice President for Planning and Public Affairs

Michael S. Nyikos - Vice President of Student Affairs and Dean of Students

Martin D. Robbins - Vice President for Development, Executive Director  
of the Colorado School of Mines Foundation

\*Student Trustee

Institute for Minerals and Energy Management Progress Report. Dr. P. M. Burgess, Director of the Institute, referred to the written progress report which was sent to the Board. He said that this represents the results of about three and one-half months of activity. He said that the Institute hopes to address what leadership in industry is identifying as management problems, for example, a change in the structure of supply and demand in commodity metals.

Dr. Burgess referred the Board to the chart of executive development programs in the report. He said also that the question has been raised as to the distinction between what the institute is doing and what continuing education is doing. Continuing education is developing outlets for the faculty. The institute is much more demand driven. It is attempting to look at problems in industry.

President McBride commented that he believes that Dr. Burgess is driving the institute in the direction that is hoped for. Funding for the institute was also discussed.

Mr. Wilson thanked Dr. Burgess for his report.

The meeting was adjourned at 11:45 a.m., and the Board went into executive session.

  
Secretary

# RECORD OF PROCEEDINGS

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Security Resolution. Dr. Golden indicated that any time the composition of the Board or the officership of the School changes a new security resolution has to be approved. He referred the Board to the resolution which was distributed to it.

It was moved, seconded and passed to approve the resolution, which reads as follows:

## SECURITY RESOLUTION

Be it resolved by the Board of Trustees of the Colorado School of Mines that those persons occupying the following positions at the Colorado School of Mines shall be known as Managerial Group as described in the Industrial Security Manual for Safeguarding Classified information.

Guy T. McBride, Jr.	President
William M. Mueller	Vice President for Academic Affairs
W. Gordon Scott	Vice President for Business Affairs
John O. Golden	Dean of Graduate Studies and Research

That the President and the other members of the Managerial Group currently hold, have been processed, or will be processed for a personal security clearance for access to classified information to the level of the facility clearance granted to this institution as provided for in the aforementioned Industrial Security Manual.

That the said Managerial Group is hereby delegated all of the Board's duties and responsibilities pertaining to the protection of classified information under classified contracts of the Department of Defense of User Agencies of its Industrial Security Program awarded to the Colorado School of Mines.

That the following named officers and members of the Board of Trustees and the Colorado School of Mines administrative officers shall not require, shall not have, and can be effectively excluded from access to all positions that would enable them to affect adversely the policies and practices of the University in the performance of classified contracts for the Department of Defense or user Agencies of its Industrial Security Program, awarded to the Colorado School of Mines, and need not be processed for personnel security clearance.

### Officers - CSM Trustees

James C. Wilson	President
Fred R. Schwartzberg	Vice President
Don K. Henderson	Secretary

### CSM Trustees

W. K. Coors - Adolph Coors Company, Golden, Colorado 80401

Monte Pascoe - Dept. of Natural Resources, Rm. 718, 1313 Sherman St.  
Denver, Colorado 80218

Jasper N. Warren - Goldrus Drilling Co., 900 FCNB Bldg., Houston,  
Texas 77002

Russell L. Wood - Louisiana Land Exploration Company, Suite 660  
West Point Bldg., 3900 S. Wadsworth Blvd.,  
Lakewood, Colorado 80235

## RECORD OF PROCEEDINGS

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has been on the academic side and that our administrative software is badly outdated. The state auditor has been very critical of our systems, and we are operating at our capacity. He feels that a second immediate need is for word processing throughout the administration. All but two academic departments have word processing. They have spent about \$200,000 for equipment over the past several years. We need a complete new administrative data processing system. It would be a combined system having both word and data processing capabilities. All academic and administrative departments need access. He feels that it needs to be a system that is fairly simple and can be integrated and expanded.

Dr. McGrath is proposing to purchase Wang equipment. He feels it has the only type of equipment that we really want. Wang has the ability to communicate over long distances. The entire system is menu driven.

He discussed the preliminary proposal for financing the system. He said that there would be a phase I and a phase II. The down payment would be \$75,000, \$300,000 would be financed over two or two and one-half years, paying interest only, and a balloon payment of \$300,000 would be paid in July 1985. In phase II, in 1984, \$200,000 would be financed for the academic departments based on 1986 funds.

