



## Celebrating the life of Chris Cornford (1948-2017): Petroleum Systems Analysis 'Science as Art'?

24-25 April 2019

*The Geological Society*

### CONFERENCE PROGRAMME

<b>Wednesday 24 April</b>	
08.30	<b>Registration</b>
08.50	<b>Welcome and Opening Remarks</b>
<b>Session 1: 'Big Data' – What's it all about?</b>	
09.00	<b>Keynote Speaker: The uncertain art of science in petroleum systems</b> <b>Dan Cornford, IGI Ltd</b>
09.40	<b>Petroleum Families of the Barents Sea – Paint by numbers</b> Benedikt Lerch, <i>Aker BP ASA</i>
10.05	<b>Trends and Exceptions – Remaining VIGIlant about Standard Biomarker Interpretation</b> Gion Kuper, <i>Tullow</i>
10.30	Break – flip chart Q&A (30 mins) in the Lower Library
11.00	<b>Linking UK, Norwegian and Danish North Sea petroleum systems – consistent oil family assignment and applications</b> Daniel Stoddart, <i>GeoEight AS</i>
11.25	<b>Maturation &amp; migration – Fundamental petroleum system processes unraveled using the high molecular weight NSO fraction</b> Volker Ziegls, <i>GFZ German Research Centre for Geosciences</i>
11.50	<b>Posters: Source Rocks &amp; Primary Migration</b> <b>Note: Presenters will be allowed a short verbal slot by their posters</b>
12.30	Lunch & Posters – Lower Library
<b>Session 2: Using data to inform Petroleum Systems Analysis</b>	
13.30	<b>Keynote Speaker: Top Down petroleum systems analysis and Geospatial Patterns of petroleum phase and properties</b> <b>Zhiyong He, ZetaWare Inc.</b>
14.10	<b>A combined Geochemical and Phase Equilibrium approach to Petroleum Migration</b> Brian Moffatt, <i>Petrophase Ltd</i>
14.35	<b>The Seco-oleananes: Identification, Origin and Distribution in Late Cretaceous/Tertiary Deltaic Petroleum Systems</b> Samuel Olukayode, <i>ExxonMobil</i>
15.00	Break – flip chart Q&A (45 mins) in the Lower Library
15.45	<b>Artificial-Intelligence assisted hydrocarbon exploration: Case examples from the Norwegian Continental Shelf</b> Daniel Austin, <i>Earth Science Analytics</i>
16.10	<b>Charge history of the Snefrid Nord gas and oil discovery – A collage</b> Axel Wenke, <i>Equinor</i>



16.35	<b>Source rock from seismic (SRfS) – from rock properties to basin distribution</b> Marita Gading, <i>Equinor</i>
17.00	<b>Wine Reception with flip chart Q&amp;A</b> (followed by Conference Dinner at The Cavendish Hotel, St. James')

<b>Thursday 25 April</b>	
08.30	<b>Registration</b>
08.50	<b>Welcome</b>
<b>Session 3: Petroleum Systems Analysis – State of the Art</b>	
09.00	<b>Keynote Speaker: Witwatersrand Gold-Uranium Mineralisation: ‘freeze-frame on an Archaean petroleum system</b> Andy Barnicoat, <i>Geoscience Australia</i>
09.40	<b>Using magnetic techniques to calibrate lateral hydrocarbon migration in basin modelling: A Case Study from the Lower Tertiary, UK Central North Sea</b> S. Adesope Badejo, <i>Imperial College London</i>
10.05	<b>Multi-disciplinary analysis of the Mesozoic succession of Maio, Cape Verde: Implications for the MSGBC petroleum systems</b> Max Casson, <i>North Africa Research Group (NARG), University of Manchester</i>
10.30	<b>Break – flip chart Q&amp;A (30 mins) in the Lower Library</b>
11.00	<b>Calculated radioactive heat production in the North Sea: new data for petroleum systems analysis</b> Alexander Finlay, <i>Chemostrat</i>
11.25	<b>The unconventional hydrocarbon potential of the Weald Basin, onshore UK. A 3D basin and petroleum system modelling approach</b> Francesco Palci, <i>Imperial College London</i>
11.50	<b>Posters: New Techniques &amp; Basin Studies/Models</b> <b>Note: Presenters will be allowed a short verbal slot by their posters</b>
12.30	<b>Lunch &amp; Posters – Lower Library</b>
<b>Session 4: Thermal History Reconstruction in petroleum systems analysis</b>	
13.30	<b>Keynote Speaker: Thermal History Data and Missing Section - The Great Uplift Debate gets into Deep Water</b> Richard Bray, <i>Subsurface Resource Consulting</i>
14.10	<b>Sorry to intrude, but is it time to check-out of the ‘Motel Theory’ in the Faroe-Shetland Basin</b> David Gardiner, <i>IGI Ltd</i>
14.35	<b>From regional data acquisition to exploration drilling in only one year – integrated Petroleum Systems Modelling in the Tendrara Exploration area, Eastern Morocco</b> Jason Canning, <i>Sound Energy</i>
15.00	<b>Break – flip chart Q&amp;A (45 mins) in the Lower Library</b>
15.45	<b>Uplifted Triassic shales expose their secrets</b> Andrew Green, <i>IGI Ltd</i>



