## Technical Programme

### Day One

**Tuesday 23 November**

**Programming Overview**

- **08:30 - 09:30** Conference, Exhibition and Registration Open
- **09:30 - 10:00** Keynote Address: Phil Kirk | Harbour Energy
- **10:00 - 10:30** Keynote Address: TotalEnergies Exploration for the Future | Emmanuelle Garinet, TotalEnergies

### Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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<tbody>
<tr>
<td>10:30</td>
<td><strong>Refreshment Break &amp; Exploring the Exhibition</strong></td>
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<tr>
<td>12:45</td>
<td><strong>Lunch &amp; Exploring the Exhibition</strong></td>
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<td>15:15</td>
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### Exploration: UK

**11:15 - 11:45**

- **Exploration: UK**
  - A Pressure Cell Summary of the Highly Prospective Central North Sea HPHT Domain
    - Eva Zimmer, Oil & Gas Authority

- **Multi-azimuth seismic**
  - Multi-azimuth Acquisition and High-resolution Model Building and Imaging from Shallow to Deep Reservoir - A Case Study from Offshore Morocco
    - Andrew Furber, WesternGeco

- **Machine Learning / Digital**
  - Mining Data at Scale Using Deep Learning
    - Chin Hang Lun, CGG

### Exploration: Africa

**16:00 - 16:30**

- **Exploration: Africa**
  - The Brulpadda Discovery and Accelerated Follow-up-de-risking in a Complex Environment
    - William Gordon Canning, TotalEnergies

- **OBN**
  - Optimizing Ocean-bottom Node Acquisition Parameters Using Complementary Forward Modelling
    - Mathieu Chapelle, WesternGeco

- **Reservoir Geology**
  - Sand Injectite Fields: North Sea
    - Andrew Hurst, University of Aberdeen

### Lunch & Exploring the Exhibition

**12:45 - 13:45**

### Exploration: UK

**13:45 - 14:15**

- **Exploration: UK**
  - The Ossian “Spur and Groove”: A Buried Variscan Landscape
    - Phil Mollicone, pmoll-seismic Limited

- **OBN**
  - Reducing Structural Uncertainty in the Central North Sea with OBN Data
    - Gareth Jones, CGG

- **Reservoir Geology**
  - Sand Injectite Fields: North Sea
    - Andrew Hurst, University of Aberdeen

### Energy Transition: CCUS

**14:15 - 14:45**

- **Exploration: UK**
  - Exporting North Sea Geology with the North Sea Core Initiative
    - Kirstie Wright, North Sea Core CIC

- **OBN**
  - High Resolution Velocity Model Building on Long Offset Ocean Bottom Node Data: North Sea, Utsira High
    - Simon Baldock, TGS

- **Reservoir Geology**
  - A Mineralogical and Statistical Differentiation of Reservoir and Associated Injected Sandstones in the South Viking Graben
    - Graham Petrie, CGG

### Lunch & Exploring the Exhibition

**16:00 - 16:30**

### Exploration: Africa

**16:30 - 17:00**

- **Exploration: Africa**
  - VENUS: Will a Successful Wildcat Witness the Birth of a Valuable New Southern African Play?
    - Tony Younis, Impact Oil and Gas Limited

- **OBN**
  - Nodes, Streamers and 7 Sources, Using the Full Seismic Toolbox to Unravel the Complexities of the Nordkapp Basin Salt Structures
    - Per Eivind Dhelie, Lundin Energy Norway

- **Reservoir Geology**
  - Quantifying How Sensitive the Stratigraphic Architecture of Distributive Fluvial Systems Is Towards Changes in Accommodation and Sediment Supply
    - Swiad Sneider, University of Aberdeen

### Lunch & Exploring the Exhibition

**17:00 - 17:30**

### Exploration: Africa

**17:00 - 17:30**

- **Exploration: Africa**
  - Horn of Africa: The Next Chapter in Its Petroleum Journey
    - Claire Banks, CGG

- **OBN**
  - Seismic Interpolation with U-Net and Its Application to OBN Data
    - Peng Zhao, CGG

- **Reservoir Geology**
  - A Mineralogical and Statistical Differentiation of Reservoir and Associated Injected Sandstones in the South Viking Graben
    - Graham Petrie, CGG

### Lunch & Exploring the Exhibition

**17:30 - 19:30**

**Exhibition Networking Evening**

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This programme is subject to change.
PETEX 2021

TECHNICAL PROGRAMME

WEDNESDAY 24 NOVEMBER

08:30 - 09:00
Conference, Exhibition and Registration Open

09:00 - 09:30
Keynote Address: Geoscience 5.0 - The changing role of geoscience through the Energy Transition
Sophie Zurquiyah, CGG

AUDITORIUM

09:30 - 10:00
Experimentation To Create Value: A Case Study Using TensorFlow and XGBoost for Sherg Log Prediction
Samuel Eckford, Summit E&P Ltd.

