

# Faculty Curriculum Vitae

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**POSITION/TITLE:** Assistant Professor

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## **EDUCATIONAL BACKGROUND/TRAINING**

1979 - 1984 Michigan State University E. Lansing, Michigan  
Geology

- Bachelors Science with High Honors

1984 - 1991 University of Missouri Columbia, Missouri  
Sed. Petrology

- Doctor of Philosophy

### Scholarships Awards:

G. Ellsworth Huggins Doctoral Fellowship University of Missouri

Arts and Science Scholarship University of Missouri

Superior Graduate Achievement Award University of Missouri

Clay Mineral Society Best Student Poster

AAPG A.I. Levorsen Award for Best Paper (with D.W. Houseknecht)

## **RELEVANT TEACHING EXPERIENCE**

2005 - 2016 Shell International Exploration and Production Houston, Texas  
Guest lecturer for Phase I, Phase II and Phase III various Petrophysics courses

2012 - 2015 University of Houston Houston, Texas  
Adjunct Professor for courses PETR 6304 and PETR 6314  
Instructor for Master's petrophysics courses University of Houston

# Faculty Curriculum Vitae

## ACADEMIC SCHOLARSHIP/RESEARCH/CREATIVE ENDEAVORS

Taylor, T.R., Melvyn R. Giles, Lori A. Hathon, Timothy N. Diggs, Neil R. Braunsdorf, Gino V. Birbiglia, Mark G. Kittridge, Calum I. Macaulay, and Irene S. Espejo, 2010: Sandstone diagenesis and reservoir quality prediction: Models, myths, and reality: American Association of Petroleum Geologists Bulletin v. 94, p. 1093-1132.

Taylor, T.R., Stancliffe, R., Macaulay, C.I., and Hathon, L.A., 2004, High temperature quartz cementation and the timing of hydrocarbon accumulation in the Jurassic Norphlet sandstone, offshore Gulf of Mexico, USA, in Cubitt, J.M., England, W.A., and Larter, S. (eds) 2004. Understanding petroleum reservoirs: towards an integrated reservoir engineering and geochemical approach. Geological Society, London, Special Publications, 237, p. 257-278.

Hathon, L.A., and Espejo, I.S., 1997, Detrital Modes of Tertiary Units in the Central Middle Magdalena Basin, Colombia, VI Bolivarian Symposium, Volume 1, p. 150-162, Cartagena, Colombia.

Pittman, E.D., and Hathon, L.A., 1994, Material Balance Considerations for the Generation of Secondary Porosity by Organic Acids and Carbonic Acid Derived from Kerogen, Denver Basin, Colorado, USA. in Pittman, E.D., and Lewan, M.D., eds., Organic Acids in Geological Processes: Berlin, Springer-Verlag, p.115-137.

Houseknecht, D.W., Bensley, D.F., Hathon, L.A., and Kastens, P.11., 1993, Rotational Reflectance Properties of Arkoma Basin Dispersed Vitrinite: Insights for Understanding Reflectance Populations in High Thermal Maturity Regions: Organic Geochemistry, v.20, no.2, pp. 187-196.

Hathon, L.A., 1992, Burial Diagenesis of the Sespe Formation, Ventura Basin, California: Unpublished Doctoral Thesis, 267 p.

Hathon, L.A., and Houseknecht, D.W., 1992, Origin and Diagenesis of Clay Minerals in the Oligocene Sespe Formation, Ventura Basin, in Origin, Diagenesis, and Petrophysics of Clay Minerals in Sandstones: SEPM Spec. Pub. no.47, pp.185-195.

Houseknecht, D.W., Hathon L.A., and McGilvery, T.A., 1990, Thermal Maturity of Paleozoic Strata in the Arkoma Basin: in, Source Rocks in the Southern Mid-continent: Oklahoma Geological Survey Circular 93.

Houseknecht, D.W., and Hathon, L.A., 1987, Petrographic Constraints on Models of Intergranular Pressure Solution in Quartzose Sandstones: Applied Geochemistry, v.2, nos. 5-6, pp.507-521.

### **PUBLISHED ABSTRACTS:**

Kultaransingh Hooghan, Mike Dixon, and Lori A Hathon, 2014. **“Protocol for finalizing locations for FIB/SEM cubes on shale samples: general guidelines with upscaling in mind”**, URTEC 2014, paper 1922784.

Kultaransingh Hooghan, Mike Dixon, and Lori A Hathon, 2014. “How low can you go when imaging shales?”. SPE Workshop, Kyoto Japan

Hathon, Lori, and Myers, Michael T., 2012. **“Shale Rock Properties: Peak Strength, Acoustic Anisotropy and Rock Fabric”**. ARMA 12-553.46th US Rock Mechanics Symposium, Chicago, 26-29 June 2012

Myers, M.T. and Hathon, Lori A., 2012. **“Staged Differential Effective Medium (SDEM) Models for Modeling the Influence of Vugs on Acoustic Velocity”**. ARMA 12-553. 46th US Rock Mechanics Symposium, Chicago, 26-29 June 2012

*Hathon, Lori A., and Myers, Michael T., 2011. “Prediction of Acoustic Properties from 2D digital images: Measurements, Sample Characterization and Modeling” SPE Workshop. From Image to Insight: How Can We Leverage Pore-Scale Observations Through Rock Physics Models - Invited Talk*

