# **Estevao Stefane Mahanjane (Mozambique)**

#### **Desired occupational field:**

Member of the CLCS

Geoscience (Geology & Geophysics)

#### **Objectives:**

Accept challenges where my knowledge in Marine Geology/Geophysics and hydrography can fully contribute in the matter of the article 76 UNCLOS

#### Work Experience

Dates: 2004 onwards

Occupation or position held Main Activities and responsibilities

# Expertise on Article 76 of the United Nations Convention on Law of the Sea (UNCLOS):

- Member of the Mozambican Task force for delineation of the outer limits of the continental shelf;
- Member of the Mozambican delegation to the United Nations (New York) for presentation to the CLCS of the extended continental shelf of Mozambique, 31 March 2011;
- Preparation and presentation to the CLCS of the Submission by the Republic of Mozambique, New York, 31 March 2011 (refer to CLCS/70);
- Key person for the preparation of the technical and scientific information, the dossier for the Mozambique extended continental shelf beyond 200M according with the UNCLOS-82 (requirements of article 76 and STG), submitted to the United Nations in July 2010;
- Key person for the preparation of the preliminary Information submitted to the United Nations in 2009, regarding to the Mozambique extended continental shelf beyond 200 M according to the technical and scientific requirements of article 76;
- Member of the Mozambican delegation to the United Nations (New York) for the submission of the preliminary information, held on the 11 May 2009;
- Appointed data manager within the Mozambique committee of experts for implementing article 76 of UNCLOS to delineation of outer limits of the extended Continental Shelf;
- Advisor for Mozambique on planning and designing of additional geophysical data acquisition, processing, and interpretation to fulfil the requirement of Article 76 of UNCLOS: include Gravity, Magnetics and (Multi-channel Reflexion & Refraction) 2D seismic data;

#### **Training Courses and Seminars:**

Organizer and 2-days seminar in Maputo on the subject of article 76 of UNCLOS — Maputo, 29-30 September 2008

UNEP Shelf Programme Desk-top Preparation Workshop-Part 1 and 2

UNEP, GIGIRI, Nairobi, 14-24 March 2006

Dates: June 2001 onwards

Occupation or position held Main Activities and responsibilities:

## **Expertise in oil industry (Geosciences):**

#### Senior Geoscientist (Geophysics and Geology)

- 2003-2010 Seismic interpretation IN-HOUSE and responsible for the mentoring junior staff;
- Loading and quality control of 2D and 3D seismic data, identifying and following with data enhancement;
- Management of Petroleum database (Seismic and Well digital data);
- Data interpretation including geological correlations and sequence stratigraphy analysis in sedimentary basins and geological modelling;
- Mentoring tutorial to Ministry of Mineral Resource staff;
- Evaluation of Petroleum Potential in Mozambique sedimentary basins;
- Planning and development of resources assessment methods;
- Petroleum resource assessment on regional and national scale;
- Preparation of documentation and running the 2nd, 3rd and 4th Licensing Rounds for Oil and Gas Exploration and Production;
- Evaluation of company applications for new exploration licences;
- Licensing and Negotiations for Petroleum Concession awards;
- Providing technical advice to Ministry of Mineral Resources;
- Represented the National Petroleum Institute (INP) in various geoscientific programmes involving oil industry;
- Project team leader for Reserves evaluation in the Gas Fields in the continental margins.

# **On-the-job training**

#### 2007/2006

Exploration Project assisted by the Petroleum Geosciences Service (PGS) — Reservoir (United Kingdom):

• Seismic Interpretation, Prospect generation & Ranking of about 80,000 line kms of 2D seismic from the offshore Mozambique Basin;

- Two months Courses: Sequence stratigraphy-Level 1 & 2; Introduction to Wellsite Geological Operations. Institute Teknologi Petroleum Petronas. Kuala Lumpur, Malaysia;
- Drilling Operations with Petronas: Evaluation of the Geological and Geophysical (G&G) data from the daily drilling reports and wellsite Geological Reports for decision make process, including compiling all information from G&G, Geopressure, wireline, Petrophysics, drilling parameters for the Final Well Report.

#### 2005

2D land seismic Acquisition (including pre-processing and quality Control in the field) with SASOL (South Africa).

2004

3 months secondee for the G and G studies in the offshore Zambezi Delta, Mozambique with PETRONAS, based on seismic interpretation of about 5,000 line km 2D seismic for the prospect identification and ranking.

