

Professor Gerard T. Schuster
Department of Geology and Geophysics
University of Utah

EDUCATION:

Ph.D. Columbia University (New York, N.Y.), Applied Geophysics, 1984.

U of Utah: Asst. and Assoc. Professor: 1985-1991, 1991-1996.

U of Utah: Prof. of Geophysics: 1996-present.

DISTINCTIONS:

2004-05 Editor of Geophysics

2003 Departmental Distinguished Teaching Award

2002 Invited 4-month Distinguished Visiting Scientist at U of Minnesota

00-04 Invited 1-week Short Course Lecturer: Cairo University and Dhahran, Aramco

2000 Invited 3-month Visiting Scholar Stanford University

2000-2003 Assistant Editor Geophysics

1987- Founder and Director of UTAM Consortium

1998-99 Distinguished SPE Lecturer

1998 Invited Lecturer at Stanford Math Geophysics NSF Summer School

1997-99 Associate Editor of Geophysics

1993 Front Cover of Leading Edge Magazine (Oct. Issue)

1992 Departmental Distinguished Research Award (University of Utah)

1991 Most Technically Important Poster Citation (Joint EAEG/SEG meeting
Cambridge, England Conference, 1990).

1990 IBM Scientific Excellence in Supercomputing Award (Honorable Mention)

1987 Departmental Distinguished Teaching Award (University of Utah)

PAST PROFESSIONAL MEMBERSHIPS:

Society of Exploration Geophysicists, Society of Industrial and Applied Mathematics,
International Society for Optical Engineering

50 PUBLICATIONS: SELECT POST 1995 LISTING

Zhou, C., Cai, W., Luo, Y., Schuster, G.T., and Hassanzadeh, S., 1995, Acoustic wave equation travelttime and waveform inversion of crosswell data: Geophysics, 60, 765-773.

Olsen, K.B., and Schuster, G.T., 1995, Causes of low-frequency ground motion amplification in the Salt Lake Basin: The case of the vertically-incident P wave, *Geophys. J. Int.* 122, 1045-1061.

Olsen, K.B., Pechmann, J.C., and Schuster, G.T., 1995, Simulation of 3-D elastic wave propagation in the Salt Lake Basin: *Bull. Seism. Soc. Am.* 85, 1688-1710.

Olsen, K.B., J.C. Pechmann, and G.T. Schuster, 1996, An analysis of simulated and observed blast records in the Salt Lake Basin: *Bull. Seism. Soc. Am.*, 1688-1710.

Cai, W., Qin, F., and G.T. Schuster, 1996, Electromagnetic velocity inversion: *Geophysics*, 1007-1021.

Schuster, G.T., 1996, Resolution limits for crosswell migration and travelttime tomography: *Geophysical J. Int.*, 427-440.

Sun, Y., Schuster, G.T., and Sikorski, K., 1997, A Quasi-Monte Carlo approach to efficient 3D seismic migration: *Theory, Geophysics*, 918-928.

Zhou, C., Schuster, G.T., and Hassanzadeh, S., and Harris, J., 1997, Elastic wave equation travelttime and waveform inversion of crosswell data: *Geophysics*, 853-868.

Sun, Y., Schuster, G.T., and Sikorski, K., 1998, Reply to discussion on "A Quasi-Monte Carlo approach to efficient 3D seismic migration: Theory": *Geophysics*, 1475-1479.

Nemeth, T., and Schuster, G.T., 1999, Least squares migration: *Geophysics*, 64, 208-221.

Zhou, C., Chen, J., Schuster, G.T., and Smith, B., 1999, A Quasi-Monte Carlo approach to efficient 3D seismic migration: Field data test: *Geophysics*, 1562-1572.

Chen, J., and Schuster, G.T., 1999, Resolution limits for migration images: *Geophysics*, 1046-1053.

Morey, D., and Schuster, G.T., 1999, Paleoseismicity of the Oquirrh fault, Utah from shallow seismic tomography: *Geophysical J. Int.*, 138/1, 25-35.

- Schuster, G.T., and Hu, J., 2000, Green's function for migration: Continuous recording geometry: *Geophysics*, **65**, 167-175.
- Nemeth, T., Sun, H., and Schuster, G.T., 2000, Separation of signal and coherent noise by least squares filtering: *Geophysics*, **65**, 574-583.
- Schuster, G.T., and Liu, Z., 2001, Seismic array theorem and rapid calculation of acquisition footprint noise: *Geophysics*, **66**, 1843-1849.
- Hu, J., and Schuster, G.T., 2001, Poststack migration deconvolution: *Geophysics*, **66**, 939-952.
- Sun, H., and Schuster, G.T., 2001, 2-D wavepath migration: *Geophysics*, **66**, 1528-1537.
- Wang, Y., Xu, J., and Schuster, G. T., 2001, Viscoelastic wave simulation in basins by a variable-grid finite-difference method: *BSSA*, **91**, 1741 - 1749.
- Schuster, G.T., 2002, *Geophysics is kid's play*: *Leading Edge*, Nov. issue.
- Sheng, J., and Schuster, G.T., 2003, Finite-frequency resolution limits of wave path travelttime tomography for smoothly varying models: *Geophys. J. Int.*, **152**, 669-676.
- Sun, H., and Schuster, G. T., 2003, 3D wavepath migration: *Geophysical Prospecting*, **51**, 421-430.
- Schuster, G.T., Katz, L., Followill, F., and Yu, J., 2003, Autocorrelogram migration: Theory: *Geophysics*, **68**, 1685-1694
- Sheley, D., Crosby, T., Zhou, M., Giacomini, J., Yu, J., He, R., and Schuster, G., 2003, 2-D seismic trenching of colluvial wedges and faults: in *Contributions to Neotectonics and Seismic Hazard from Shallow Geophysical Imaging*, *Tectonophysics*, **368**, 51-69.
- Sheley, D., and Schuster, G., 2003, Reduced-time migration of transmission P-S waves: *Geophysics*, **68**, 1695-1707.
- Schuster, G.T., Yu, J., Sheng, J., and Rickett, J., 2004, Interferometric/daylight seismic imaging: *GJI* **157**, 838-852.