

BIOGRAPHICAL SKETCH:

Robert R. Stewart

Department of Earth and Atmospheric Sciences

University of Houston

Houston, Texas 77204

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Professional Preparation

<i>Institution</i>	<i>Major</i>	<i>Degree</i>
University of Toronto	Physics	B.Sc.
Massachusetts Institute of Technology	Geophysics	Ph.D.
Assn. Prof. Engineers & Geoscientists Alta.	Geophysics	P.Geo.
Texas Board Prof. Geoscientists	Geophysics	P.G.

Appointments

<i>Year(s)</i>	<i>Title</i>
2008-present	University of Houston, Department of Earth & Atmospheric Sciences, Professor of Geophysics, Cullen Chair in Exploration Geophysics (2008-present); Director, Allied Geophysics Laboratory; Adjunct Professor (2008-2014), Dept. of Geoscience, University of Calgary; Adjunct Professor (2013-2016), Rice University, Houston.
1987- 2008	University of Calgary, Professor (1993-2008) Associate Professor (1987-93), Chair in Exploration Geophysics (1987-97), Director (1988-2008), CREWES Project.
1985-1987	Veritas Software Ltd., Calgary, Alberta, Senior Research Geophysicist, VSP and CDP software design, borehole seismic manager.
1983-1985	Chevron Geosciences Co., Calgary, Alberta, Processing geophysicist, Group leader of Canadian Frontier seismic data processing.

Recent Publications

- Du, Y., M.E. Willis, and R.R. Stewart, 2014, VSP migration velocity via residual moveout: Revised in Geophysics.
- Huang, L., R.R. Stewart, S. Sil, and N. Dyaaur, 2014, Fluid substitution effects on seismic anisotropy: In press in J. Geophys. Res.
- Hyslop, C. and R. R. Stewart, 2014, Imaging lateral heterogeneity using reflected surface waves: In press in Geophysics.
- Omoboya, O., J.J.S de Figueiredo, L. Huang, N. Dyaaur, and R.R. Stewart, 2014, Experimental study of the influence of fluids on seismic azimuthal anisotropy: Revised in J. Petrol. Geophys. Eng.
- Far, M.E., J. J. S. de Figueiredo, R.R. Stewart, J. P. Castagna, D.-H. Han, and N. Dyaaur 2014, Measurements of seismic anisotropy and fracture compliances in synthetic fractured media: Geophys. J. Intl., 197, 3, 1845-1857.
- Li, J., Liner, C., and R.R. Stewart, 2014, Time-lapse seismic modeling for CO₂ sequestration at the Dickman Oilfield, Kansas: Geophysics, 79,2, B81-B95.
- Zhang, Z., R.R. Stewart, and D. C. Lawton, 2013, Estimating seismic attenuation (Q_p & Q_s) from rock properties: Can. J. Explor. Geophys., 38, 1, 1-3.
- Khan, S., R.R. Stewart, M. Otoum, and L. Chang, 2013, A geophysical investigation of the active Hockley fault near Houston, Texas: Geophysics, 78, 4, 1-9.
- de Figueiredo, J.J.S., R.R. Stewart, J. Scleicher, N. Dyaaur, O. Omoboya, R. Wiley, and A., William, 2013, Shear-wave anisotropy from aligned inclusions: Ultrasonic frequency and attenuation properties: Geophys. J. Intl., Advanced Access Feb.5, 2013, 1-14.

- Stewart, R.R., N. Dyaur, O. Omoboya, J. J. S. de Figueiredo, M.E. Willis, and S. Sil, 2013, Physical modeling of anisotropic domains: Ultrasonic imaging of laser-etched fractures in glass: *Geophysics*, 78, 1, 1-9.
- de Figueiredo, J.J.S., J. Scleicher, R.R. Stewart, and N. Dyaur, 2012, Estimating fracture orientation from elastic-wave propagation: An ultrasonic experimental approach: *J. Geophys. Res.*, 117, B08304, 1-13.
- Roy, S. and R.R. Stewart, 2012, Near-surface seismic investigation of Barringer (Meteor) Crater, Arizona: *J. Eng. Envir. Geophys.*, 17, 3, 117-127.
- Haase, A. and Stewart, R.R., 2010, Near-field seismic effects in a homogeneous medium and their removal in vertical seismic profile attenuation estimates: *Geophys. Prosp.*, 58, 1023–1032.

