

Ursula Hammes

Research Associate

Bureau of Economic Geology

The University of Texas at Austin



Education: Ph.D., Geology, University of Colorado, 1992
Diploma (M.S.), Geology, Geologisches/Paläontologisches Institut, Universität Erlangen, Germany, 1987

Areas of Expertise: Carbonate and clastic sequence stratigraphy
Mudrock systems
Seismic and wire-log interpretation
Prospect generation

The University of Texas at Austin
University Station, Box X
Austin, Texas 78713-8924
E-mail: ursula.hammes@beg.utexas.edu
Telephone: 512-471-1891
Fax: 512-471-0140

Professional History: Present Position: Research Associate, Universität Potsdam, Institut für Erd- und Umweltwissenschaften, Potsdam, Germany (August 2011 - Present)

Present Position: Research Associate, Bureau of Economic Geology, The University of Texas at Austin (September 2004 - Present)

Engineering/Scientist Associate V, Bureau of Economic Geology, The University of Texas at Austin (September 2003 - September 2004)

Consultant, Bureau of Economic Geology, The University of Texas at Austin (November 2002 - September 2003)

Sequence stratigraphy and seismic and wire-log interpretations in Tertiary clastic sediments along the Texas Gulf Coast. Prospect generation and training of operators in sequence stratigraphic analysis of wireline logs and seismic.

Exploration Geologist, Anadarko Petroleum Corporation, Houston, Texas (April 1997 - November 2001)

GOM Group: Basin and prospect evaluation of the Mesozoic Eastern Gulf of Mexico, including basin modeling, 2D/3D seismic interpretations, and prospect generation. World Wide Business Development Group: conducted studies on exploration potential for different countries and petroleum provinces around the world (e.g., Nigeria, Iran, Colombia, Hungary, Ecuador, Morocco, Mauritania). Evaluated deals and prospects. Development Group: Prospect development in Kansas and Oklahoma; responsible for identifying prospects in the Hugoton Basin, selecting well locations and supervising drilling. Basin Studies Group: Conducted basin analyses and petroleum system assessment (source rock analyses, reservoir quality, structural analysis) for exploration potential of West Greenland, Southeast Australia, and Southeast Canada. Responsible for interpreting FMI/EMI logs in different geologic settings using Z&S log interpretation software (Recall). Working knowledge of UNIX-based applications (Landmark, Z&S Recall software; FAPS fault analysis) and PC applications (Geographix, Petra, SeisVision, Freehand).

Ursula Hammes

Research Associate

Bureau of Economic Geology

The University of Texas at Austin

Professional History Continued: Postdoctoral Research Fellow, Bureau of Economic Geology, The University of Texas at Austin (November 1995 - March 1997)
Develop reservoir model of karsted and fractured Ellenburger reservoir in West Texas using 3-D seismic and well log correlations. Working knowledge of Landmark workstation, including Openworks, Geodataworks, Stratworks, and Seisworks. Working knowledge of Schlumberger Sun workstation using Geoframe for FMI/FMS log interpretations. Working knowledge of Halliburton Silicon Graphics workstation using InterView for EMI log interpretations.

Environmental Scientist/Geologist, IT Corporation, Houston, Texas (July 1994 - October 1995)
Conduct geochemical soil tests for Mercury and PCB contaminated sites along Tenneco gas pipelines. Preparation of proposals, reports, and environmental audits.

Geologic Consultant, Marathon Oil Company, Littleton, Colorado (January 1992 - April 1994)
Established diagenetic and geochemical model in a sandstone reservoir of the Celtic Sea.
87Sr/86Sr isotopes of Miocene carbonates of the Red Sea. Reservoir evaluation of selected wells of the Smackover Formation, U.S.A., using point-count data.

Geologic Consultant, Simon Petroleum Geology (January 1992 - April 1994)
Sedimentology and diagenesis of the Cretaceous Shuaiba Formation, Oman.

Research/Teaching Assistant, The University of Colorado, Boulder (September 1988 - December 1992)
Conducted geochemical analyses with mass spectrometer, electron microprobe, and Synchrotron X-ray fluorescence. Described thin sections with standard petrographic methods, scanning electron microscope and cathodoluminescence. Described and sampled cores. Taught courses in Sedimentology, Historical Geology, and Physical Geology.

Exploration Geologist: Well-Site Geologist, BEB Oil and Gas, Hannover, Germany (January 1988 - August 1988)
Micropaleontology and stratigraphy in northwest Germany. Source-rock evaluation with pollen and spores. Sampled cuttings and selected formation boundaries.

Research Geologist, ARCO Oil and Gas, Production, and Research, Plano, Texas (June 1989 - September 1989)
Established diagenetic and geochemical model of debris flow deposits of the Permian Bone Spring Formation.

