MARIANA IULIA OLARIU

University of Texas at Austin- Department of Geological Sciences 1University Station C1100, Austin, TX, 78712 E-mail: iolariu@mail.utexas.edu GEO 4.154, phone: 512 471 6757

STATUS

- H1B until 2012

EXPERTISE

Experience in clastic sedimentology (use of outcrop and subsurface data to interpret shallow and deep-water ancient depositional systems); building and interpretation of 3-D digital virtual outcrops based on LIDAR data; data analysis; multi-spectral image analysis and image processing; geospatial analysis (Remote Sensing, GIS) applied to sedimentological and structural problems.

EDUCATION

2007- Ph.D. - Geoscientist, Geosciences Department, University of Texas at Dallas; GPA 4/4

Dissertation: Development and testing of Methods for Analyzing High Resolution Three-Dimensional Digital Outcrop Geology: Big Rock Quarry, Arkansas

1995- **B.S.** – Geology engineer, Department of Geology and Geophysics, University of Bucharest, Romania; GPA 8.3/10

Thesis: Sedimentological Study of Tigveni Sandstone, Arges County, Romania (Miocene deposits from Dacic Basin)

Other courses

2008 SEPM Short Course – Sequence Stratigraphy Applied to Petroleum Exploration

WORK EXPERIENCE

2008 – present - **Research engineering/Scientist Associate** III University of Texas at Austin, Department of Geological Sciences

2001 – 2007 - Teaching Assistant

University of Texas at Dallas, Geosciences Department Introduction to Geophysics; Oceanography; Oceans; Data Analysis; Earthquakes &Volcanoes; Computers for Geoscientists

1995 – 2000 - Research Scientist

Institute of Educational Sciences, Bucharest, Romania

- Evaluation of SOCRATES Program in Romania
- TIMSS The Third International Mathematics and Science Study
- Rural Education in Romania

All these projects involved statistical analysis of students' achievements and evaluations of educational programs related to Earth Sciences curriculum.

SKILLS/QUALIFICATIONS

Operating Systems: DOS/Windows, MacIntosh Software: GOCAD, Polyworks, Matlab, Petra, Neuralog, Sirovision, ArcGIS, ENVI, Corel /Canvas / Adobe Illustrator, Photoshop, Microsoft Office Speaking: English, Romanian

SOFT SKILLS

- determination, seriousness, respect for other people's work; easy at communication with people from different backgrounds; open to share ideas and results with other people; easily adapt at different work environments.

PUBLICATIONS

- Olariu M. I., Olariu C., Steel J. R., Dalrymple R. W. and Martinius A. W., 2010, Anatomy of a laterally migrating tidal bar: Esdolomada Member, Roda Formation, Graus-Tremp Basin, Spain, in review at Sedimentology
- Olariu, M. I., Ferguson J.F., Aiken C.L.V., 2008, Outcrop Fracture Characterization Using Terrestrial Laser Scanners: Deepwater Jackfork Sandstone at Big Rock Quarry, Arkansas, Geosphere, v. 4, no. 1, pp. 247-259
- Aiken C. L. V., Xu X., Thurmond J., Abdelsalam M., Olariu M. I., Olariu C., 2004, 3-D Laser scanning and virtual photorealistic outcrops: acquisition, visualization and analysis, Short Course #3, Tulsa, OK : American Association of Petroleum Geologists, 100 p.
- Olariu, M. I., Aiken, C. L. V., Ferguson, J. F., Abdelsalam, M. G., Development of an Analytical method For Ground-based Mutispectral Mapping: The Deepwater Deposits at Big Rock Quarry, Arkansas (to be submitted to the International Journal of Remote Sensing)
- Olariu, M. I., Bhattacharya J. P. and Aiken, C. L. V., Interpretation of Channelized Architecture Using Three-dimensional Photorealistic Models, Pennsylvanian Deepwater Deposits at Big Rock Quarry, Arkansas (to be submitted to Marine Geology)

PRESENTATIONS

- Olariu M. I., Carvajal R. C., Steel J. R., Olariu C., 2010, Process and Architectural Evolution during Deltaic Cross-Shelf Transits – Fox Hills Deltas, Washakie Basin, Wyoming, AAPG Annual Meeting, New Orleans
- Olariu M. I., Olariu C., Steel J. R. and Martinius A., 2009, Characteristics of obliquely migrating tidal bars: Esdolomada Member, Roda Formation, Graus-Tremp Basin, Spain, AAPG Annual Meeting, Denver
- Olariu M. I., Ferguson J. F., Aiken C. L. V., 2008, Quantitative Analysis of 3-D Geologic Outcrops: Deep-water Jackfork Sandstone at Big Rock Quarry, Arkansas, AAPG Annual Meeting, San Antonio
- Olariu M. I., Ferguson J. F. and Aiken C. L. V., 2006, Outcrop Fracture Characterization using Terrestrial Laser Scanners: Deep-water Jackfork sandstone at Big Rock Quarry, Arkansas, GSA Penrose meeting, Durham, UK

- Olariu M. I., Xu X. and Aiken C. L. V., 2004, Development of Analysis Techniques of Close-in 3-D Photorealistic Mapping: Deepwater Turbidite Deposits at Big Rock Quarry, Arkansas: AAPG Annual Meeting, Dallas
- Olariu M. I., Xu X., Abdelsalam M., Aiken C. L. V. and Ammann L., 2003, The use of oblique close-range multi-spectral imagery in digital 3-D mapping of the Jackfork turbidites at Big Rock Quarry, Arkansas, In: Abstracts with Programs GSA, Vol. 35, Issue 6, pp.260
- Olariu M. I., Xueming X., Abdelsalam M., Aiken C. L. V. and Ammann L., 2002, Ground based remote sensing techniques integrated with close range, oblique derived 3-D digital models of Jackfork turbidites, Big Rock Quarry, Arkansas, In: Abstracts with Programs - GSA, Vol. 34, Issue 6, pp.477

MEMBERSHIPS

Geological Society of America; American Association of Petroleum Geologists

RECOGNITION AND AWARDS

2005 – Student scholarship, AAPG Southwest chapter

- 2003 GCSSEPM Ed Picou Fellowship Grant for Graduate Studies in the Earth Sciences
- 2002 Dr. Oscar Wilhelm award, University of Texas at Dallas
- 1991 1995 Merit Scholarship, University of Bucharest

REFERENCES

Prof. Ronald J. Steel, e-mail: <u>RSteel@jsg.utexas.edu</u>, ph.: 512-471-0954 Prof. Carlos L.V. Aiken, e-mail: <u>aiken@utdallas.edu</u>, ph.: 972-883-2450

Prof. John F. Ferguson, e-mail: ferguson@utdallas.edu, ph.: 972-883-2410

Prof. Janok P. Bhattacharya, e-mail: jpbhattacharya@uh.edu, ph.: 713-743-4720