Geophysical magazine articles

- Chang, L., R. R. Stewart, and N. Dyaur, 2014, Geophysics for astronauts: In press in the GSH Journal.
- William, A., R. R. Stewart, and J. Wang, 2014, Underwater exploration: New UH sonar and seismic capabilities: *GSH Journal*, 5, 3, 28-29.
- Stewart, R.R., 2014, Communication in geophysics: My, how we've changed. Haven't we? – A word from the Board: *GSH Journal*, 5, 3, 5.
- Kocel, E., R.R. Stewart, P. Mann, and L. Chang, 2014, Searching for a blind fault: the Haiti subsurface imaging project: In press in *The Leading Edge*.
- Alexandre Silva and R. R. Stewart, 2014, Seismic, sonar, and sunshine: The 2014 UH Geophysics Field Camp at Galveston: *GSH Journal*.
- Zong, J., R.R. Stewart, and N. Dyaur, 2014, Elastic properties of salt: Lab measurements and GoM well log analysis: *GSH Journal*, 5, 7, 40.
- Wang, J. and R.R. Stewart, 2014, Wade in the water: Physical modeling, Vs estimation, and filtering of marine guided waves: *GSH Journal*, 5, 6, 37.
- Aziz, A. and R.R. Stewart, 2014, Probing the past: Subsurface imaging to identify burials at the Mueschke Cemetery, Houston: *GSH Journal*, 5, 4, 28.
- Kocel, E., R.R. Stewart, and Aziz, A., 2014, Searching for blind faults: Subsurface imaging in Haiti: *GSH Journal*, 5, 3, 28.
- Stewart, R.R., 2014, Geoscience trends: Onward and upward – A word from the Board: *GSH Journal*, 5, 2, 5-6.
- Stewart, R.R., 2014, Salaries, students, and seniors – President's page: *The Leading Edge*, 33, 1, 8-10.
- Aziz, A., R.R. Stewart, and Chang, L., 2014, Geophysics field school: Earthly interactions: *GSH Journal*, 5, 1, 28-29.
- Stewart, R.R., 2013, Great reading, great message – two errors: *Readers' Forum, PEG: Assn. Prof. Eng. Geosc. Alta.*, 4, 4, 18.
- Chang, L., R.R. Stewart, and A. Azuzidin, 2013, What lies beneath: UH's La Marque Geophysical Observatory: *GSH Journal*, 4, 31-32.
- Aziz, A. and R.R. Stewart, 2013, The Hockley Mine salt dome: *GSH Journal*, 4, 3, 30-31.
- Gulati, J. and R.R. Stewart, 2013, 3D VSP Overview and Introduction: *The Leading Edge*, 32, 10, 1234-1236.
- Chopra, S., R. R. Stewart, D. C. Lawton, and G.F. Margrave, 2013, Looking back at the first 25 years of CREWES, and forward to its next 25: *CSEG Recorder*, 38, 7, 10-22.
- Agudelo, W., E. Pineda, R. Gomez, J. Guerrero, N. Rojas, R. Stewart, N. van de Coevering, 2013, Using converted-wave seismic data for lithology discrimination in a complex fluvial setting: Tenerife oil field, Middle Magdalena Valley, Colombia: *The Leading Edge*, 32, 1, 72-78.
- Fraquelli, H.A. and R.R. Stewart, 2013, A multicomponent seismic framework for estimating reservoir oil volume: *The Leading Edge*, 32, 1, 80-84.
- Pacal, E. and R.R. Stewart, 2012, Subsurface imaging with VSP and ocean-bottom seismometers: Novel acquisition designs: *Houston Geological Society Bulletin*, 54, 6, 21.
- Stewart, R.R., K. Spikes, J. Sisson, S.A. Hall, J. Huang, and S. Danbom, 2012, Outstanding in the field: Hands-on geophysical education: *The Leading Edge*, 31, 3, 278-286.