### 2004

Participated in the extensive Exploration Project together with Anadarko International (USA), Vanco (USA) and Norsk Hydro (Norway):

• 2D seismic interpretation of about 4000 line kms from the offshore Rovuma Basin (Mozambique) for the prospect and leads generation focusing the evaluation of the Petroleum prospectivity.

2004-2003

Wellsite geologist in the onshore Exploration/Production drilling Campaign in the Pande-Temane Gas Field (Mozambique).

## Employer

National Petroleum Institute (INP)

Maputo, Mozambique

Government Institution (Petroleum Sector)

Dates: June 2000 onwards

# **Teaching Assistant**

Occupation or position held Main Activities and responsibilities

Lecturer in Geosciences: General Geology and Geomorphology, Marine Geology, Geo-statistics and Geo-mathematics, Applied Geophysics (including seismic acquisition, processing and interpretation)

# Employer

Eduardo Mondlane University

Maputo, Mozambique

#### Type of business or sector

**Tertiary Education** 

#### **Education and Training**

Dates: 2010-2010 (Ongoing):

Philosophy Doctorate in Exploration Geophysics (Geosciences)

Skills covered

Explorationist

#### Name and Type of organization providing education and training

Leibniz University Hannover (LUH)

Institute of Geology

Germany

Dates: 2002

Title of qualification awarded Skills covered Emphasis

Bachelor of Science Honours in Exploration Geophysics

**Exploration Geophysics** 

Marine Geology, Exploration Geophysic Methods, Reservoir Engineering, Petroleum sedimentology

Name and type of organization providing education and training

University of Cape Town, South Africa

Dates: 1994-1999

Title of qualification awarded skills covered

Diploma, Geology

Emphasis: Exploration and applied geology

Name and type of organization providing education and training

Eduardo Mondlane University

Maputo, Mozambique

Tertiary Education

# Affiliations:

Society of Exploration Geophysics (SEG)

#### Language(s) Self-assessment

Portuguese

Understanding: Listening: Proficient User; Reading: Proficient User

# Speaking:

Spoken Interaction: Proficient User

Spoken production: Proficient User

# Writing:

Proficient User

English

Understanding: Listening: Proficient user; Reading: Proficient User

# Speaking:

Spoken Interaction: Proficient User

Spoken production: Proficient User

# Writing:

Proficient User

# German

Understanding: Listening: Basic user; Reading: Basic User

### Speaking:

Spoken Interaction: Basic User

Spoken production: Basic User

# Writing:

Basic User

#### **Computer skills and competences**

Competent with most Microsoft Office Programmes and some experience with HTML, Kingdom Suite, GeoGraphix, Surfer 8, Geocap, Geoquest.

# **Additional Information**

### **Publications**

- 1. Ongoing PhD Project at Leibniz University of Hannover, Germany: Geotectonic History and Petroleum System Analysis for the Northern Mozambique Basin, Basin Modelling Concept;
- Mahanjane, E., (submitted to journal in December 2011) A Geotectonic History of the northern Mozambique Margin including the "Beira High" (off Zambezi Coast) — A Contribution for Understanding its Development;
- Reichert, C., Sonke, N., Adam, J., Aslanian, D., Roest, W., Mahanjane, S., James, E.T., Bargeloh, H., Behrens, T., Martin, B., Ehrhardt, A., Heyde, I., Jokat, W., Kallaus, G., Klingelhöfer, F., Moulin, M., Kewitsch, P., Schrader, U., Schreckenberger, B., and Sievers, J. (2008) — Cruise Report, BGR07. R/V MARION DUFRESNE CRUISES MD 163 & MD 164. PROJECT MOBAMASIS.Bundesanstalt für Geowissenschaften und Rohstoffe (BGR);

- 4. Mahanjane, E., Achimo, M., and Nhanale, E. (2007) The interpretation of the syn-rift sediments from Mazenga Graben to Palmeira Graben, Type of Lithologies based on well logs. Geological Department, UEM;
- 5. Mahanjane, E., Achimo, M., and Mendes, L. (2007) The study of the Grudja (Upper Cretaceous) sediment distribution in the offshore Chidenguele Graben. Geological Department, UEM;
- 6. Mahanjane, E., Achimo, M., and Paulo, A. (2007) The study of Geotectonic Structure of Buzi. Geological Department, UEM;
- 7. Mahanjane, E., Mahanjane G., and Mendes L., (2004) Assessment of Cultural-economic and environmental impact to Community of Chibuto Heavy sand Project;
- 8. Mahanjane, E. (2001) Manual of Mineral and Industrial Materials. Volumes I & II (Portuguese version), Geological Department, UEM.