

REGISTRATION FORM

Name _____

(Please print)

Designation _____

Address _____

Telephone _____

Email _____

I wish to register for the Course at a cost of £750 + VAT (UK Only) including course material and course lunches.

I enclose a cheque for £750 + VAT

Please invoice me at the above address

Please send me information on local hotels

Disclaimer

All materials and information supplied during and associated with this course are intended purely for instructional purposes. Whilst every effort is taken to ensure that materials provided are accurate and suitable for training purposes, ASRANet Ltd accepts no responsibility for their accuracy or utility.

I accept the above.

Signature _____

Date _____

The completed form should send to:

ASRANet Ltd.

5 St Vincent Place, Glasgow, G1 2DH

Cost

The registration fee of the workshop will be £750+VAT (pound sterling) which includes course notes and lunches. You should make your own arrangements for accommodation.

Payment

Payments can be made by cheque (made payable to ASRANet Ltd.), cash or bank transfer but no card payments. Please enquire for details.

Venue

George Square Ltd
St Georges Building
3rd Floor
5 St Vincent Place
Glasgow, G1 2DH

Tel: +44 (0) 141 275 4801

Fax: +44(0) 141 275 4800

Note

Please do not make your travel arrangements until you receive an Invoice from us.

Contact

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Design of Offshore Pipelines and Risers

*(This course meets the requirement for
Continuing Professional Development (CPD)
of the
Royal Institution of Naval Architects (RINA))*

27-28 February 2017



(A Maritime Company for Courses,
Conferences & Research)

An ISO 9001:2008 certified company

Glasgow, UK

About the Course

The course will aim to teach the first principles of design of pipelines and risers used for the offshore industry. Introduction to structural analysis methods for cracks, dents and corrosion defects give an understanding for the methods for stress analysis. In depth study on hydrodynamic loading on pipelines and the environmental loading on risers will provide a wide view to the dynamic loading analysis methods. Furthermore the effects of VIVs on risers and moorings provide an overview of the challenges in design of risers as well as aid to the methods for modelling and analysing risers and mooring lines. Structural design of risers dictate the life and fatigue performance of a riser, this area will be covered in depth and methodologies for achieving an optimum design using FEA and reliability will also be addressed. Finally, emphasis will be given to the overall design procedures including fatigue and fracture of the pipelines. Material selection and their properties will be covered briefly.

Who Should Attend

Engineers and scientists involved in the design, operation and assessment of offshore structures and their associated equipment. Personnel from oil companies, consultancy organisations, classification societies and certifying authorities will also benefit from attending this Course

PROGRAMME

Monday 27th February 2017

- 08.30 – 09.00 Delegate Registration
- 09.00 – 10.30 Lecture 1: Hydrodynamic around pipes
Omar Khattab
- 10.30 -10.45 *Break*
- 10.45 – 12.15 Lecture 2: Analysis of flexible pipelines
Omar Khattab
- 12.15 – 13.30 *Lunch*
- 13.30 – 15.00 Lecture 3: Vortex Vibration of Risers and Moorings
Omar Khattab
- 15.00 – 15.30 *Break*
- 15.30 – 17.00 Lecture 4: Overview of pipeline design premise
Purnendu Das

Tuesday 28th February 2017

- 09.00 – 10.30 Lecture 5: Introduction to Structural Reliability
Purnendu Das
- 10.30 – 10.45 *Break*
- 10.45 – 12.15 Lecture 6: Structural design of top tensioned riser systems
Trevor Hodgson

- 12.15 – 13.30 *Lunch*
- 13.30 – 15.00 Lecture 7: Finite element Analysis of in-situ behaviour
Trevor Hodgson
- 15.00 – 15.30 *Break*
- 15.30 – 17.00 Lecture 8: Structural Reliability of Pipelines
Purnendu Das

Wednesday 29th February 2017

- 09.00 – 10.15 Lecture 9: Application of Structural Reliability to Pipelines
Purnendu Das
- 10.15 – 10.30 *Break*
- 10.30 – 12.00 Lecture 10: Design for buckling and strength
Purnendu Das
- 12.00 – 13.15 *Lunch*

ABOUT THE LECTURERS:

