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GEOSCIENTISTS &  
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Society for  
Underwater  
Technology



# EAGE/SUT Workshop on Integrated Site Characterization for Offshore Renewable Energy

22-23 MAY 2024 • BOSTON, MASSACHUSETTS

- **Final Announcement**

[WWW.EAGE.ORG](http://WWW.EAGE.ORG)

## TECHNICAL COMMITTEE MEMBERS

Zack Westgate	University of Massachusetts Amherst
Andy Hill	BP
Maarten Vanneste	Norwegian Geotechnical Institute (NGI)
Allan McKay	PGS
Jack Finch	AFRY
Aria Abubakar	SLB
Paul Doherty	Gavin & Doherty Geosolutions (GDG)
Lisa Hill	<b>Geo Marine Survey Services B.</b>
Trevor King	Norwegian Geotechnical Institute (NGI)
Chris McHugh	SULMARA
Rodolfo Sancio	Geosyntec Consultants
Xiaoyan Long	Fugro
Mick Cook	MCL Consultancy
Joris Siermann	Shell
Timothy Watton	Equinor
Andy Barwise	RWE
Nick Izzo	Orsted
Michael Handel	Orsted

## WORKSHOP OVERVIEW

Offshore renewable energy is a pivotal element in the energy transition. The workshop addresses globally applicable themes which are tailored to region-specific considerations, serving as a unique technical platform to tackle challenges and progress towards genuinely integrated site characterization and foundation design.

## LOCATION

This event will take place in the city of Boston, Massachusetts.

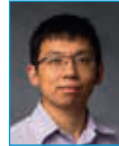
## KEYNOTE SPEAKERS



Elizabeth Dewing Andrews  
Avangrid's



Zachary Finucane  
Wood Thilsted



Haibin Di  
SLB



Maarten Vanneste  
Norwegian Geotechnical Institute (NGI)

## IMPORTANT DATES

Workshop dates	22-23 May 2024
Icebreaker Reception	22 May 2024
Early fee	18 April 2024



“The global workshop series aims to champion and advance a multi-disciplinary approach as the standard for sustainable future offshore renewable energy site characterization and infrastructure development.”

## REGISTRATION AVAILABLE NOW

We would like to thank our registration sponsor for their support!



Be part of the workshop and register now!

REGISTERED AND PAID	UNTIL 18 APRIL 2024	FROM 19 APRIL 2024 UNTIL 7 MAY 2024	FROM 8 MAY 2024 UNTIL 23 MAY 2024
EAGE/SUT Green Member <sup>1,5</sup>	\$1.065	\$1.315	\$1.515
EAGE Bronze/Silver/Gold Member <sup>1,5</sup>	\$915	\$1.165	\$1.365
EAGE Platinum Member <sup>1,5</sup>	\$915	\$915	\$915
Non-member <sup>3</sup>	\$1.165	\$1.415	\$1.615
EAGE/SUT Student Member <sup>1,2,5</sup>	\$620	\$620	\$620
Student Non Member	\$695	\$695	\$695

## TECHNICAL PROGRAMME

We would like to thank our technical programme sponsor for their support!