10:00 - 10:30
Future Exploration Workflows Using Machine Learning
Daniel Stoddart, Earth Science Analytics

10:30 - 11:15 | Refreshment Break & Exploring the Exhibition

11:15 - 11:45
Deep Reinforcement Learning for Random Noise Attenuation
Ross O’Driscoll, ION

11:45 - 12:15
Seismic Processing Parameter Mining - Can the Past Help Us?
Tony Martin, PGS

12:15 - 12:45
Cost-Effective High-Resolution Reservoir Property Modeling Using Physics-Based Deep Machine Learning
Pavel Didenko, CGG

12:45 - 13:45 | Lunch & Exploring the Exhibition

13:45 - 14:15
Collaboration Showcase | Keynote Address: Energy Futures – A Low Carbon, Sustainable Earth?
Jon Gluyas, Durham Energy Institute

14:15 - 14:45
Multi-proxy Sedimentary Provenance Approaches to Unravelling Complex Sand Dispersal Histories; Examples from the Black Sea and Barents Shelf
Stephen Vincent, CASP

14:45 - 15:15
A Re-evaluation of the Biostratigraphy, Provenance and Sedimentology of the Skagerrak Formation CNS: Results from the Triassic Joint Industry Project
Adrian Hartley, University of Aberdeen

15:15 - 16:00 | Refreshment Break & Exploring the Exhibition

16:00 - 16:30
Geoscientists for the Energy Transition Worldwide – a New UK Leadership Initiative
Jonathan Redfern, University of Manchester

16:30 - 17:00
Quantifying Greenhouse Gas Emissions for Oil and Gas Assets
Jason Canning, RPS Energy

17:00 - 17:30
Unlocking Key Learnings from Global Analogues for a More Effective Net Zero Strategy: Case Studies from the Farnsworth & Vacuum Fields
Joanna Hansford, C&C Reservoirs

17:30 - 19:30 | PETEX Social Event
08:30 - 09:00
Conference, Exhibition and Registration Open

09:00 - 09:30
**Keynote Address:** Racial diversity in UK geoscience: are we prepared for the future?
*Professor Chris Jackson, University of Manchester*

09:30 - 10:00
**Analogues**
- Quantitative Analysis of Sand Injection Complexes from Outcrop Analogues: *Robert Waltham, University of Aberdeen*

09:30 - 10:00
**Geophysics**
- 3D Surface Related Multiple Attenuation for Land Data Using Least-squares Multiple Imaging: *Brandon Li, CGG*
- Towed Streamer EM: Efficient Mapping of sub-surface Resistivity for Resource Evaluation: *Lucy MacGregor, OFG Multiphysics*

09:30 - 10:00
**Uncertainty & Bias**
- Favourability': Restoring Lost Heterogeneity and Correcting a Systematic Bias in our Production Forecasting: *Karl Stephen, Heriot Watt University*
- Integrating Geology, Rock Physics and Seismic into Realistic Uncertainty Quantification Using Serverless Cloud Computing: *Shervin Rasoulzadeh, CGG*

10:00 - 10:30
**Outcrop Analog Studies as a Tool to Understand Reservoir Development in Igneous Rocks, Utsira High, Norwegian North Sea**
*Lars Riber, University of Oslo*

10:00 - 10:30
**3D Surface Related Multiple Attenuation for Land Data Using Least-squares Multiple Imaging**
*Brandon Li, CGG*

10:00 - 10:30
**Towed Streamer EM: Efficient Mapping of sub-surface Resistivity for Resource Evaluation**
*Lucy MacGregor, OFG Multiphysics*

10:30 - 11:15 | Refreshment Break & Exploring the Exhibition

11:15 - 11:45
Shaping the Future
**Inclusion in Innovation**
*Michael Deal, ExxonMobil*

11:45 - 12:45
In Conversation with
*Sir Mark Moody Stuart, Carla Riddell (Spirit Energy) & PESGB Young Professionals*

12:45 - 13:45 | Lunch & Exploring the Exhibition

13:45 - 14:15
**Collaboration Showcase**
*Keynote Address: Sustainable Net Zero*
*Gioia Falcone, University of Glasgow*

14:15 - 14:45
**Exploration: Insights**
- Detachment Faulting, Successive Incision and Controls on Supradetachment Basin Formation at the Mid-Norwegian Rifted Margin: *Julie Linea Gresseth, Norwegian University of Science and Technology*

14:15 - 14:45
**Reservoir Geology**
- The Influence of Pore-Lining Chlorite in Preserving Exceptional Reservoir Quality in Deeply-Buried, Delta-Front and Delta-Fed Sandstones: Observations and Predictions: *John Cater, Petrostrat Limited*

14:15 - 14:45
**Energy Transition: Geothermal**
- Subsurface Geological Challenges for the Development of Geothermal Resources in Sedimentary Basins: *Saba Keynejad, CGG*

14:15 - 14:45
**Improving Predictability of Changes in Tide-influenced Channel Morphology – Implications for Exploration and Reservoir Analogue Studies**
*Anna van Yperen, University of Oslo*

14:15 - 14:45
**Aeolian Facies Distribution in Modern and Subsurface Arid Rift Basins**
*Sophie Behrendsen, University of Aberdeen*

14:15 - 14:45
**Potential for Geothermally Heated Horticulture in England**
*William Nibbs, University of Glasgow*

14:45 - 15:15
**4D**
- Finding the Sweet Spot? Choosing the Right Seismic Monitoring Strategy for Your Field: *C. Leone, WesternGeco*

14:45 - 15:15
**UK: Old & New**
- Old Field, New Tricks: Alwyn OBN & 2GR Integration: *Arindam Mitra, TotalEnergies*
- Unlocking Fracture Prediction on the Clair Field: The Value of Integrating Ultra High Density Seismic with Pioneering Well and Production Data: *Dan Davies, bp*
- Blackrock Operations Geology: Delivering a Successful Well in Complex Lithologies: *Richard Smout, Siccar Point Energy*

14:45 - 15:15
**Exploration: International Opportunities**
- Hydrocarbon Exploration Potential in Ecuador, Colombia, and Venezuela. Where to Go and Why?: *Andres Mesa, Independent Exploration Consultant*
- Chasing Missed Opportunities in a Mature Basin: *Ben Dewhirst, Echo Energy*
- Potential Oil and Gas Opportunities Offshore Montenegro: *Dennis Anestoudis, Energean*

15:15 - 16:00 | Refreshment Break & Exploring the Exhibition

17:30 | End of Conference