# **CARLA SANCHEZ**

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## **EDUCATION**

# PhD Geological Sciences, The University of Texas at Austin

GPA: 4.0/4.0

Dissertation Topic: Controls on mixed carbonate-siliciclastic three-dimensional stratigraphic architecture, Northwest Shelf of Australia.

Advisors: Dr. Ronald Steel / Dr. Craig Fulthorpe.

Expected Graduation: December 2010.

## MS Geological Sciences, The University of Texas at Austin, 2006

GPA: 4.0/4.0

Thesis: Quantitative Seismic Geomorphology of Miocene and Pliocene–age Fluvio-deltaic Systems, Northern Gulf of Mexico Province.

Advisor: Dr. Lesli Wood.

# BE Geophysics, Simon Bolivar University, 2001

GPA: 3.9/5.0

Senior Thesis Project: Structural interpretation and exploratory prospect evaluation of Barua Area, Maracaibo Lake.

#### RELEVANT EXPERIENCE

# The University of Texas at Austin - Jackson School of Geosciences

Teaching Assistant for Sequence Stratigraphy (Graduate level)

9/2006 – Present

Provide background and assistance for labs on siliciclastic sequence stratigraphy to class of 20 graduate students. Grade lab exercises.

## ConocoPhillips - Subsurface Technology

Geoscience Intern in Sedimentary Systems

5/2008 - 8/2008

Define a detailed depositional architecture and stratigraphic framework of fluvial to shallow marine clastic succession by integrating 3D seismic, well-log and core data.

Analysis of reservoir architectures, including the geometry, size, and spatial distribution of depositional elements.

Characterize key sub-seismic and sub-log scale surfaces within the reservoir unit that influence reservoir performance (baffles, barriers, flow units).

Deliverables: well-to-seismic ties for key wells, set of 3D seismic key surfaces; detailed well-log cross-sections; set of seismic attribute maps for intervals of interest.

#### The University of Texas at Austin – Jackson School of Geosciences

Graduate Research Assistant at the Institute for Geophysics

9/2006 - Present

Define the stratigraphic architecture of a Middle Miocene to Recent, mixed carbonatesiliciclastic basin fill in the Northwest Shelf of Australia.

## Marathon Oil Corporation - International Exploration

Summer Intern for Angola Exploration

5/2006 - 8/2006

Characterize deep-water depositional systems using quantitative and qualitative seismic geomorphology techniques and well data in order to establish predictive

relationships between slope turbidite channel morphometrics and estimated net-togross ratios.

Apply seismic geomorphology techniques to predict reservoir quality in new prospect areas.

#### The University of Texas at Austin – Jackson School of Geosciences

Graduate Research Assistant at the Bureau of Economic Geology

6/2005 - 5/2006

Quantitative Clastics Laboratory: Establish predictive relationships between morphology of fluvio-deltaic systems and their fill type. Examine temporal morphometric variations to reduce reservoir quality uncertainty and estimate reservoir dimensions for modeling.

Deep Shelf Gas Project: Assess further exploration potential in the Texas Shelf (Gulf of Mexico) through mapping of stratigraphic surfaces, interpretation of growth fault timing, and analysis of basin-wide sediment dispersal via depocenter development.

# Teaching Assistant at Department of Geological Sciences

8/2004 - 5/2005

Provide practical experience in basic geologic principles and gem minerals topics to 20person groups of non-major undergraduate students. Class instruction through laboratory lectures, gem recognition and faceting practices, and leading local field trips.

## Petroleos de Venezuela - Exploration Bussiness Unit

Exploration Geophysicist

7/2001 - 1/2003

Improve correlation of well data to reflection seismic through checkshot and vertical seismic profile (VSP) processing and modeling.

Reprocessing of two-dimensional seismic to aid interpretation of structural traps.

Supervise acquisition of geophysical data and monitor quality control of basic field data.

Intern 6/2000 - 12/2000

Interpretation of structural and stratigraphic traps for prospect evaluation. Generation of velocity model for depth conversion of seismic horizons (Maracaibo Lake Basin).

## Simon Bolivar University – Earth Science Department

Teaching Assistant 1/2001 - 3/2001

Present basic principles of Petroleum Geology and Stratigraphy-Sedimentology to groups of 40 geophysics undergraduate students in lab lectures and field trips.

#### ABSTRACTS

- Sanchez, C.M.; Steel, R.; Fulthorpe, C.S.; Austin, J.A. Jr. 2010. Miocene Shelf-Edge Delta Behavior and Influence on Deepwater Slope Morphology, Northwest Shelf of Australia. American Association of Petroleum Geologists Annual Meeting. New Orleans.
- Sanchez, C.M.; Fulthorpe, C.S.; Austin, J.A. Jr. 2008. Three-dimensional Architecture of Neogene Mixed Carbonate-Siliciclastic Sequences, Australian Northwest Shelf. American Geophysical Union Fall Meeting. San Francisco, California.
- Sanchez, C.M.; Fulthorpe, C.S.; Austin, J.A. Jr. 2008. Neogene Mixed Carbonate-Siliclastic Systems in the Northwest Shelf of Australia: Influence of Siliclastics Distribution on Shallow-Water Carbonate Sedimentation. American Association of Petroleum Geologists Annual Meeting. San Antonio, Texas.
- Sanchez, C.M.; Fulthorpe, C.S.; Austin, J.A. Jr. 2007. Northwest Shelf of Australia The Next Step in Understanding the Role of Eustasy in the Generation and Preservation of Stratigraphy. Drilling to Decipher Long-Term Sea-Level Changes and Effects, Consortium for Ocean Leadership Workshop. Salt Lake City, UT.

- **Sanchez, C.**, and L. Wood, 2006, Quantitative Seismic Geomorphology of Pliocene and Miocene-Age Fluvio-Deltaic Reservoirs in the Northern Gulf of Mexico Shelf Province. American Association of Petroleum Geologists Annual Meeting Houston, Texas.
- Ollarves, R., F. Audemard, P. Camacho, **C.M. Sanchez**, A. Cataldi, and F. Zambrano, **2004**, GPR as a tool in the search for active faults: a quaternary outcrop example VIII Venezuelan Geophysical Conference, Caracas, Venezuelan Geophysical Society.
- Sanchez, C.M., and A. Peña, 2001, Structural Interpretation for Prospect Exploratory Potential Evaluation in Barua, Maracaibo Lake, IV Society for Sedimentary Geology Latin-American Section Annual Meeting Merida, Venezuela.

## **AWARDS**

ConocoPhillips Spirit Scholar (Fall 2007 - Present).

Recipient of American Association of Petroleum Geologists Grants-in-Aid (2006, 2008).

Basin Research Studentship Prize Commendation 2008 on presentation at American Geophysical Union Fall Meeting "Three-dimensional Architecture of Neogene Mixed Carbonate-Siliciclastic Sequences, Australian Northwest Shelf".

Honorable award for oral presentation. 4th SEPM - Latin American Sedimentology Meeting, Merida, Venezuela, November, 2001.

#### OTHER PROFESSIONAL ACTIVITIES

American Association of Petroleum Geologists. UT Student Chapter Treasurer and Short Courses Chair (Spring 2005 – Spring 2008). Student member (2004-Present)

Society of Exploration Geophysicists and Society for Sedimentary Geology. Student Member (2004-Present).