Mr. Scott answered questions concerning the source of the funds. He said that financing arrangements have not been finalized.

It was moved, seconded and passed to proceed to define and to investigate avenues of obtaining the entire system.

Mines Medal Recipients. President McBride reported that he has contacted the candidates for the Mines Medal to be awarded at the mid-year Degree Convocation in December and that the responses have been affirmative. He is therefore able to recommend to the Board that the following persons be awarded Mines Medals:

Henry A. Babcock  
Bernetta Conrey  
Elvera Dinkmeyer  
John A. Reeves

It was moved, seconded and passed to award the Medals.

Proposed Distinguished Achievement Medal Selection Committee. President McBride asked the Board to give him permission to appoint a committee for selecting Distinguished Achievement Medal candidates.

It was moved, seconded and passed to proceed with the appointment of a committee (in the customary fashion).

Proposed Resolution Regarding Reduction of 1982-83 Colorado Student Aid Funds. President McBride said that we have been notified of the first stage rescission of \$9,200 in student aid funds and that the Board is asked to approve. The proposed resolution indicates how the student aid office intends to distribute this burden. The CCHE made it clear that an institution could if it wished transfer other funds into student aid. The administration is recommending that that not be done because of the fact that we may receive another cut equal to or more than the present amount.

It was moved, seconded and passed to approve the resolution. The resolution is appended hereto.

President McBride answered questions.

## RECORD OF PROCEEDINGS

3

there are three factors that have made this planning difficult at this particular time: we have been advancing our thinking as we have gone along, the School is in a very dynamic period of its own, and the world around us is changing. Therefore, this is an ongoing process.

The assumptions listed in chapter two are essentially the same as they were at Keystone. He reviewed the participatory planning process and discussed questions slated for future consideration.

Mr. Welles reviewed the CSM goals and other sections of the plan which were revised to reflect the discussions at Keystone in July to be certain they reflected Board consensus. In discussing plans in 1982-83 to review graduate and research programs, Mr. Wood asked whether a department's decision to enhance its graduate or research program is made in a vacuum. Dr. Golden said that it largely is. President McBride said that he would hope that the departments will move vigorously on this, and said he feels departments may need to be pushed and encouraged somewhat to realize their full potentials. Mr. Henderson said he hoped the alumni will be kept informed on how the School is proceeding with research and graduate program enhancement.

Mr. Welles reviewed the financial projections section. After some discussion concerning inflation, President McBride pointed out the effect of utility costs, especially electricity projections, on projected CSM budgets. It was pointed out that these are projections, not predictions. Extensive discussion ensued.

Mr. Welles distributed a copy of the 1968 Borgmann Report, which was undertaken for the CCHE. He pointed to Option Three, Development of National Leadership, which is similar to the consensus developed last July at Keystone. Mr. Welles stated five tasks remain: we need to revise our Table of Needs, we must prepare a facilities master plan (an expensive, complex effort), we have to develop an operational plan, the ongoing questions discussed earlier need to be looked at, and the planning process needs to be a cyclical activity.

Mr. Henderson asked that the plan be reviewed to insure the inclusion of a strongly affirmative statement about faculty enrichment, development, etc. He fails to see it strongly emphasized as a continuing goal. Mr. Welles will work with Dr. Mueller on this.

Upon question as to how CCHE might utilize, copy, or cite the plan, Mr. Welles said that the CCHE may wish us to condense the plan into twenty pages for submission to it.

It was moved to approve the plan as submitted with certain revision rights to the administration as it has suggested. It was also suggested that this needs to be revisited periodically.

The Board agreed that it will entertain a suggestion from the administration as to that cycle at some future meeting. President McBride said that he would like a little time to think about what he will do.

It was moved, seconded and passed to approve the master plan, with the stated revisions.

Computer Presentation. Dr. Michael McGrath, Director of the Computing Center, distributed a preliminary proposal to the Board on administrative computing and word processing. He said that most of the emphasis

# RECORD OF PROCEEDINGS

2

James Smart  
Adjunct Associate Professor of  
Chemistry and Geochemistry

No salary for the 1982-83  
academic year.

