# Seismic2021 The role of seismic in unlocking value in the energy mix

### VIRTUAL EVENTS 17–21 MAY 2021

Organiser

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### **TECHNICAL PROGRAMME**

The role of seismic in the energy mix is difficult to overstate. Seismic 2021 will cover the entire geophysical spectrum, from exploration through appraisal, development and production and through to abandonment and repurposing for CCS - the full lifecycle potential of the asset. We will also focus on how seismic supports both the UK's MER strategy and its Net Zero ambitions, as well how seismic can sustainably support the increasing development of renewables into the energy mix.

### Who should attend?

By highlighting the role Seismic plays in the Energy Mix, this conference is not only relevant to Geoscientists and Geophysicists, but also those in non-Geo-related roles, such as Petroleum Engineers and Senior Decision makers in Operators and Service companies.

### Why attend?

- Cost effective training opportunity
- Up to date case histories from operators and service companies
- Informative techbyte presentations and technology updates
- Learn from the exhibitors showcasing their latest technologies



### Young Professionals Event – 19th May, 10:00-12:00

This year, the session will be split into two parts, covering the Energy Transition and Data Science. There will be a mix of presentations and panel discussion with the presenters.

#### Virtual Exhibition – 20th May, 16:00-17:00

Limited spaces are available! Whether you'd like to take space and showcase your products and services and interact with the attendees or if you'd like to visit the virtual exhibition and learn about new technologies in the market, don't miss out!

### Booking information – book online via www.spe-aberdeen.org/events

All rates exclude VAT	Members	Non Members	Students and Unemployed
Early bird rates before 23rd April – all 5 days	£80.00	£100.00	£25.00
Rates after 23rd April – all 5 days	£100.00	£120.00	£25.00
Daily rate	£30.00	£40.00	£25.00
Young Professional Event	FREE	FREE	FREE

For more information visit www.spe-aberdeen.org/events or call 01224 646311, aberdeen.events@spe-uk.org



	MONDAY 17TH MAY – CCS AND NEW TECHNOLOGIES	
13:30	Welcome & Introduction - Ian Barron, Shell - Conference Chair	
13:40	Keynote Presentation	Walter Rietveld, BP
14:00	Geophysics for CCS – Repurposing a Depleted Reservoir for the Energy Transition	lan Barron, Shell
14:20	The Role of Passive Seismic Methods in Offshore CO2 Storage Monitoring	Roy Bitrus, Tenzor Geo Ltd
14:40	Autonomous and unmanned geophysical acquisition for offshore renewables development and CCS	Eric Bathellier, Kietta
15:00	Panel Discussion and Q&A	
15:25	BREAK	
15:40	<b>Techbyte -</b> Surface and borehole time-lapse seismic modelling for a CO2 storage site - Acorn Goldeneye	Sheela Ramani, IntelSeis
15:40 15:45		Sheela Ramani, IntelSeis Nikolay Amelin, Geology Without Limits
	- Acorn Goldeneye	
15:45	<ul> <li>Acorn Goldeneye</li> <li>Techbyte - Autonomous Surface Node – a new approach to collect marine seismic data</li> <li>Techbyte - Application of Machine learning for cross-equalization of multi-vintage</li> </ul>	Nikolay Amelin, Geology Without Limits
15:45 15:50	<ul> <li>Acorn Goldeneye</li> <li>Techbyte - Autonomous Surface Node – a new approach to collect marine seismic data</li> <li>Techbyte - Application of Machine learning for cross-equalization of multi-vintage time-lapse seismic data.</li> </ul>	Nikolay Amelin, Geology Without Limits Shaji Matthew, Heriott Watt University

	TUESDAY 18TH MAY - ACQUISITION AND PROCESSING			
13:30	Welcome and Introduction			
13:35	Revisiting Mariner: Value of Multicomponent and Multimeasurement Data for Model Building	Soumya Roy, Schlumberger / Equinor		
14:00	High-resolution streamer and OBN hybrid seismic in the Middle East	James Wallace		
14:25	Utilising advances in streamer seismic acquisition and processing technology to optimise late life mature field management in the Gryphon area field cluster, Quad 09, UKCS.	Adrian Merry, Total		
14:50	<b>Techbyte</b> - Swath matching technique: An unconventional yet efficient way to acquire 3D seismic surveys offshore – A North Sea Example.	Angus Styles, ION		
14:55	Techbyte - De-multiple on the Dunbar OBN data in the North Sea	Gareth Jones, CGG		
15:00	BREAK			
15:15	New technology for deep-water sparse-node imaging   a reimaging case study from the West of Shetland	Hazem Ahmed, Schlumberger		
15:40	Impacting The Development Drilling on Arran, A Salt Diapir Field, Through RTLSM Seismic Processing	David Webster, Shell		
16:05	Reprocessed time-lapse seismic data provides new reservoir information on the Njord field	Kristoffer Sundøy, Equinor		
16:45	CLOSE			

	WEDNESDAY 19TH MAY – YOUNG PROFESSIONALS EVENT	
10:00-12:00	This year, the session will be split into two parts, covering the Energy Transition and Data Science. There will be a mix of presentations and panel discussion with the presenters	