Synergistic Activities

University of Houston *Provost's Teaching Excellence Award*, 2014, 1st Vice President, Society of Exploration Geophysicists, 2014; *Teaching Excellence Award*, 2013, College of Natural Sciences and Mathematics, University of Houston; *Honorary Membership*, 2011, Geophysical Society of Houston (GSH); 1st Vice President, GSH, 2014; *Industry Icons*, 2010, Most influential people in the energy industry: 2010-2019: Hart's E&P Magazine; *Fellow International*, 2007, The Explorers Club of New York; *Life Membership Award*, 2006, Society of Exploration Geophysicists (SEG, Tulsa) – "Exceptional meritorious service to the Society; *Honorary Membership Award*, 2004, Canadian Society of Exploration Geophysicists (CSEG) – "Distinguished contributions in the field of geophysics; *Geophysics transect leader*, NASA Haughton-Mars Project (Devon Island, High Arctic, Canada); *Geoscience survey leader*, Program for Belize, MaaxNa archaeological project (Belize, Central America); *Director*, UH Geophysics Field Camp (Montana).

Collaborators & Other Affiliations

Collaborators and Co-editors:

Brown R. J., U. Stavanger; Johnson, B. C. U. Calgary; Lawton, D. C., U. Calgary; Lines L, R., U. Calgary; Margrave, G. M., U. Calgary; Russell, B., CGG; Ursenbach, C., CGG; Zhang, Z., Shell, Gaiser, J.E., CGG., P.Mann, U. Houston; S. Khan, U.Houston.

Graduate Advisor:

M.S. supervisor: Coskun, S., 2014; Zhang, M., 2013; Akbas, O., 2013; Huang, L., 2013; Green, S., 2013; Mason, V., 2013; Qiu, B., 2012; Chang, L., 2012; Babcock, N., 2012; Gargouri, M., 2012; Pacal, E., 2012; Turolski, A., 2012; Fraquelli, H., 2011; Uduanouchie, K., 2011; Omoboya, O., 2011; Huang, J., 2011; Aitken, J., 2008; Al Duliajan, K., 2008; Alcudia, A., 2008; Allen, M. 2008; Coloumbe, C., 1993; Donati, M. 1996; Emery, D., 2006; Ferguson, R.1996; Goodway, B., 2001; Guevara, S., 2000; Gulati, J. 1998; Hons, M., 2008; Jaramillo, J., 2005; Khalil, A.A. 1991; Labonte, S., 1990; Larson, G.1996; Li, G., 1995; Mazur, M., 1999; Miong, S., 2008; Moldoveanu, M.,2005; Munro, K., 2005; Nieto, C., 2005; Ogiesoba, C., 2004; Osteridge (09); Schieck, D.G., 1994; Quijada (09); Soubotcheva, N., 2006; St. Onge, A. 1999; Suarez, G., 2008; Tan, J., 2007; Todorov,T., 2000; Varga (09);Westbroek, H. 1998; Xu, R., 2002; Zheng, Y. 1995.

Ph.D. supervisor: Roy, S. ('13); Mukherjee, T. ('13); Li, J. ('12); Kato, A. ('10); Xu, R., ('09); Zhang, Z., ('09); Bale, R., 2006; Rodriguez, C. 2000; Sun, Z. 1999; Chan, W. 1998; Harrison, M. 1992; Eaton, D.W. 1992.

Postgraduate-Scholar Sponsor:

Sposato, J. 2012-13; Wiley, R. 09-13; Dyaur, N. 09-13; Haase, A., 03-08; Ursenbach, C.,00-08; Chen, Z., 03-07; Maier, R., 03-08;Tao, G. 02-03; Bancroft, J. 94-98; Cui, J. 03-04; Daley, P., 99-00; Gu, H.,06-07; Hildebrand, A. 99-00; Le, L. 91-93; Margrave, G. 95-98; Wong,J.,06-08.,

Total number of graduate students supervised: 63

Total number of postdoctoral scholars sponsored: 15