

EAGEEUROPEAN
ASSOCIATION OF
GEOSCIENTISTS &
ENGINEERS

EAGE Workshop on Fiber Optic Sensing for Energy Applications in Asia Pacific

9-11 NOVEMBER 2020 • ONLINE

Day 1 - 9 November 2020 (Monday)

Start	End	Duration	Track 1
9:00	9:10	0:10	Welcome Speech by Chairs
9:10	9:40	0:30	Keynote 1: Value Chain of DFOS and Several Recent Important Progresses Kinzo Kishida Neubrex
Session 1 - Advances in Fibre Optic Sensing - I			
Chairs: Dr Ahmad Riza Ghazali, PETRONAS Research Sdn. Bhd & Dr Konstantin Tertysnikov, Curtin University			
9:40	10:05	0:25	20. Development of Automatic Fiber Optic Cable Installation Machine for Geological Environment Monitoring K. Kishida Neubrex
10:05	10:30	0:25	34. Influence of Interrogators' Design on DAS Directional Sensitivity E.Sidenko Curtin University
10:30	10:55	0:25	10. Temperature and Strain Separation from a Distributed Rayleigh System R.Crickmore Optasense
10:55	11:20	0:25	42. Single Mode Fiber with Nickel-Acrylate Coating for Magnetic Field Sensing M.Zulkifli Multimedia University
11:20	11:45	0:25	30. Sensitivity-Enhanced Optical Cables for Borehole Distributed Acoustic Sensing Systems in Oil/Gas Exploration B.Han University of Electronic Science and Technology of China
11:45	11:55	0:10	Break
Poster 1			
11:55	12:40	0:45	40. Detecting Distributed Vibration of a Pipeline Using Optical Fibre Sensing M.Jin University of Western Australia 33. Distributed Fiber-Optic Sensing Based Production Logging Investigation: Flowloop Experiments G.Jin Colorado School of Mines 12. A Case Study on the Monitoring of Dual-String Heavy Oil Producers in Field B, Malaysia, Using Distributed Fibre Optic Acoustic and Temperature Sensing O. Ebokpo Silixa
12:40	13:40	1:00	Break
13:40	14:10	0:30	Keynote 2: From Evolution to Revolution; 25 years of Fiber Optic Reservoir Monitoring Systems Garth Naldrett Silixa
14:10	14:40	0:30	Keynote 3: LYTT; Illuminating the subsurface Tommy Langnes LYTT
Session 2 - Advances in Fibre Optic Sensing - II			
Chairs: Dr Nader Issa, Terra15 & Dr Michael Mondanos, Silixa			
14:40	15:05	0:25	43. Improved Sensitivity Distributed Pressure Sensor Using Off-Axis Coated Single Mode Fiber M.Nawal Multimedia University
15:05	15:30	0:25	3. Effect of Rocks Stiffness on Observed DAS VSP Amplitudes R.Isaenkov Curtin University
15:30	15:55	0:25	41. Investigation of Magnetostrictive Layer-in-Clad Optical Fiber for Distributed Magnetic Sensing M.F.Azman Multimedia University
15:55	16:20	0:25	24. Borehole Fiber Optic Sensors for Simultaneous Multiparameter Measurement of Acoustic, Temperature and Pressure M.H. Mad Zahir PETRONAS Research Sdn Bhd
16:20	16:30	0:10	Break
Poster 2			
16:30	17:00	0:30	22. Imaging the Shallow Subsurface with Multichannel Analysis of Surface Waves (MASW) using Distributed Acoustic Sensing (DAS) A.David Silixa 14. DAS 3DVSP Data Acquisition for Methane Hydrate Research T.K. Lim TEC
End of Day 1			

Day 2 - 10 November 2020 (Tuesday)

Start	End	Duration	Track 1
9:00	9:30	0:30	Keynote 4: Emerging Applications of Distributed Acoustic/Vibration Sensing, including Non-Energy Applications Nader Issa Terra15
Session 3 - Seismic Imaging and Monitoring - I			
Chairs: Dr Andre Gerhardt, Woodside & Prof Roman Pevzner, Curtin University			
9:30	9:55	0:25	35. Frequent Time-lapse Monitoring with DAS – Benefits and Limitations D. Kiyashchenko Shell International Exploration and Production Inc
9:55	10:20	0:25	13. Long-range DAS Data Acquisition on a Submarine Fiber-optic Cable M. Karrenbach OptaSense
10:20	10:45	0:25	36. Fiber Optic Surveillance of Subsea Developments Including Intelligent Well Completions (IWCs) B. Seabrook Exxonmobil Upstream Research Company
10:45	11:10	0:25	29. Topside Distributed Acoustic Sensing of Subsea Wells G. Wilson Halliburton
11:10	11:35	0:25	37. Measurements of 80km Long Submarine Cables using TGD-DAS System K. Kishida Neubrex
11:35	11:45	0:10	Break
Poster 3			
11:45	12:00	0:15	38. Downhole Surveillance of a Well Decommissioning: Case Study from the Harvey 3 Well L.Ricard CSIRO Energy
12:00	12:15	0:15	6. Locating Microseismic Events and Determining Spatial Uncertainty Using 1C DAS Fiber-Optic Strain Measurements J. Le Calvez Schlumberger Oilfield Services
12:00	13:00	1:00	Break
Round Table Discussion			
Chair: Dr Andre Gerhardt, Woodside			
13:00	13:30	0:30	Discussion on Motivation and Challenges from an End User Perspective - D. Kiyashchenko Shell International Exploration and Production Inc - B. Seabrook Exxonmobil Upstream Research Company - J. Smith HiSeis Pty Ltd - A.R. Ghazali PETRONAS Research Sdn. Bhd
13:30	13:40	0:10	Break
13:40	14:10	0:30	Keynote 5: Distributed Temperature Sensing (DTS) Techniques for Measuring Low Flow Regimes Michael Mondanos Silixa
Session 4 Seismic Imaging and Monitoring - II			
Chairs: Dr Konstantin Galybin, Schlumberger & Dr Andre Franzen, PETRONAS			