Myers, Michael T., and Hathon, Lori. A., 2011 **“Prediction of Rock Properties in the GOM”**, ARMA 11-353. 45th US Rock Mechanics Symposium, San Francisco, 26-29 June 2011. – Invited Talk

Hathon, Lori A., and Myers, Michael T., 2011 **“A Survey of the Production Time-Scale Compaction Behavior of Unconsolidated Sands”**, ARMA 11-229. 45th US Rock Mechanics Symposium, San Francisco, 26-29 June

# Faculty Curriculum Vitae

Hathon, L.A., and Myers, Michael T., 2010 “**Observations of Intrinsic Anisotropy in Varied Geologic Settings**” AAPG Annual Convention and Exhibition, New Orleans, Louisiana, 11-14 April 2010

Myers, Michael T., and Hathon, Lori A., 2010 “**Application of Staged Effective Medium Models for the Prediction of Velocities**” AAPG Annual Convention and Exhibition-11-14 April 2010

Holger Averdunk, Jill Middleton, Adrian Sheppard, Christoph Arns, Mark Knackstedt, Michael Myers, and Lori Hathon. 2008. “**3-D Imaging and Analysis of Grain Compaction**” AAPG Annual Convention, San Antonio Texas

Myers, Michael T., and Hathon, Lori A., 2006. “**Understanding the Stress Dependence of Velocity in Unconsolidated Sands**” 2006 AAPG

Hathon, Lori A., Myers, Michael T., and Espejo, Irene S., 2005. “**Production and Geologic Time-Scale Compaction in Rigid Grain-Rich and Ductile Grain-Rich Sands**” AAPG International Conference. September 11-14, 2005.

Hathon, L.A., Myers, M.T., and Hopkins, D.S., 2004, Textural and Mineralogic Controls on Mechanical Compaction of Sands on Geologic and Production Time Scales I: Comparative Compaction Studies using Natural Sands and Artificial Sand Packs: IGC Program with Abstracts, p.

Myers, M.T., Espejo, I.S., Hathon, L.A., and Taylor, T.R. 2004, Textural and Mineralogic Controls on Mechanical Compaction of Sands on Geologic and Production Time Scales II: Influence of Small Volumes of Cement: IGC Program with Abstracts, p.

Lander, R.H., Espejo, I.S., Larese, R.L., Bonnell, L., Hathon, L.A., and Taylor, T.R., 2004, Dissolution or Growth? Origin of Quartz Textures in Thermally Immature Sandstones: IGC Programs with Abstracts, p.

Hathon, L.A., Rambow, F.H.K., Taylor, T.R., Myers, M.T., Sun, N., and Fanning, D., 2003, Rock Properties from 2D Images: Computer Assisted Petrography, AAPG International Programs with Abstracts, p.

Klein, B., Hathon, L.A., and Brewster, C., 1998, Petrography and Geochemistry of the Matagorda Island 519 Field, Offshore Texas, Gulf Coast Association of Geological Societies Transactions, v. 48, p. 547-558.

Hathon, L.A., and Houseknecht, D. W., 1996, Diagenetic Mineral Assemblage Prediction of Reservoir Burial History: AAPG Program with Abstracts, Volume 5, p. A63.

Burner, R.L., and Hathon L. A., 1996, K/Ar Dating of Authigenic Illite Constrains the Time of Diagenesis and Brine Migration in the Weber Sandstone of the Uinta-Piceance Basin, Colorado and Utah: AAPG Program with Abstracts, Volume 5, p. A21-A22.

Hathon, L.A., and Houseknecht, D.W., 1991, Porosity Reduction in Sandstones Induced by Mechanical Compaction: Cathodoluminescence Evaluation, AAPG Bulletin, v.75, no.3, pp.590-591.

Hathon, L.A., and Houseknecht, D.W., 1990, Thermal Maturity of Atokan and Desmoinesian Strata in the Arkoma Basin: Constraints on Thermal History of South-Central North America, in Oklahoma Geol. Survey, Source Rocks, Generation, and Migration of Hydrocarbons and Other Fluids in the Southern Mid-continent, p.7.

Hathon, L.A., and Houseknecht, D.W., 1990, Grain-Cement Relationships, Sespe Sandstone, Ventura Basin: AAPG Bulletin, v.74, no.5, p.672.

Houseknecht, D.W., and L.A. Hathon, 1989, Preservation of Sandstone Reservoir Quality and Methane Reserves in Over mature Strata of Arkoma Basin: AAPG Bulletin, v.73, no.9, p.1160.

Houseknecht, D.W., Hathon, L.A., and Parman, L., 1989, Thermal Maturity of Carboniferous Strata in the Ouachita Mountains, Arkoma Basin, and Ozark Dome, GSA Abstracts with Programs, v.21, no.6, p. A4.

Hathon, L.A., and Houseknecht, D.W., 1987, Hydrocarbons in an Over mature Basin: Pt. 1: Thermal Maturity of Atoka and Hartshorne Formations, Arkoma Basin, Oklahoma and Arkansas: AAPG Bulletin, v.71, no.8, pp.993-994.

Houseknecht, D.W., and Hathon, L.A., 1987, Hydrocarbons in an Overmature Basin: Pt. 2: Is There a Thermal Maturity Limit to Methane Production In Arkoma Basin, Oklahoma and Arkansas?: AAPG Bulletin, v.71, no.8, p.994.

# Faculty Curriculum Vitae