## Reappointments:

James W. Crafton  
Adjunct Assistant Professor of  
Petroleum Engineering

\$ 5,500 for the fall semester  
of the 1982-83 academic year.

Jean Michel Rendu  
Adjunct Associate Professor of  
Mineral Economics

1,750 for the spring semester  
of the 1982-83 academic year.

## Salary Supplements:

Donald W. Gentry  
Hanna Mining Company Lecturer

5,000

Michael S. Graboski  
Conoco Lecturer

4,500

William A. Hustrulid

5,000

Victor F. Yesavage

6,000

President McBride stated that Dr. R. W. Hutchinson will be the Charles Franklin Fogarty Professor in Economic Geology effective the 1983-84 academic year. He summarized Dr. Hutchinson's background.

Dr. Mueller said that he has reviewed the School's tenure situation. Sixty-five percent of our faculty are tenured.

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the Four Months Ending October 31, 1982; Colorado School of Mines Current Funds - Summary by Fund for the Four Months Ending October 31, 1982; and Colorado School of Mines Time Deposits and Investment Report October 31, 1982. We are operating within our financial plan. A revised budget will be brought to the Board at a later meeting; a further rescission of the General Fund is anticipated.

Admissions. Dean Nyikos reported that the Board will receive a written admissions report at the December meeting. He reported that the organized recruiting process and travel schedule will draw to a close in December, with admissions continuing as usual through the spring. He said that the number of applications expected to be received, 2,100, is the same number received the past two years.

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Mr. Welles introduced Rick Frost, Transcript reporter who replaces Stan Harsha.

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Master Plan. Mr. Welles reviewed draft two of the proposed Master Plan utilizing discussion points prepared and distributed in advance. He said that

# RECORD OF PROCEEDINGS

Golden, Colorado  
November 12, 1982

The Board of Trustees met in regular session on November 12, 1982 at 9:00 a.m.

Trustees present: Messrs. Coors, Henderson, Pascoe, Rosenzweig, Schwartzberg, Warren, Wilson and Wood.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Nyikos, Robbins, Scott and Welles, Dean Golden and other staff members, visitors, and a representative of the press.

Previous Minutes. The minutes of the meeting held on October 8, 1982 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Bradford R. Bean Adjunct Professor of Environmental Sciences and Engineering Ecology	No salary for the 1982-83 academic year.
Virginia L. Bollinger Adjunct Assistant Professor of Humanities & Social Sciences	\$ 2,500 for the fall semester of the 1982-83 academic year.
Lee C. Gerhard Professor of Geology	41,000 for the 1982-83 academic year adjusted for November 1 employment date.
Edward A. Howard III Visiting Assistant Professor of Environmental Sciences and Engineering Ecology	27,500 for the 1982-83 academic year.
Erroll G. Kelly Visiting Associate Professor of Metallurgical Engineering	5,000 for the spring semester of the 1982-83 academic year.
Betty L. McCummings Adjunct Assistant Professor of Humanities and Social Sciences	2,500 for the fall semester of the 1982-83 academic year.

## Continuation of Appointments:

Lawrence L. Kazmerski Adjunct Professor of Physics	2,000 for the 1982-83 academic year.
Robert D. Mager Adjunct Assistant Professor of Geophysics	3,500 for the fall semester of the 1982-83 academic year.
Levent Ozdemir Director of the Earth Mechanics and Excavation Engineering Institute and Associate Research Professor	43,760 September 1, 1982 through August 31, 1983.