	WEDNESDAY 19TH MAY – RESERVOIR AND CHARACTERISATION			
13:30	Welcome and Introduction			
13:35	Wave-equation based 4D Joint Inversion of PP and PS Converted Seismic Data over the Edvard Grieg Field in the North Sea	Peter Haffinger, Delft Inversion / Lundin Energy Norway		
14:00	Multisensor, Multi-Azimuth Quantitative Interpretation: A Case Study from the South Viking Graben, Norway	Cyrille Reiser, PGS		
14:25	Multi-realisation facies-based inversion for reservoir characterisation.	Jeremy Neep, Ikon Science		
14:50	BREAK			
15:00	Robust full reflection waveform inversion based on nonlinear imaging.	Mikhail Davydenko, Delft University of Technology		
15:25	Imaging stratal discordance enhanced by outcrop forward seismic models	Daniel Holden, Sand Injection Research Group, University of Aberdeen		
15:50	BREAK			
16:00	4D seismic processing and inversion technologies to improve mature field management in the Gryphon area field cluster, Quad 09, UKCS	Chris Gunn, Total		
16:25	Icehouse versus Greenhouse Basin Fan System Architectures over the Cambo Field Area – West of Shetland from 3D Seismic Data	Simona Caruso, University of Aberdeen		
16:50	CLOSE			

	THURSDAY 20TH MAY – SHALLOW SEISMIC/RENEWABLES		
13:30	Welcome and Introduction		
13:35	Seismic Data in Orsted	Gwenaëlle Salaün, Orsted	
13:55	Improved understanding of shallow targets through high-resolution processing of primaries, multiples and near field hydrophones	Geir Apeland, Schlumberger	
14:15	High resolution seismic acquisition and imaging for deep sea mining	Adriana Ramirez, TGS	
14:35	BREAK		
14:50	Sub-seabed boulder detection using 3DUHR seismic data	Simon Oakley, Fugro	
15:10	Improved certainty in ground-modelling with optimised processing	Peter Cox, Rockwave	
15:30	Panel Discussion and Q&A		
16:00	Virtual Exhibition		
17:00	CLOSE		

	FRIDAY 21ST MAY – IMAGING, 4D & QUANTITATIVE INTERPRETATION		
13:00	Welcome and Introduction		
13:05	High fidelity migration algorithm applications to massively improve sub-surface imaging using North Sea Case histories and reduce CO2 emissions with lower compute intensity	Jagat Deo, Seismic Image Processing	
13:30	Intravolcanic multiple scattering: modelling methods to quantify the challenge at Blackrock, West of Shetlands	Andy Alexander, Siccar Point	
13:55	Broadband time-lapse at Gullfaks Main field in the North Sea	Yulia Biryaltseva, Equinor	
14:20	Techbyte - Practical applications of joint sparsity recovery	Tom Rayment, DUG	
14:25	<b>Techbyte -</b> Illustrate errors in Elastic attributes with Kirchhoff vs One-Way Wave Equation migration in slowness space- Synthetic dataset	Adam Pegley, Seismic Image Processing	
14:30	Techbyte - Rapid Updating of Velocities While Drilling	Brian Lynch, DGI	
14:35	BREAK		
14:50	4D Seismic Across the Edvard Grieg Field – Five Years of Production and Three Seismic OBC surveys	Per Eivind Dhelie, Lundin Energy Norway	
15:15	Geophysical Applications from Fiber Optic DAS Deployed for Permanent Well/Asset Monitoring	Andres Chavarria, Optasense	
15:40	Subsea Fiber Topology and Effect on 3D and 4D Subsea DAS VSP Imaging	Glenn Wilson, Halliburton	
16:05	Mariner field: Early Production 4D Monitor	Nicholas McArdle, Equinor Production UK Ltd	
16:30	Closing Remarks		
16:35	CLOSE		

### **Sponsorship Packages**

### SPE Aberdeen is a not for profit organisation

During these challenging times, raising sponsorship is vital, not only to the successful delivery of the conference but to enable SPE Aberdeen to invest back into the industry.

By supporting this event, not only are you providing an important knowledge sharing and training opportunity for the industry, but you are also helping to support our future generation of young geoscientists.

### What SPE Aberdeen do with surplus funds

With almost daily reports highlighting the skills gap in Science, Technology, Engineering and Maths (STEM) subjects in the UK, our Section has invested almost £200,000 over the last five years to support initiatives designed around these subjects, and this figure continues to grow year on year. We have also invested around £80,000 since 2011 in scholarships to support students studying oil and gas related qualifications.

	Platinum	Event	Registration	Programme	Coffee Break	Virtual Exhibition
	£4,000	£2,500	£1,000	£1,200	£1,200	£950
Prime Branding on all materials inc web, abstracts flyer, programme	x					
Prominent branding on all materials inc web, abstracts flyer, programme		х				
Branding on materials inc web, abstracts flyer, programme			×	х	х	x
Corporate branding on conference slides	х	х	х	х	х	х
Branding on joining instructions	х	х	х	х	х	
Abstract book branding	х	х	х	х	х	х
Social media input	х	х	х	х	х	х
Recognition by chair	х	х	х	х	х	х
Video or presenting opportunity	х	х		х	х	х
Access to delegate list	х	х	х	х	х	х
No. of passes	5	3	2	2	2	2
Single day sponsorship				х		

#### ADVERTISING IN THE ABSTRACT BOOKS

If you would like to place an advert in our Abstracts Book that all attendees will receive, the costs are:

Quarter page - £250 + VAT Half page - £400 + VAT

#### VIDEO SHOWCASE SPONSORSHIP £500 + VAT

• Opportunity to provide a short 1-2 minute video for showing during the conference breaks.

#### VIRTUAL EXHIBITION SPACE

Benefits of being a virtual exhibitor include:

- Company logo and description on SPE Aberdeen website
- Mention in social media in the run up to the event and opportunity to provide content

£950 + VAT

- Opportunity to provide delegates with a handout
- Opportunity to provide short 1-2 minute video for the breaks which could either be a corporate presentation or technology demo.
- Free access to all conference sessions for two delegates
- Access to the attendee list