### Oral Presentations | Day 1 22 May

ROOM	
08:30	Introduction EAGE/SUT - Welcome Speech EAGE/SUT
<b>Session I - Regional Geohazard Assessments</b>	
08:45	<b>Keynote Speaker - Elizabeth Andrews, Avangrid; Geo-insights from East Coast Offshore Wind Development</b>
09:15	<b>Screening of Offshore Renewable Opportunities: an initial step in the risk management cycle-</b> A. Hill <sup>1*</sup> , P. Jeanjean <sup>1</sup> <sup>1</sup> BP America Inc.
09:30	<b>USA Central Atlantic Seabed Intelligence Report-</b> K. Hill <sup>1*</sup> <sup>1</sup> Global Maritime
09:45	<b>Deep-water geohazards and mitigation solutions for floating offshore wind farms in the Pacific Ocean-</b> J. Fisher <sup>1*</sup> , K. Smith <sup>1</sup> , P. PERALTA <sup>1</sup> , X. Long <sup>1</sup> <sup>1</sup> Fugro USA Marine, Inc.
10:00	<b>Coffee Break AM</b>
10:30	<b>Soil classification focusing on mapping glauconite and geohazards – based on an Energy Island story-</b> E. Dalgaard <sup>1*</sup> , E. Mutual <sup>1</sup> , B. Stuyts <sup>1</sup> <sup>1</sup> SolidGround
10:45	<b>Challenges of seabed mobility on cable routing for bottom fixed wind farms-</b> L. Ferreira <sup>1*</sup> <sup>1</sup> 2H Offshore California Inc
11:00	<b>Laboratory Testing Experience of Problematic Glauconite Soils-</b> D. Zeppilli <sup>1*</sup> , R. Beemer <sup>2</sup> <sup>1</sup> GeoTesting Express - Geocomp; <sup>2</sup> University of Massachusetts Dartmouth
11:15	<b>Panel discussion: Developer approaches to site characterization: how can we compress the timeline? (moderator Alice Ridgway Hill, Orsted)</b>
12:00	<b>Lunch</b>
<b>Session II - Advances in Site Investigation Techniques</b>	
13:00	<b>Keynote Speaker - Dr. Haibin Di, SLB; Deep learning applications for offshore windfarm site characterization</b>
13:30	<b>Offshore Renewables: what imaging data, when, how and what to call them?-</b> A. Hill <sup>1*</sup> <sup>1</sup> BP America Inc.

13:45	<b>Seismic inversion for offshore wind: Implications of near-surface soil physics on AVO approximations-</b> E. Mutual <sup>1*</sup> <sup>1</sup> SolidGround; <sup>2</sup> Qeye
14:00	<b>Advances in site characterization for Offshore Wind with 3D Ultra High Resolution Seismic-</b> A. McKay <sup>1*</sup> , W. Powell <sup>1</sup> , L. Limonta <sup>1</sup> , S. Arasanipaliala <sup>1</sup> , C. Reiser <sup>1</sup> , N. Pernin <sup>1</sup> <sup>1</sup> PGS
14:15	<b>A demonstration of the benefits and challenges of 3D ultra-high resolution seismic for offshore site characterization-</b> N. Woodburn <sup>1*</sup> , D. Monk <sup>2</sup> <sup>1</sup> Rockwave; <sup>2</sup> ACTeQ
14:30	<b>Sea bottom surface wave seismic for Windfarm implantation and foundations-</b> D. LEPAROUX <sup>1</sup> , L. MICHEL <sup>2*</sup> , P. PELLELEAU <sup>3</sup> , J. ROUSSET <sup>4</sup> , T. ALLEMAND <sup>2</sup> , M. EVAIN <sup>3</sup> , A. SOURICE <sup>2</sup> , P. SCHNURLE <sup>3</sup> , A. BALTZER <sup>5</sup> , O. VALISHIN <sup>2</sup> , M. LEHUJEUR <sup>1</sup> <sup>1</sup> GERS-GeoEND, Université Gustave Eiffel - campus Nantes; <sup>2</sup> Sercel; <sup>3</sup> Ifremer; <sup>4</sup> Nantes Université, École Centrale Nantes, CNRS, LHEEA, UMR 6598, F-44000 Nantes.; <sup>5</sup> Nantes Université, CNRS, LETG, UMR 6554, F-44000 Nantes
14:45	<b>A Case for Seabed Nodal Seismic for Offshore Wind-</b> B. Mattox <sup>1*</sup> , D. Wilson <sup>2</sup> , D. Monk <sup>1</sup> , D. Ridyard <sup>1</sup> <sup>1</sup> ACTeQ; <sup>2</sup> EPL Solutions
15:00	<b>Coffee break PM</b>
15:30	<b>Ground Investigations for Floating Wind Turbines-</b> A. Beeston <sup>1*</sup> , Y. Perikleous <sup>2</sup> <sup>1</sup> DNV; <sup>2</sup> DNV
15:45	<b>PCPT-Driven Deep Learning Application of Soil Behavioral Classification for US Atlantic Outer Continental Shelf Soils-</b> X. Long <sup>1*</sup> , Z. Zhang, S. Adhikari, J. Dow, S. Kaur, Y.S. Hernandez, D. Hargrave <sup>1</sup> Atlantic Shores Offshore Wind; <sup>2</sup> Fugro USA Marine, Inc.; <sup>3</sup> Fugro USA Marine, Inc.; <sup>4</sup> Atlantic Shore Offshore Wind, LLC; <sup>5</sup> Atlantic Shore Offshore Wind, LLC; <sup>6</sup> Fugro USA Marine, Inc.; <sup>7</sup> Atlantic Shores Offshore Wind
16:00	<b>Discussion on the Interrelationship of Cone Factors for CPT Data Interpretation-</b> R. Sancio <sup>1*</sup> <sup>1</sup> Geosyntec Consultants, Inc.
16:15	<b>Rapid selection of geotechnical test intervals using X-ray image analyses-</b> T. Wuenschel <sup>1*</sup> , M. Geyin <sup>1</sup> , M. Madyarova <sup>1</sup> <sup>1</sup> NGI, Inc.
16:15	<b>Wrap Up</b>
16:15	<b>IceBreaker Reception</b>

