

STRUCTURAL INTEGRITY 2019: 9th-10th September 2019, Aberdeen, UK

2nd International Conference on Structural
Integrity for Offshore Energy Industry

STRUCTURAL INTEGRITY 2019

Aberdeen, UK

9th-10th September 2019

Organised by

ASRANet

Call for Papers

*Abstracts should be sent to integrity@asranet.co.uk by the deadline of 28th June 2019
Abstract format is available [HERE](#)*

Special issues of Elsevier's [International Journal of Fatigue](#) and Taylor & Francis' [Journal of Structural Integrity and Maintenance](#) will be published comprising extended versions of selected papers presented at the conference.

www.asranet.co.uk

About the Conference

The marine, offshore and subsea energy industry continues to evolve creating new challenges and risks for the safety, integrity and reliability of its structures and systems. For example, wells are being drilled at greater depths, pressures and temperatures, requiring enhanced assessment of the integrity of structures and systems in such extreme conditions. There is a push to expand operations into new locations such as the Arctic, where environmental and operational conditions are considerably harsher. Many assets in the North Sea are rapidly reaching or have already exceeded their original design life and safe but affordable life extension and decommissioning are becoming major objectives. The recent rapid developments in renewable energy technologies have introduced new challenges of maintaining at minimum cost the reliability and integrity of structures and equipment in remote locations and subjected to extreme loads and environmental conditions. There are also exciting new opportunities, but also significant challenges and uncertainties, in applying structural health and condition monitoring, robotics and the novel concepts of additive manufacturing and big data to safety and structural integrity. These and many additional traditional and emerging themes will be covered during the conference through survey, focused and/or case study presentations from the practitioners and researchers in the art and science of structural integrity.

The conference will bring together researchers and practitioners to discuss and address the current and emerging issues and challenges, as well as share successes and state-of-the-art and practice, in structural integrity, safety and reliability of energy industry's marine, offshore and subsea structures and systems. It will feature keynote and invited papers providing broader overviews of the main contemporary themes as well as more focused presentations addressing specific issues of practical relevance. Ample opportunities for informal discussions, sharing of insights and networking will be available.

Conference Themes

Fatigue, fracture, corrosion, erosion and abrasion

Deterministic deterioration models and analysis

Probabilistic deterioration models and analysis

Dealing with uncertainty in structural integrity assessment

Structural integrity under extreme loads and in extreme environments

Probabilistic computational mechanics and numerical methods

Structural integrity of fixed, floating and submerged structures

Structural integrity of wells, pipes and risers

Structural integrity of wind and tidal turbines and wave energy extractors

Life-cycle assessment, asset integrity management decisions and optimization

Safe and efficient asset life extension

Reusable structures and repowering

Structural integrity in decommissioning

Design for integrity, inspectability and extended safe lifespan

Component and system reliability

Multi-scale material, defect and damage modelling

Structural health and condition monitoring

Non-destructive testing and evaluation

Intelligent use of monitored data

'Digital twins' for structural integrity

Structural integrity of additively manufactured materials

Integrity protection technologies

Industry codes and guidelines

Case studies in structural integrity, safety and reliability

Abstracts of up to 300 words with presentation/paper title and names and affiliations of all authors and an e-mail address of the corresponding author should be sent to integrity@asranet.co.uk by 28th June 2019. Abstract format is available

[HERE](#)

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International Advisory Committee

Dr RV Ahilan, London Offshore Consultants, UK
Dr Bostjan Bezensek Shell, UK
Prof Sang-Rai Cho University of Ulsan, Korea
Prof Soren Ehlers, NTNU, Norway
Prof Tat-Hean Gan, TWI, NSIRC & Brunel University, UK
Prof AM Korsunsky University of Oxford, UK
Prof Bernt Leira, NTNU, Norway
Mr Satheesh Manayankath, Health and Safety Executive, Energy Division, UK
Mr Mark Manzocchi, Atkins, UK
Prof Liviu Marsavina, Politehnica University of Timisoara, Romania
Dr Mike Mulheron University of Surrey, UK
Dr Mohammad Nabavian, Wood, UK
Dr Helena Polezhaeva, Independent, France
Prof Jeom Paik, University of Pusan, Korea & University College London, UK
Dr Cesare Marie Rizzo, University of Genoa, Italy
Dr Suhas Vhanmane, Indian Register of Shipping, India
Prof Luca Susmel, University of Sheffield, UK
Dr Ramsay Fraser, BP, UK

Keynote Speakers

Prof. Kamran Nikbin, Imperial Collage, UK
Prof. Tat-Hean Gan, TWI, NSIRC and Brunel University, UK

Invited

Mr Mark Manzocchi, Atkins, UK
Dr Xiaokang Yin, China University of Petroleum, China
Dr Mike Mulheron, University of Surrey, UK
Dr Mohammad Nabavian, Wood, UK
Prof Dimitrios G. Pavlou, University of Stavanger, Norway
Dr Erik Vanem, DNVGL, Norway
Dr Claudio Ruggieri, University of Sao Paulo, Brazil
Prof Noel O'Dowd, University of Limerick, Ireland
Dr Ali Mehmanparast, Cranfield University, UK
Prof Danie Hattingh, Nelson Mandela University, South Africa

Organising Committee

Prof Purnendu Das, *ASRANet Ltd, UK*
Dr Piotr Omenzetter, *The University of Aberdeen, UK*

Registration Fees

Full Registration: £400
Student Registration: £200

Important Dates

Abstract Deadline:	20th June 2019	Abstract Acceptance:	30th July 2019
Full Payment:	9th July 2019	Full Paper Submission:	9th August 2019

KEYNOTE AND INVITED SPEAKERS

(Click on each photo to see the title of each persons paper along with a short bio)