<b>Corporation</b>		DATE	ACCOUNT NUMBER	
		9/28/82	90 385 0	
EXACT CORPORATE NAME			OFFICER CODE	SIGNATURES REC
Parson Loans Colorado School of Mines				
ADDRESS				INITIAL DEPOSIT
Colorado School of Mines, Golden, Colorado				
CITY	STATE	ZIP	PHONE	I.D. NUMBER
Golden	Colorado	80401		
AUTHORIZED SIGNATURE				
X <i>Henry J. M... PRESIDENT</i>				
AUTHORIZED SIGNATURE				
X <i>... VICE-PRESIDENT</i>				
AUTHORIZED SIGNATURE				
X <i>... TREASURER</i>				
AUTHORIZED SIGNATURE				
X <i>... SECRETARY</i>				
AUTHORIZED SIGNATURE				
X <i>Dan Frelund Controller</i>				
OPENED BY: <i>...</i>				
ABOVE IS THE SIGNATURE OF EACH PERSON AUTHORIZED TO SIGN FOR THIS ACCOUNT. SIGNIFYING AGREEMENT THAT THE ACCOUNT IS SUBJECT TO ALL APPLICABLE RULES OF THE BANK AS STATED HEREON.				
RULES AND REGULATIONS UNITED BANK OF ARAPAHOE National Association, Englewood, Colorado 200-41				
COLLECTION CLAUSE. In receiving items for deposit or collection, this Bank acts only as depositor's collecting agent and assumes no responsibility beyond the exercise of due care. All items are credited subject to final payment in cash or solvent credits. This Bank will not be liable for default or negligence of its duly selected correspondents nor for losses in transit, and each correspondent so selected shall not be liable except for its own negligence. This Bank or its correspondents may send items, directly or indirectly, to any bank including the payor, and accept its draft or credit as conditional payment in lieu of cash. It may charge back any item at any time before final payment, whether returned or not, also any item drawn on this Bank not good, and the Bank may at its option refuse payment of check or checks drawn against depositor's uncollected item or items.				
STOP PAYMENT. The Bank will not be responsible if, through inadvertence, accident or oversight, it honors any item with respect to which a stop payment order is in effect, or prematurely honors any post-dated check. However, the Bank will endeavor to give effect to all instructions from depositors to stop payment on their items provided such instructions are received in time to afford the Bank a reasonable opportunity to act before the item is honored. An oral request for stop payment is effective only for 14 days, but a request in writing, duly signed, is effective for six months, and may be renewed.				

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Parson Loans Colorado School of Mines				
ADDRESS				INITIAL DEPOSIT
Bus office %Marge Butner				
CITY	STATE	ZIP	PHONE	I.D. NUMBER
Golden	Colorado	80401		
AUTHORIZED SIGNATURE				
X <i>Henry J. M... PRESIDENT</i>				
AUTHORIZED SIGNATURE				
X <i>... VICE-PRESIDENT</i>				
AUTHORIZED SIGNATURE				
X <i>... TREASURER</i>				
AUTHORIZED SIGNATURE				
X <i>... SECRETARY</i>				
AUTHORIZED SIGNATURE				
X <i>Dan Frelund Controller</i>				
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Resolution Authorizing Signing of Checks

Colorado School of Mines

Exact Corporate Name \_\_\_\_\_  
 RESOLVED, that The Bank Named on Reverse Side is hereby designated as a depository for the funds of this corporation and that the Bank be and it is hereby authorized to accept for credit to this corporation and/or for collection any and all bills and notes payable to the corporation or in which it may have an interest when endorsed in the name of this corporation in writing, by rubber stamp or otherwise, with or without a designation of the party making such endorsement, and that all transactions in connection therewith shall be governed by the conditions, rules, regulations, customs and practices now or hereafter adopted or practiced by the Bank or Clearing House Association, including but not limited to those pertaining to collections, interest and service charges, etc., and that, as hereinafter specified, the following are officers of this corporation who have been duly and regularly elected and/or appointed:  
 Type below ONLY the names and titles of persons authorized to sign.

NAME

TITLE

- |                                |                           |
|--------------------------------|---------------------------|
| (1) <u>Guy T. McBride, Jr.</u> | <u>President of CSM</u>   |
| (2) <u>Don K. Henderson</u>    | <u>Secretary of Board</u> |
| (3) <u>W. G. Scott</u>         | <u>Treasurer</u>          |
| (4) <u>Daniel R. Frelund</u>   | <u>Controller</u>         |

(Here indicate which of the above must sign. Thus: any one; any two; or 1 and 2 or 3, etc.)  
Any two.

be and they are hereby authorized to withdraw said funds from said depository on the check of the corporation, signed as aforesaid, and that the said officers authorized to withdraw funds be and they are hereby authorized to endorse and receive payment of bills and notes payable to the corporation, and the said Bank is hereby authorized to pay any such instruments so signed or endorsed and presented to it for payment, including those drawn to the individual order of any officer or other person authorized to sign the same; and be it  
 FURTHER RESOLVED: That said authority hereby conferred shall remain in full force until written notice of the revocation thereof by the Board of Directors of this Corporation shall have been received by said depository, and that the Secretary be and he is hereby authorized and directed to deliver to the Bank a certified copy of this resolution and to certify to the Bank the true and correct signatures of the above-named officers.