## Oral Presentations | Day 2- 23 May

ROOM	
<b>Session III - Ground Model Development</b>	
08:45	<b>Keynote Speaker - Maarten Vanneste, NGI; Data integration and ground models - Experience from recent projects and recommendations for future developments</b>
09:15	<b>An overview of current challenges in uncertainty quantification for offshore windfarm ground models-</b> N. Bozorgzadeh <sup>1</sup> , R.T. Klinkvort <sup>1</sup> , M. Vanneste <sup>1</sup> , C.F. Forsberg <sup>1</sup> , F. Nadim <sup>1*</sup> <sup>1</sup> Norwegian Geotechnical Institute
09:30	<b>Integrated ground modelling workflows: Risk reduction through a holistic understanding of seabed and ground conditions</b> - J. Elliott <sup>1*</sup> , F. Giovacchini <sup>2</sup> , K. Gould <sup>1</sup> , J. Sellars <sup>1</sup> , M. Grove <sup>2</sup> <sup>1</sup> Seequent; <sup>2</sup> Seequent
09:45	<b>Quantifying geotechnical/geophysical attributes for offshore site assessment. Study cases considering different stages of offshore wind-farm development.</b> - A. Werpup Oguro <sup>1*</sup> , N. Römer-Stange <sup>2</sup> , L. Siemann <sup>1</sup> , J. Hebig <sup>1</sup> , C. Ramos <sup>1</sup> , V. Spiess <sup>2</sup> <sup>1</sup> Fraunhofer IWES; <sup>2</sup> Bremen University
10:00	<b>Coffee Break AM</b>
10:30	<b>An Integrated Geotechnical and Geophysical Ground Model for Highly Layered Soils on the US East Coast-</b> M. Kanitz <sup>1*</sup> , J. Dührkop <sup>1</sup> , S. Berendt Marstal <sup>2</sup> , J. Fernandez Scarioni <sup>1</sup> , A. Espunes Jubero <sup>2</sup> <sup>1</sup> Ramboll; <sup>2</sup> Ramboll
10:45	<b>Nederwiek Zuid (NL) Integrated Ground Model: UHRS pre-stack inversion for quantitative ground modelling-</b> E. Dalgaard <sup>1*</sup> , B. Stuyts <sup>1</sup> , F. Horn <sup>1</sup> , C. Smith <sup>2</sup> , P. Cox <sup>3</sup> , C. Boylan <sup>3</sup> , J. Bronkhorst <sup>4</sup> , S. Wezenberg <sup>4</sup> , N. Dyer <sup>5</sup> , K. Blacker <sup>5</sup> <sup>1</sup> SolidGround; <sup>2</sup> Arup; <sup>3</sup> Rockwave; <sup>4</sup> Netherlands Enterprise Agency (RVO); <sup>5</sup> Cathie Group
11:00	<b>Nederwiek Zuid (NL) Integrated Ground Model: AVO-compliant UHRS processing for elastic pre-stack inversion-</b> P. Cox <sup>1*</sup> , C. Boylan <sup>1</sup> , C. Smith <sup>2</sup> , E. Dalgaard <sup>3</sup> , F. Horn <sup>3</sup> , B. Stuyts <sup>3</sup> , J. Bronkhorst <sup>4</sup> , S. Wezenberg <sup>4</sup> , N. Dyer <sup>5</sup> , K. Blacker <sup>5</sup> <sup>1</sup> Rockwave; <sup>2</sup> Arup; <sup>3</sup> SolidGround; <sup>4</sup> Netherlands Enterprise Agency (RVO); <sup>5</sup> Cathie Group
11:15	<b>Nederwiek Zuid (NL) Integrated Ground Model: Discipline-Led Approach, Optimising Offshore Wind Site Characterisation Products-</b> C. Smith <sup>1*</sup> , S. Eaton <sup>1</sup> , T. Bizzotto <sup>1</sup> , N. Dakin <sup>2</sup> , P. Moran <sup>3</sup> , P. Cox <sup>4</sup> , E. Dalgaard <sup>5</sup> , J. Bronkhorst <sup>6</sup> <sup>1</sup> Arup; <sup>2</sup> British Geological Survey; <sup>3</sup> Inosys; <sup>4</sup> Rockwave; <sup>5</sup> SolidGround; <sup>6</sup> Netherlands Enterprise Agency (RVO)
11:30	<b>Panel discussion: Ground model decision making along the engineering design process (moderator Paul Doherty, GDG)</b>
12:15	<b>Lunch</b>
<b>Session IV - Advances in Geotechnical Engineering</b>	
13:15	<b>Keynote Speaker - Zachary Finucane, WoodThilsted; Construction and Operational Challenges for US Offshore Wind</b>

