

Anjali Fernandes

The University of Texas at Austin, Jackson School of Geosciences, Dept. of Geological Sciences
1 University Station, C1100, Austin, TX 78712-0254.

anjalifernandes@mail.utexas.edu, anjalifernandes@gmail.com

Office phone: 512-471-6955

Research Interests

I am interested in the formation and evolution of channelized landscapes. My dissertation focuses on processes inducing erosion and sedimentation associated with submarine turbidite channels, their geomorphic evolution and the resulting stratigraphy in these complex systems. I have approached my chosen research problems through integrating various sources of data such as experimental, seismic, bathymetric and outcrop data.

(More information at: http://steelresearch.geo.utexas.edu/People_pages/Fernandes_Profile.htm)

Education

Ph. D. Candidate, Sedimentology and Stratigraphy

Advisors: Dr. David Mohrig & Dr. Ron Steel (Projected graduation: December, 2011)

The Jackson School of Geosciences, The University of Texas at Austin

- G.P.A.: 3.83 / 4.0

Master of Science, Applied Geology (May, 2005)

Indian Institute of Technology, Department of Earth Sciences

- Masters Project Title: “Structural Attributes and Neotectonic Studies along the South Wagad Fault, Kutch, Gujarat: Insights from Field-mapping and Analogue Modeling”
- Cumulative Performance Index (C.P.I.): 7.66 / 10

Bachelor of Science, General Geology (May, 2003)

University of Bombay

Relevant Skills

- Proficient at 2D/3D seismic interpretation using Landmark Seisworks and GeoProbe, Kingdom Suite 2D/3D PAK, VuPAK, Geoframe IESX and GeoViz
- Stratigraphic mapping and sedimentology from outcrop
- Core description, and well-log interpretation and correlation
- Experienced in data processing and computational coding with MATLAB

Professional Experience

- Statoil (September, 2009 – December, 2009)
Visiting Student Researcher, Deep-Marine Research Group, Statoil Research Center, Trondheim.
- Noble Energy (May, 2009 – August, 2009)
Intern, Africa Business Unit, Houston
- StatoilHydro (June, 2007 – December, 2007)
Intern, Deep Marine Research Group, StatoilHydro Research Center, Trondheim.
- Oilfield Instrumentation, India, Ltd. (October, 2005 – May, 2005)
Mudlogger, Bombay Offshore, contracted to British Gas, India.
- Jackson School of Geosciences, University of Texas at Austin (August, 2006 – Present)

Teaching Assistant/Research Assistant

Awards

- Best Student Oral Presentation at the meeting of the American Association of Petroleum Geologists (Houston, 2011)
- Certificate of Excellence for ranking among the Top 10 Best Oral Presentations at the meeting of the American Association of Petroleum Geologists (2011)
- American Association of Petroleum Geologists Grants-in-Aid (April, 2011)
- SEPM Weimer Research Grant (April, 2011)
- West Texas Geological Society John Emery Adams Scholarship (April, 2011)
- The William R. Muehlberger Field Geology Scholarship (March, 2010)
- The DeFord Field Geology Scholarship (May, 2010)
- The Ratan Tata Foundation Over-seas Studies Scholarship (July, 2006)
- The Indian Institute of Technology Graduate Studies Scholarship (July, 2003)
- Citizen Co-op. Bank Post-graduate Scholarship (July 2006)