Ursula Hammes

Research Associate

Bureau of Economic Geology

The University of Texas at Austin

Professional Societies: American Association of Petroleum Geologists

SEPM (Society for Sedimentary Geology)

Awards and Honorary Societies: Outstanding Research Award, Jackson School of Geosciences, STARR Project, Co-Principal Investigator, 2010

Third Place, Thomas A. Philpott Excellence of Presentation Award, Gulf Coast Association of Geological Societies (GCAGS), 60th Annual Convention, San Antonio, Texas, 2010

Grover E. Murray Best Published Paper Award as co-author of Third-Place Paper published in GCAGS Transactions, "Preliminary Classification of Matrix Pores in Mudrocks", 2010

Honorable Mention, Best Poster Paper Presented at the SEG 2007 Annual Meeting for paper titled "Linear Amplitude Patterns in Corpus Christi Bay Frio Subbasin, South Texas", 2008

Second Place, Thomas A. Philpott Excellence of Presentation Award for "All Fill—No Spill: Slope-Fan Sand Bodies in Growth-Faulted Subbasins: Oligocene Frio Formation, South Texas Gulf Coast", 2007

A. I. Levorsen Award as co-author of Best Paper presented at Gulf Coast Section, GCSSEPM/GCAGS Annual Meeting, "Preliminary Classification of Matrix Pores in Mudrocks"

Committee Responsibilities and Professional Activities: Co-Chair, Unconventional Resources, 2012 American Association of Petroleum Geologists Annual Convention, Long Beach, 2012

Chair, Gas Shales Committee: Haynesville Shale, EMD, 2011 - 2012

Co-Chair, Gas Shales Committee, 2011 Annual AAPG Conference, Houston, Texas, 2011

Ursula Hammes

Research Associate

Bureau of Economic Geology

The University of Texas at Austin

Selected Publications: Hammes, U., Willis, J. J., Feeley, M., Smith, R., Stull, K., Willis, J. C., and Willis, K. M., eds., 2010, Transactions: Gulf Coast Association of Geological Societies, v. 61, 929 p.

Hammes, U., Hamlin, H. S., and Ewing, T. E., 2011, Geologic analysis of the Upper Jurassic Haynesville Shale in east Texas and west Louisiana: AAPG Bulletin v. 95, no. 10, p. 1643–1666.

Hammes, Ursula, Eastwood, Ray, Rowe, H. D., and Reed, R. M., 2009, Addressing conventional parameters in unconventional shale-gas systems: depositional environment, petrography, geochemistry, and petrophysics of the Haynesville Shale, in Carr, T., D'Agostino, T., Ambrose, W., Pashin, J., and Rosen, N. C., eds. Unconventional energy resources: making the unconventional conventional: 29th Annual GCSSEPM Foundation Bob F. Perkins Research Conference, December 6–8, Houston, p. 181–202.

Hammes, Ursula, 2009, Sequence stratigraphy and core facies of the Haynesville Mudstone, East Texas: Gulf Coast Association of Geological Societies Transactions, v. 59, p. 321–324.

Hammes, Ursula, Loucks, R. G., Brown, L. F., Jr., Treviño, R. H., Montoya, Patricia, and Remington, R. L., 2007, Reservoir geology, structural architecture, and sequence stratigraphy of a growth-faulted subbasin: Oligocene Lower Frio Formation, Red Fish Bay Area, South Texas Gulf Coast: The University of Texas at Austin, Bureau of Economic Geology Report of Investigations No. 272, 28 p. + plate.

Zeng, Hongliu, Loucks, R. G., and Hammes, Ursula, 2008, Linear amplitude patterns in Corpus Christi Bay Frio Subbasin, south Texas: interpretive pitfalls or depositional features?: Geophysics, v. 73, no. 5, p. A27–A31.

Brown, L. F., Jr., Loucks, R. G., Treviño, R. H., and Hammes, Ursula, 2006, Understanding growth-faulted, intraslope subbasins by applying sequence-stratigraphic principles: examples from the south Texas Oligocene Frio Formation: Reply: AAPG Bulletin, v. 90, no. 5, p. 799–805.

Brown, L. F., Jr., Loucks, R. G., Treviño, R. H., and Hammes, Ursula, 2004, Understanding growth-faulted, intraslope subbasins by applying sequence-stratigraphic principles: examples from the south Texas Oligocene Frio Formation: AAPG Bulletin, v. 88, no. 1, p. 1501–1522.

Budd, D. A., Hammes, Ursula, and Ward, W. B., 2000, Cathodoluminescence in calcite cements: new insights on Pb and Zn sensitizing, Mn activation, and Fe quenching at low trace-element concentrations: Journal of Sedimentary Research, v. 70, no. 1, p. 217–226.

Hammes, Ursula, 1997, Electrical imaging catalog: microresistivity images and core photos from fractured, karsted, and brecciated carbonate rocks: The University of Texas at Austin, Bureau of Economic Geology Geological Circular 97-2, 40 p.

Ursula Hammes

Research Associate

Bureau of Economic Geology

The University of Texas at Austin

Selected Publications Continued: Hammes, Ursula, 1995, Initiation and development of small-scale sponge mud mounds, Upper Jurassic (Oxfordian), Southern Franconian Alb, Germany, in Monty, C.L.V., Bosence, D., Bridges, P., and Pratt, B., eds., *Mud-mounds: origin and evolution: International Association of Sedimentologists, Special Publication*, v. 23, p. 335–357.

Budd, D. A., Hammes, Ursula, and Vacher, H. L., 1993, Calcite cementation in the Upper Floridan aquifer: a modern example for confined-aquifer cementation models?: *Geology*, v. 21, p. 33–36.