SECRETARY'S CERTIFICATE  
 I, Don K. Henderson, do hereby certify that I am the  
 duly appointed, qualified and acting Secretary of Colorado School of Mines

a corporation organized and existing under and by virtue of the laws of the State of Colorado  
 and I further certify that the foregoing is a full, true and correct copy of a resolution adopted at a meeting of the Board of Directors of the corporation duly and regularly held on the eighth day of October, 1982  
 at which a quorum of the said corporation were present and acting, and I further certify that said Resolution is in full force and effect and has not been vacated or set aside and that the signatures of the respective officers of said corporation appearing on the reverse side hereof are the true signatures of the respective officers whose signatures they purport to be.  
 (CORPORATE SEAL) ATTEST: Don K. Henderson Secretary Guy T. McBride, Jr. President

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TITLE

- |                                |                           |
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Any two.

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Colorado School of Mines

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FURTHER RESOLVED: That said authority hereby conferred shall remain in full force until written notice of the revocation thereof by the Board of Directors of this Corporation shall have been received by said depository, and that the Secretary be and he is hereby authorized and directed to deliver to the Bank a certified copy of this resolution and to certify to the Bank the true and correct signatures of the above-named officers.

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a corporation organized and existing under and by virtue of the laws of the State of Colorado and I further certify that the foregoing is a full, true and correct copy of a resolution adopted at a meeting of the Board of Directors of the corporation duly and regularly held on the eighth day of October 1982

at which a quorum of the said corporation were present and acting, and I further certify that said Resolution is in full force and effect and has not been vacated or set aside and that the signatures of the respective officers of said corporation appearing on the reverse side hereof are the true signatures of the respective officers whose signatures they purport to be.

(CORPORATE SEAL) ATTEST:

Secretary

President

Resolution Authorizing Signing of Checks

Colorado School of Mines

Exact Corporate Name

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Type below ONLY the names and titles of persons authorized to sign.

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(Here indicate which of the above must sign. Thus: any one; any two; or 1 and 2 or 3, etc.)

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at which a quorum of the said corporation were present and acting, and I further certify that said Resolution is in full force and effect and has not been vacated or set aside and that the signatures of the respective officers of said corporation appearing on the reverse side hereof are the true signatures of the respective officers whose signatures they purport to be.

(CORPORATE SEAL) ATTEST:

Secretary

President

<b>Corporation</b>		DATE	9 28 82	ACCOUNT NUMBER	90 388 4
EXACT CORPORATE NAME				OFFICER CODE	SIGNATURES REQ
Institution Loans Colorado School of Mines					
ADDRESS					INITIAL DEPOSIT
Colorado School of Mines, Bus., Office Att Marge Butner					
CITY	STATE	ZIP	PHONE	I.D. NUMBER	REF
Golden, Colorado		80401			
AUTHORIZED SIGNATURE					CSM
X				<i>Henry J. Muthers</i>	PRESIDENT
AUTHORIZED SIGNATURE					VICE-PRESIDENT
X					
AUTHORIZED SIGNATURE					TREASURER
X				<i>Paul Henderson</i>	
AUTHORIZED SIGNATURE					SECRETARY
X					
AUTHORIZED SIGNATURE				OPENED BY:	
X				<i>Don Fredlund</i>	Controller
<p>ABOVE IS THE SIGNATURE OF EACH PERSON AUTHORIZED TO SIGN FOR THIS ACCOUNT. SIGNIFYING AGREEMENT THAT THE ACCOUNT IS SUBJECT TO ALL APPLICABLE RULES OF THE BANK AS STATED HEREON.</p> <p><b>RULES AND REGULATIONS</b> <b>UNITED BANK OF ARAPAHOE National Association, Englewood, Colorado</b> 200-41</p> <p><b>COLLECTION CLAUSE.</b> In receiving items for deposit or collection, this Bank acts only as depositor's collecting agent and assumes no responsibility beyond the exercise of due care. All items are credited subject to final payment in cash or solvent credits. This Bank will not be liable for default or negligence of its duty selected correspondents nor for losses in transit, and each correspondent so selected shall not be liable except for its own negligence. This Bank or its correspondents may send items, directly or indirectly, to any bank including the payor, and accept its draft or credit as conditional payment in lieu of cash. It may charge back any item at any time before final payment, whether returned or not, also any item drawn on this Bank not good, and the Bank may at its option refuse payment of check or checks drawn against depositor's uncollected item or items.</p> <p><b>STOP PAYMENT.</b> The Bank will not be responsible if, through inadvertence, accident or oversight, it honors any item with respect to which a stop payment order is in effect, or prematurely honors any post-dated check. However, the Bank will endeavor to give effect to all instructions from depositors to stop payment on their items provided such instructions are received in time to afford the Bank a reasonable opportunity to act before the item is honored. An oral request for stop payment is effective only for 14 days, but a request in writing, duly signed, is effective for six months, and may be renewed.</p>					

