# **Deepak Devegowda**

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## **EDUCATION AND TRAINING**

2008 PhD., Petroleum Engineering, Texas A&M University

2003 M.S., Petroleum Engineering, Texas A&M University

1998 B.Tech, Electrical Engineering, Indian Institute of Technology

## RESEARCH AND PROFESSIONAL EXPERIENCE

**Organization:** School of Petroleum and Geological Engineering, University of Oklahoma.

**Designation:** Associate Professor, July 2014-

**Organization:** School of Petroleum and Geological Engineering, University of Oklahoma.

**Designation:** Assistant Professor, Aug 2008-July 2014

**Organization:** Occidental Oil and Gas Corporation, Houston, TX. **Designation:** Reservoir Engineering Intern, Summer 2006

**Organization:** Dept. of Petroleum Engg, Texas A&M U.

**Designation:** Graduate Research Assistant, Spring 2004-Spring 2008.

**Organization:** Halliburton Company, Egypt and India.

**Designation:** Technical Project Leader, Wire-line Services, 1998-2001

#### **SELECTED PUBLICATIONS**

- 1. Verma, S., Zhao, T., Marfurt, K. and **Devegowda, D**. 2016. Estimation of Total-Organic-Carbon and Brittleness Volume. Accepted for publication in *SEG Interpretation*.
- 2. Chang, Y., Bouzarkouna, Z. and **Devegowda, D.** 2015. Multi-Objective Optimization for Rapid and Robust Optimal Oilfield Development Under Geological Uncertainty. *Computational Geosciences*, **19**(4), 993-950.
- 3. Hu, Y., **Devegowda, D.**, Striolo, A., Phan, A., Ho, A.T., Civan, F. and Sigal, R. 2015. The Dynamics of Hydraulic Fracture Water Confined in Nanopores in Shale Reservoirs. *Journal of Unconventional Oil and Gas Resources*, 9(2015), 31-39.
- 4. Hu, Y., **Devegowda**, **D**., and Sigal, F. 2015. Impact of Maturity on Kerogen Pore Wettability: A Modeling Study. Under review for the *SPE Journal*.
- 5. Hu, Y., **Devegowda, D.**, Striolo, A., Civan, F. and Sigal, R. 2014. A Pore Scale Study Describing the Dynamics of Slickwater Distribution in Shales Following Hydraulic Fracturing. *SPE Journal*, doi:10.2118/167234-PA.

- 6. Tagichian, A., Zaman, M. and **Devegowda, D.** 2014. Stress shadowing effect for multistage hydraulic fracturing in shale wells. *Journal of Petroleum Science and Engineering*, doi:10.1016/j.petrol.2014.09.034
- 7. Alzate, J. and **Devegowda**, **D.** 2013. The value of production logging combined with 3D surface seismic in unconventional plays characterization. *SEG Interpretation*. **2**(2013); pp. SB37-SB49.
- 8. **Devegowda, D.**, Arroyo, E. and Datta-Gupta, A. 2009. Flow Relevant Covariance Localization Schemes for Ensemble Kalman Filter. *Advances in Water Resources*, doi: 10.1016/j.advwatres.2009.10.001
- 9. Arroyo, E., **Devegowda, D.** and Datta-Gupta, A. 2008. Streamline Assisted EnKF for Rapid and Continuous Reservoir Model Updating. *SPE Reservoir Evaluation & Engineering*, Dec 2008.
- 10. **Devegowda, D.** and Scott, S.L. 2004. An Assessment of Subsea Production Systems. *SPE Journal of Petroleum Technology*, pp 56-57 (August 2004).

## **BOOK CHAPTERS**

- 1. **Devegowda, D.**, Xiong, X., Civan, F. and Sigal, R. 2015. The Role of Pore Proximity in Governing Fluid PVT Behavior and Produced Fluids Compositions in Liquids-Rich Shale Reservoirs. In *Unconventional Oil and Gas Resources Handbook: Evaluation and Development*. doi:10.1016/B978-0-12-802238-2.00006-7.
- 2. Sigal, F., **Devegowda**, **D.** and Civan, F. 2015. Simulation of Shale Reservoirs. *Fundamentals of Gas Shale Reservoirs*, ed. Reza Razaee, Wiley and Sons.
- 2. **Devegowda, D.** and Chao Gao. 2010. Reservoir Characterization and Uncertainty Assessment Using the Ensemble Kalman Filter: Formulation and Application to the Petroleum Industry. In *Uncertainty Analysis in Reservoir Characterization*, ed. Yuan Ma, AAPG.
- 3. Datta-Gupta, A., **Devegowda, D.**, Oyerinde, D. and Cheng, H. 2008. The Role of Streamline Models for Data Assimilation in Petroleum Engineering and Hydrogeology. In *Quantitative Information Fusion for Hydrological Sciences*, ed. Xing Cai and T.-C. Jim Yeh, Chap. 5, 105-136, Springer Verlag Publishers.

## **SELECTED SYNERGISTIC ACTIVITIES**

- 1. Technical committee member, SPE Annual Technical Conference and Exhibition, 2013, 2014, 2015.
- 2. Technical committee member, SPE Unconventional Resources Conference, 2014.
- 3. Technical committee member, SPE Saudi Arabia Annual Technical Conference and Exhibition, 2012.
- 4. Technical committee member, SPE Production Operations Symposium, 2011.
- 5. Organizing committee, SPE History Matching Workshop, 2009, 2015.
- 6. Peer Reviewer
  - a. SPE Journal
  - b. Fluid Phase Equilibria

- c. Computational Geosciences
- d. Journal of Petroleum Science and Engineering
- e. Computers and Geosciences
- f. Advances in Water Resources
- g. International Journal of Coal Geology
- h. Journal of Natural Gas Science and Engineering
- i. *'Uncertainty Analysis in Reservoir Characterization'*, ed. X. Ma, American Association of Petroleum Geologists Press.
- j. 2013 Oil and Gas Awards, Midwestern Section
- k. Journal of Canadian Petroleum Technology
- l. Environmental Earth Sciences
- m. Neural Computing and Applications

## PROFESSIONAL AND HONORARY ORGANIZATION AFFILIATIONS

- 1. Society of Petroleum Engineers
- 2. American Society of Mechanical Engineers