14:10	14:35	0:25	8. Multiwell 3D VSP with Fibre Optics for Monitoring of CO2 Injection A.Yurikov Curtin University
14:35	15:00	0:25	15. Processing of Continuous Vertical Seismic Profile Data Acquired with Distributed Acoustic Sensors and Surface Orbital Vibrators S. Yavuz Curtin University
15:00	15:25	0:25	7. Seasonal Effects on DAS using Buried Helically Wound Cables K. Tertyshnikov Curtin University
15:25	15:50	0:25	11. Fiber-Optic Walkaway VSP for Structural Uncertainty Reduction in Cooper Basin, Australia K. Galybin Schlumberger Australia
15:50	16:15	0:25	28. Imaging of Fiber Optics DAS VSP Installed behind Casing and with an Inflatable Liner M.D. Davis PETRONAS Research Sdn. Bhd
16:15	16:25	0:10	Break
Poster 4			
16:25	16:40	0:15	23. Distributed Acoustic Sensing Technique for Seismic while Drilling: Stage 3 of the CO2CRC Otway Project Case Study Z. Qin Curtin University
16:40	16:55	0:15	32. P-wave Anisotropy Parameters Estimation from Multi-well 3D VSP using DAS: Stage 3 of the CO2CRC Otway Project S. Popik Curtin University
End of Day 2			

Day 3 - 11 November 2020 (Wednesday)			
Start	End	Duration	Track 1
Session 5 - Imaging and Monitoring (Subsea)			
Chairs: Dr Nader Issa, Terra15 & Dr Ludovic Ricard, CSIRO			
9:00	9:25	0:25	16. Acquisition and Processing of Multi-fiber DAS Microseismic in the Montney Formation S.Cole OptaSense
9:25	9:50	0:25	27. Fibre-optics Sensing and Permanent Sources for Seismic Monitoring of a Large-scale CCS site in Decatur, Illinois: Preliminary Results and Lessons Learnt J. Correa Lawrence Berkeley National Laboratory
9:50	10:15	0:25	26. Underground Sounds from an Abandoned Well: Forensic Analysis of Distributed Acoustic Sensing Data R. Pevzner Curtin University
10:15	10:40	0:25	19. Ambient Seismic Noise in Urban Environment: Case Study using Downhole DAS at Curtin University Campus V.Shulakova CSIRO
10:40	10:50	0:10	Break
Session 6 - Imaging and Monitoring (Mining)			
Chairs: Prof Roman Pevzner, Curtin University & Dr Konstantin Galybin, Schlumberger			
10:50	11:15	0:25	31. Curtin Geolab Research Facility: Walkaway VSP with DAS and Geophones S. Zulic Curtin University
11:15	11:40	0:25	17. Downhole Fiber-optic Distributed Acoustic Sensing for Seismic Imaging and Monitoring in Coal Mining: Case Study from Northern Shaanxi Province, China WenfengDu China University of Mining & Technology (Beijing)
11:40	12:05	0:25	21. 3D VSP for Coal Seams Exploration using Permanently Installed DAS K.Tertyshnikov Curtin University
12:05	12:15	0:10	Break
Session 7 - Non-Seismic Applications			
Chairs: Dr Michael Mondanos, Silixa & Dr Kinzo Kishida, Neubrex			
12:15	12:40	0:25	5. Geothermal Steam Production Optimization via Application of Distributed Temperature Sensing M. Chin Halliburton
12:40	13:05	0:25	39. Monitoring the Quality of Perforations using Temperature as a Proxy L. Ricard CSIRO
13:05	13:30	0:25	25. Pipeline Geotechnical Monitoring in Unstable Terrains with Fiber Optic Distributed Sensing F. Ravet Omnisens
13:30	14:30	1:00	Break
14:30	15:00	0:30	Terra15
15:00	15:15	0:15	Break
15:15	15:30	0:15	Curtin University - Introductions
15:30	16:00	0:30	Terra15
16:00	16:30	0:30	Silixa
16:30	17:00	0:30	Silixa
17:00	17:15	0:15	Closing Remarks by Chairs
End of Day 3			

Please note that the programme follows (UTC+8) timezone. The programme is confirmed as of publishing date and may be subject to change without prior notice.