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X					
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X				<i>Paul Henderson</i>	
AUTHORIZED SIGNATURE					SECRETARY
X					
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<b>Corporation</b>		DATE 9 28 82	ACCOUNT NUMBER 90 387 6	
EXACT CORPORATE NAME Foundation Loans Colorado School of Mines			OFFICER CODE	SIGNATURES REQ
ADDRESS Colorado School of Mines Att Business office Marge Butner				INITIAL DEPOSIT
CITY Golden, Colorado	STATE Colorado	ZIP 80401	PHONE	I.D. NUMBER
AUTHORIZED SIGNATURE X		<i>Henry J. ...</i> PRESIDENT		
AUTHORIZED SIGNATURE X		VICE-PRESIDENT		
AUTHORIZED SIGNATURE X		TREASURER		
AUTHORIZED SIGNATURE X		SECRETARY		
AUTHORIZED SIGNATURE X		Dan Faelund Controller		
ABOVE IS THE SIGNATURE OF EACH PERSON AUTHORIZED TO SIGN FOR THIS ACCOUNT. SIGNIFYING AGREEMENT THAT THE ACCOUNT IS SUBJECT TO ALL APPLICABLE RULES OF THE BANK AS STATED HEREON.				
RULES AND REGULATIONS UNITED BANK OF ARAPAHOE National Association, Englewood, Colorado 200-41				
COLLECTION CLAUSE. In receiving items for deposit or collection, this Bank acts only as depositor's collecting agent and assumes no responsibility beyond the exercise of due care. All items are credited subject to final payment in cash or solvent credits. This Bank will not be liable for default or negligence of its duly selected correspondents nor for losses in transit, and each correspondent so selected shall not be liable except for its own negligence. This Bank or its correspondents may send items, directly or indirectly, to any bank including the payor, and accept its draft or credit as conditional payment in lieu of cash. It may charge back any item at any time before final payment, whether returned or not, also any item drawn on this Bank not good, and the Bank may at its option refuse payment of check or checks drawn against depositor's uncollected item or items.				
STOP PAYMENT. The Bank will not be responsible if, through inadvertence, accident or oversight, it honors any item with respect to which a stop payment order is in effect, or prematurely honors any post-dated check. However, the Bank will endeavor to give effect to all instructions from depositors to stop payment on their items provided such instructions are received in time to afford the Bank a reasonable opportunity to act before the item is honored. An oral request for stop payment is effective only for 14 days, but a request in writing, duly signed, is effective for six months, and may be renewed.				

