

Kumba-Exxaro Seminar and Short Course Series
Department of Geology, University of Pretoria:

Petroleum Systems and Organic Chemistry,
Organic Facies and Palynology

13th to 17th March 2017

Presenters:

Prof. Dr. Dag A. Karlsen and Prof. Dr. Wolfram
Michael Kürschner

Department of Geosciences, University of Oslo, Norway

Abbreviated Programme

Day 1, 13th March 2017; 09.¹⁵ – 16.³⁰h

Source rock formation, the concept of organic maturity as a function of burial temperature (time), primary and secondary migration, the basics of source rock characterization, exercises

Day 2, 14th March 2017; 09.¹⁵ – 16.³⁰h

The organic elements of the “Petroleum System”: Chromatograms as “fingerprints” of oils; basics of peak identification in GC-FID and GC-MS chromatograms i.e. isoprenoids and biomarkers for facies and maturity estimates, characterizing oils and gas in a basin, in relation to source rocks, exercises

Day 3, 15th March 2017; 09.¹⁵ – 16.³⁰h

Natural gases, their origin and characteristics, coal-bed drilling, shale gas, characterization of gases by composition and stable C-isotopes, relationship between oil and gas in conventional traps, exercises

Day 4, 16th March 2017; 09.¹⁵ – 16.³⁰h

Palynology: Introduction, pollen & spores, acritarchs & dinoflagellate cysts
Practical exercises – hands on a microscope and palynomorphs

Day 5, 17th March 2017; 09.¹⁵ – 16.³⁰h

Palynofacies and depositional environment, biostratigraphy & sequence stratigraphy, microscopic techniques and maturity studies, hands on a microscope

Each day includes practical work, discussions and student – industry delegates interaction
Coffee and lunch breaks on the UP campus

Registration and payment (5000 ZAR per person / 3000 ZAR academics & GSSA) are requested until 6th March with Ms Vusani Mathada: vusani.mathada@up.ac.za
UP Geology post-graduate students free entrance but MUST register.