13:45	<b>CHARACTERISATION OF SAND SOILS FOR OFFSHORE RENEWABLES FOUNDATION DESIGN: RISKS AND OPPORTUNITIES-</b> S. Whyte <sup>1,2*</sup> , M. Rattley <sup>1,2</sup> , D. Donaghy <sup>1,2</sup> <sup>1</sup> Ocean Infinity; <sup>2</sup> Geowynd
14:00	<b>Physical modelling to understand the installation and operational performance of bottom-fixed wind turbine foundations-</b> F. Bransby <sup>1*</sup> , C. O'Loughlin <sup>1</sup> , B. Bienen <sup>1</sup> , P. Watson <sup>1</sup> , C. Gaudin <sup>1</sup> <sup>1</sup> University of Western Australia
14:15	<b>Protection provided by rock versus sand to anchor damage against offshore cables-</b> A. Peccin da Silva <sup>1*</sup> , D. Luger <sup>1</sup> <sup>1</sup> Deltares
14:30	<b>Coffee break PM</b>
15:00	<b>Recent trends in the study of monopile behavior for improving installation and operational performance-</b> F. Pisanò <sup>1,3&gt;*</sup> , E. Kementzetzidis <sup>3</sup> , H. Wang <sup>2</sup> <sup>1</sup> Norwegian Geotechnical Institute; <sup>2</sup> Norwegian Geotechnical Institute; <sup>3</sup> Delft University of Technology
15:15	<b>From silent installation in sands to lateral response in glauconites: addressing challenges for monopile foundations-</b> A. Peccin da Silva <sup>1*</sup> , M. Post <sup>1</sup> , M. Konstantinou <sup>1</sup> , D. De Lange <sup>1</sup> , A. Elkadi <sup>1</sup> <sup>1</sup> Deltares
15:30	<b>A CPT-based critical-state approach for the analysis of (mono)pile run during driving operations-</b> A. Senanayake <sup>1*</sup> , A. Rahim <sup>1</sup> , H. Kassa <sup>2</sup> , R. Kinkvort <sup>3</sup> , F. Pisano <sup>1</sup> <sup>1</sup> Norwegian Geotechnical Institute; <sup>2</sup> Equinor; <sup>3</sup> Norwegian Geotechnical Institute
15:45	<b>Panel Discussion - Noise mitigation for foundation installation (moderator Federico Pisano, NGI)</b>
16:30	<b>Wrap up</b>

## SPONSORING

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## CONTACT

The **First EAGE/SUT Workshop on Integrated Site Characterization for Offshore Renewable Energy** is organized by the EAGE Latin America Office and SUT (Society for Underwater Technology). For enquiries please contact by email [lan@eage.org](mailto:lan@eage.org).



For up to-date information visit:

# See you in Boston!

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