<b>Corporation</b>		DATE 9 28 82	ACCOL 90 387 6	
EXACT CORPORATE NAME Foundation Loans Colorado School of Mines			OFFICER CODE	SIGNATURES REQ
ADDRESS Colorado School of Mines, Att Bus. Office Att Marge Butner				INITIAL DEPOSIT
CITY Golden, Colorado	STATE Colorado	ZIP 80401	PHONE	I.D. NUMBER
AUTHORIZED SIGNATURE X		<i>Henry J. ...</i> PRESIDENT		
AUTHORIZED SIGNATURE X		VICE-PRESIDENT		
AUTHORIZED SIGNATURE X		TREASURER		
AUTHORIZED SIGNATURE X		SECRETARY		
AUTHORIZED SIGNATURE X		Dan Faelund Controller		
ABOVE IS THE SIGNATURE OF EACH PERSON AUTHORIZED TO SIGN FOR THIS ACCOUNT. SIGNIFYING AGREEMENT THAT THE ACCOUNT IS SUBJECT TO ALL APPLICABLE RULES OF THE BANK AS STATED HEREON.				
RULES AND REGULATIONS UNITED BANK OF ARAPAHOE National Association, Englewood, Colorado 200-41				
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Resolution Authorizing Signing of Checks  
 Exact Corporate Name Colorado School of Mines  
 RESOLVED, that the Bank Named on Reverse Side is hereby designated as a depository for the funds of this corporation and that the Bank be and it is hereby authorized to accept for credit to this corporation and/or for collection any and all bills and notes payable to the corporation or in which it may have an interest when endorsed in the name of this corporation in writing, by rubber stamp or otherwise, with or without a designation of the party making such endorsement, and that all transactions in connection therewith shall be governed by the conditions, rules, regulations, customs and practices now or hereafter adopted or practiced by the Bank or Clearing House Association, including but not limited to those pertaining to collections, interest and service charges, etc., and that, as hereinafter specified, the following are officers of this corporation who have been duly and regularly elected and/or appointed:  
 Type below ONLY the names and titles of persons authorized to sign.

- NAME
- (1) Guy T. McBride, Jr.
  - (2) Don K. Henderson
  - (3) W. G. Scott
  - (4) Daniel R. Frelund
- (Here indicate which of the above must sign. Thus: any one; any two; or 1 and 2 or 3, etc.)  
Any two.
- TITLE
- President of GSM
  - Secretary of Board
  - Treasurer
  - Controller

I, Don K. Henderson, Secretary of Colorado School of Mines, do hereby certify that I am the duly appointed, qualified and acting Secretary of Colorado a corporation organized and existing under and by virtue of the laws of the State of Colorado and that the foregoing is a full, true and correct copy of a resolution adopted at a meeting of the Board of Directors of the corporation duly and regularly held on the eighteenth day of October, 1982, at which a quorum of the said corporation were present and acting, and that the Secretary be and he is hereby authorized and directed to deliver to the Bank a certified copy of this resolution and to certify to the Bank the true and correct signatures of the above-named officers.  
 SECRETARY'S CERTIFICATE  
 This Corporation shall have been received by said depository, and that the Secretary be and he is hereby authorized and directed to deliver to the Bank a certified copy of this resolution and to certify to the Bank the true and correct signatures of the above-named officers.  
 FURTHER RESOLVED, that said authority hereby conferred shall remain in full force until written notice of the revocation thereof by the Board of Directors of this Corporation shall have been received by said depository, and that the Secretary be and he is hereby authorized and directed to deliver to the Bank a certified copy of this resolution and to certify to the Bank the true and correct signatures of the above-named officers.  
 and they are hereby authorized to withdraw funds from said depository on the check of the corporation, signed as aforesaid, and that the said officers be and they are hereby authorized to endorse and receive payment of bills and notes payable to the corporation, and the said Bank is hereby authorized to pay any such instruments so signed or endorsed and presented to it for payment, including those drawn to the individual order of any officer or other person authorized to sign the same; and be it  
 further RESOLVED, that said authority hereby conferred shall remain in full force until written notice of the revocation thereof by the Board of Directors of this Corporation shall have been received by said depository, and that the Secretary be and he is hereby authorized and directed to deliver to the Bank a certified copy of this resolution and to certify to the Bank the true and correct signatures of the above-named officers.  
 ATTEST:  
 (CORPORATE SEAL)  
 Secretary

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 Exact Corporate Name Colorado School of Mines  
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 ATTEST:  
 (CORPORATE SEAL)  
 Secretary