16.10	<b>The Thermal History of the Weald Basin, southeast England</b> Tanya Beattie, <i>University of Southampton</i>
16:35	<b>Some physical considerations of the kinetic models for predicting petroleum generation in geological basins</b> A. D.Carr, <i>Advanced Geochemical Systems Ltd</i>
17.00	<b>Closing Remarks and depart to local hostelry</b>

## POSTER PROGRAMME

DAY ONE POSTERS	
	<b>PyroViewer – a new Rock Eval data evaluation tool</b> Markus Doerner, <i>University of Bergen</i>
	<b>The Hydrological Cycle During Deposition of the Mahogany Oil Shale Interval of Eocene Lake Uinta, Green River Formation, Utah</b> Amy L. Elson, <i>National Oceanography Centre Southampton</i>
	<b>UK North Sea oils geochemistry: Interpreting newly acquired data from legacy oils</b> Akinniyi A Akinwumiju, <i>Integrated Geochemical Interpretation</i>
	<b>Geochromatographic separation of organic tracers using a natural Draupne (Kimmeridge Clay) source rock column</b> Florian M. Panitz, <i>Kiel University</i>
	<b>A hydrocarbon biomarker study in the Cleveland Basin, North Yorkshire: implications for the end-Triassic mass extinction event</b> S. J. Beith, <i>National Oceanography Centre Southampton</i>
	<b>A geochemical analysis of Triassic source rock of the 7th member of Yanchang formation in Erdos basin, China — the comprehensive effect in paleoclimate, biological thrive and the potential lacustrine current</b> Xiaoxue Liuzhuang, <i>PetroChina</i>
	<b>Demineralisation Study Shows Preferential Oil Storage in Kerogens within mature Kimmeridge Clay in the North Sea</b> Munira Raji, <i>Durham University</i>

DAY TWO POSTERS	
	<b>Petroleum system analysis and prospect identification using a multi-attribute volumetric approach</b> Gaynor Paton, <i>GeoTeric</i>
	<b>Generalized Petroleum Generation History Model of the Upper Cretaceous Source Rocks in Sirt Basin, Libya</b> Khaled Albriki, <i>China University of Petroleum</i>
	<b>Hydrocarbon Generation and Migration modelling of the Barremian-Aptian Source Rock unit of the northern Orange Basin, South Africa</b> C. Samakinde, <i>University of the Western Cape, Capetown</i>
	<b>Analysis of Petroleum System in Mahu Sag of Junggar Basin, Northwest China</b> Jian Wang, <i>PetroChina</i>
	<b>Combining modelling dimensions, software and states of mind in PSA: an application to the Namibe Basin, off southern Angola</b> Tiago Cunha, <i>IGI Ltd</i>
	<b>Assessment of the Golden Zone for the Norwegian Barents Sea through estimation of net erosion and petroleum system modelling</b> Jesper Kresten Nielsen, <i>MOL Norge AS</i>