**Prof. Kamran Nikbin, Imperial
Collage, UK**



**Prof. Tat-Hean Gan, TWI, NSRIC and
Brunel University, UK**



**Mr Mark Manzocchi,
Atkins, UK**



**Dr Mohammad Nabavian,
Wood, UK**



**Dr Mike Mulheron,
University of Surrey, UK**



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**Dr Xiaokang Yin,
China University of Petroleum, China**



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Sao Paulo, Brazil**



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Prof Danie Hattingh,
Nelson Mandela University, South Africa

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About Aberdeen

Aberdeen is a thriving city – with people working and studying here from across the world, attracted as to Europe's capital of energy (both O&G and renewables) and offshore and subsea industries with many of the main players and supply chain/services providers having a strong presence. The city itself is home to several museums including the Tolbooth Museum, Aberdeen Maritime Museum, Gordon Highlanders Museum and the Zoology Museum. Scotland's first centre of science and discovery can also be found near Aberdeen Beach and there are a great selection of cultural attractions, with several theatres and art galleries across the city. Equally well-known for its shopping, the city's Union Square (adjacent to Aberdeen Railway Station) has over 50 top shopping brand stores (including MAC, BOSS, Apple and ZARA), and 30 restaurants, as well as a 10-screen cinema. Nearby, the connecting Trinity Shopping Centre is home to a large Primark and Debenhams, and many other shops. Aberdeen's rivers and the North Sea are also home to a host of wildlife, and even dolphins have found a home here. These fascinating mammals are regularly seen playing at the mouth of Aberdeen's working harbour; Dolphin Watch, located at the vantage point of Torry Battery, is open seasonally to help visitors spot these urban dolphins. If you like you can also take on of Aberdeen Harbour Cruises, providing a great opportunity to experience a different viewpoint of the city as well as get up close to wildlife. Aberdeenshire is also home to a large number of traditional castles and outdoor activities. For those attendees that enjoy hiking and hillwalking, Aberdeen acts a great starting point for exploring the Cairngorms National Park.

Getting Here

Getting to Aberdeen is simple, with a whole variety of transport options available to those travelling, and the city can be reached by road, rail, or sky. Once in the city there are excellent transport links throughout the area meaning most destinations are easily accessible by public transport, taxi or car. For those driving, Aberdeen is approximately 2.5 hours' drive from Edinburgh or Glasgow. Well sign-posted, the surrounding area of Aberdeenshire is within close proximity of Aberdeen with the towns and villages easy to get to by major country and main roads. For those flying, Aberdeen International Airport is located just six miles from Aberdeen city centre and is within easy reach of Aberdeenshire by bus or taxi. The region is well connected globally with daily flights to all major airports including all three London airports, Frankfurt, Paris and Amsterdam. The international airport also has many direct routes to most UK cities as well as many key European destinations. For more information you can visit Aberdeen Airports website [HERE](#). Aberdeen's railway station right in the heart of the city (next to the main shopping centre, Union Square), has frequent, fast and reliable services to and from all Scotland's major cities. Travel on one of the hourly trains from Glasgow and Edinburgh or use the east coast line to travel from cities such as York or Newcastle. For timetables and to book your train tickets to Aberdeen visit the Scotrail website [HERE](#). For those preferring to travel overnight, Aberdeen can also be reached from London on the Caledonian Sleeper. Visit the Caledonian Sleeper website [HERE](#) for more information about this service.

Accommodation

[Jurys Inn Aberdeen](#)
[Hotel ibis Aberdeen Centre](#)
[Travelodge Aberdeen Central](#)
[Mercure Aberdeen Caledonian Hotel](#)

[Aberdeen Douglas Hotel](#)
[Hilton Garden Inn Aberdeen City Centre](#)
[DoubleTree by Hilton Hotel Aberdeen Treetops](#)
[Premier Inn Aberdeen City Centre](#)

CONFERENCE VENUE

DOUBLETREE BY HILTON ABERDEEN TREETOPS

161 SPRINGFIELD RD, ABERDEEN

AB15 7AQ

DoubleTree by Hilton Aberdeen Treetops is a quiet retreat in the leafy West End of the city, with close links to Aberdeen Airport, Aberdeen Exhibition and Conference Centre (AECC) and the City Centre. Enjoy a scenic and relaxing location, and reach local restaurants, bars and shopping centres with ease. We're also near golf courses, parks, whisky trails and family-friendly attractions, and we provide quick access to motorways and complimentary car parking.

DRINK NETWORKING SESSION

17:00—18:30

CONFERENCE DINNER VENUE

DOUBLETREE BY HILTON ABERDEEN TREETOPS

161 SPRINGFIELD RD, ABERDEEN

AB15 7AQ

Special Delegate Rate - Doubletree by Hilton

£70 per night: Single with Breakfast

£80 per night: Double with Breakfast



Sponsorship & Exhibition Space

Sponsorship

Cost £1500 + VAT

Package Includes:

- 2 Free Delegate Registration
- Company Logo in the Conference Programme
- Company Logo in the Book of Abstracts
- Company Advert in the Book of Abstract (A4 Size)
- Advert in the Conference Proceedings

Exhibition

Cost £1200 + VAT

Package Includes:

- 1 Free Delegate Registration
- 1 Display table (1800 x 1200 mm) in Breakout Area
- Display material: Published material, Structural component
- Display Banners

Sponsorship Package + Exhibition Package

Cost £2100 + VAT

- 2 Free Delegate Registrations
- 1 Display Table (1800 x 1200 mm) in Breakout Area
- Display Material: Published Material, Structural Component
- Display Banners
- Company Logo in the Conference Programme
- Company Logo & Advert in the Book of Abstracts (A4 Size)
- Advert in the Conference Proceedings