Published Abstracts

- Fernandes, A. M., Petter A. L., Mohrig, D., Steel, R., 2011, Depositional Conditions Associated with Bank-Attached Bars and Channel-Filling Deposits in Submarine Channels of the Upper Brushy Canyon Formation, west Texas, *Internal architecture, bedforms and geometry of turbidite channels, Geological Society of London, London*
- **Fernandes, A. M.**, Mohrig, D., Steel, R., Buttles, J., Henriksen, S., 2011, A Three Dimensional Geometric Analysis of Bank-attached Bar-forms in Sinuous Submarine Channels: A Tool for Inferring the Relative Importance of Bedload and Suspended Load Sedimentation, *AAPG Annual Conference, Houston*
- **Fernandes, A. M.**, Petter A. L., Mohrig, D., Steel, R., 2011, Sediment fractionation within bypass and channel-filling turbidites of upper slope channels, Brushy Canyon Formation, west Texas, *AGU Chapman Source to Sink Conference, Oxnard, California*
- **Fernandes, A. M.**, Mohrig, D., Steel, R., Buttles, J., Henriksen, S., 2010, Three Dimensional Geometries of Bank-attached Bar-forms in Sinuous Submarine Channels, *American Geophysical Union, San Francisco, California*
- **Fernandes, A. M.**, Mohrig, D., Henriksen S., Steel, R., Buttles, J., 2010, Lateral Accretion Packages in Submarine Channels: Occurrence, Geometry and Processes Governing their Deposition, *The International Sedimentological Congress, Mendoza, Argentina*
- Henriksen, S., Duffaut, K., **Fernandes, A.**, Janocko, M., Jiang, S., Pontén, A., 2010, A multidisciplinary approach towards understanding the formation of sinuous deep-water channels, *The International Sedimentological Congress, Mendoza, Argentina*
- **Fernandes, A. M.**, Buttles, J., Mohrig, D., Steel, R., Henriksen, S., 2010, Formation of Channels, Sheets and Lobes by Sheet-like Density Underflows, *AAPG Annual Conference, New Orleans*
- Henriksen, S., Duffaut, K., **Fernandes, A. M.**, Janocko, M., Jiang, S., Pontén, A., 2010, A multidisciplinary approach towards understanding the formation of sinuous deep-water channels, *Statoil Internal Technology Conference, Osl*
- **Fernandes, A. M.**, Buttles, J., Mohrig, D., Steel, R., 2009, Laboratory-scale Channelization by Sheet-like Density Underflows, *Meeting of the International Association of Sedimentologists, Alghero, Italy*

- Buttles, J., **Fernandes, A.**, Mohrig, D., 2009, A Physical Model of Submarine Knickpoint Evolution and Erosion Style in a Cohesive Sediment Bed, *Second Workshop on the Modeling of Turbidity Currents and Related Gravity Currents, UCSB, Santa Barbara.*
- **Fernandes, A.**, Steel, R., Henriksen, S., Mohrig, D., 2009, Comparing Stratal Architectures in Confined and Weakly Confined Turbidite Channel Systems, *AAPG Annual Conference, Denver*
- **Fernandes, A.**, Mohrig, D., Buttles, J., Peyret, A., Steel, R., 2009, Laboratory Experimentation in Self-channelization by Turbidity Currents, *AAPG Annual Conference, Denver*

Publications:

- **Fernandes, A.**, Mohrig, D., Steel, R., Henriksen, S., Three-dimensional Geometries of Bank-attached Bars in Submarine Channels (in review by co-authors)
- **Fernandes, A.**, Steel, R., Henriksen, S., Mohrig, D., Confined and Weakly Confined Turbidite Channel Systems: Key Differences in Architectural Style (in review by co-authors)
- **Fernandes, A.**, Buttles, J., Mohrig, D., Steel, R., Laboratory-scale Channelization by Sheet-like Density Underflows (in prep.)
- **Fernandes, A.**, Mohrig, D., Steel, R., Bank attached bars in Sinuous Channels on Earth and Mars (in prep.)

Voluntary Intra-departmental Activities:

- **Server Administrator:** Established and managed online data storage and collaborative research locations for the University of Texas Morphodynamics Laboratories & the Dynamic Stratigraphy Workgroup (2009-present)
- **Web-site Administrator:** Designed and managed web-site of the Dynamic Stratigraphy Workgroup, (2010-present)
- **Organizer:** Co-managed the weekly Soft-rock Brown Bag Seminar (2007)

Voluntary External Activities:

- **Reviewer:** Journal of Marine and Petroleum Geology (2011)
- **Session Co-convenor: Multi-disciplinary Approach to Understanding the Dynamics of Sinuous Channel Evolution in Different Environments** (G. S. A. Meeting 2011, Minneapolis)