Purnendu Das. BE, ME, PhD, C.Eng, C.MarEng, FRINA, FIStructE, FIMarEST has been the Director of 'ASRANet Ltd' (an ISO 9001-2008 certified company) since February 2006. He retired as a Professor of Marine Structures in the Department of Naval Architecture & Marine Engineering at the University of Strathclyde, UK in September 2011. Past EU projects were MARSTRUCT (a network of excellence on Marine Structure) and SHIPDISMANTL (a cost effective and environmentally friendly dismantling of ship structures). Past industrial projects included work from the UK Health and Safety Executive (HSE), MoD UK, Subsea-7 UK, Shell, Woodgroup and US Navies etc. He was the principal investigator of many EPSRC projects. Before joining the University of Glasgow in 1991 he worked with British Maritime Technology as Principal Structural Engineer (1984-91). He is the author of more than 250 publications, including contract reports and more than 60 journal papers and is a member of the editorial boards of the 'Journal of Marine Structures', 'Journal of Ocean and Ship Technology' and 'Journal of Ocean and Climate System' and the Journal of Ship Mechanics amongst others. His areas of research include limit state design and analysis & reliability analysis of ship & offshore structures. Purnendu Das has wide ranging industrial and academic contacts and has advised and supervised 20 PhD students, to his credit. Details of visits and collaborations include his various sabbatical study periods spent at University of California, Berkeley, USA (July – September 1996), at Lloyd's Register of Shipping (August 1997), Kockums Ltd (July 1998) and spent some time at Instituto Superior Técnico (IST), Lisbon (July 2000). He is running about 20 CPD courses which are attracting many people from different industries. These courses are on 'Fatigue & Fracture Analysis', 'Ships at Sea', 'Advanced Analysis and Design of Offshore Structures', 'Offshore Floating System Design', 'Structural Response under Fire and Blast Loading' and 'Design of Pipelines and Risers' amongst others. He was a member of ISSC (International Ship and Offshore Structure Congress) for the periods of 1991-97 and 2003-2006. He was a member of the OMAE (Offshore Mechanics and Arctic Engineering) Organising

Committee on 'Safety and Reliability'. He is running about 15 bi-annual international conferences on various themes like Risk, Reliability, Advanced Analysis & Design of Engineering Structures, including marine structures. He was a member of the "Research Committee" of Structural Engineers (IStructE) during 2012-2015. He was a visiting Professor at IST Surabaya, Indonesia from July 2015 for one year. He is now a visiting professor at the Wuhan University of Technology, China from July 2016.

Omar Khattab BSc, MSc, PhD, CEng, FRINA,MSANJ has been an independent consultant since 2007 working for various clients including Brooks Bell Jarret Kierman, Safety at Sea Ltd., Milford Haven Port Authority, Svitzer Marine Ltd., Port of Belfast, Lloyds Register EMEA, Clydeport Operation Ltd. and SACH Solicitors amongst others. Prior to becoming an independent consultant, Dr. Khattab was a lecturer at Alexandria University, Egypt, where he gained his undergraduate degree, for 5 years. He obtained his MSc degree in Hydrodynamics from Alexandria University and his PhD from Japan in 1979. He then spent 5 years with the British Ship Research Association (BSRA) as Principal Research Officer at the Naval Architecture Department. During 1988-1993, Dr. Khattab worked in Senior and Management positions at BMT in the Ship Performance Department, the Fluid Dynamics Group and the Hydrodynamic Services at BMT CORTEC Ltd. After this spell at BMT, he returned to lecturing at Southampton Institute where he began as Senior lecturer for 2 years and was quickly promoted to Head of Maritime Technology. Dr. Khattab then moved to Brookes Bell Jarret Kirman in 2000 before beginning work as R & D Manager at Safety at Sea Ltd where he stayed until he began consultancy work. Dr. Khattab is a Fellow of Royal Institute of Naval Architects, a member of Japan Society of Naval Architects as well as a member of Kansai Society of Naval Architects. His areas of expertise include Ship Grounding and Collision, Hull Form Design, Fluid Mechanics, Ship Construction and Ship hydrodynamics amongst many others. His Consultancy work has included the Investigation of handling behaviour of new generation of Cruise Liners in

Miami Harbour and the Design of berthing Jetty for Svitzer tugs in Milford Haven to name but a few.

Trevor Hodgson is in his second spell with Atkins, having been with them in total for well over thirty years. He has spent the majority of this time working in offshore-related areas, both in the technical execution of this work and in the management of teams of engineers to achieve specified goals. He has extensive experience of conceptual and detail design for jacket structures and topsides, including over thirty platforms in SE Asia, and concrete structures in the North Sea and worldwide. His experience encompasses both shallow and deeper water platforms of steel and concrete construction, drilling riser and conductor analysis, semi-submersible and FPSO vessels, high-speed aluminium surface craft, and even peer review for the nuclear industry. He has recently been involved in the development of concepts and detailed designs for the offshore renewable energy market, including wind, wave and tidal energy conversion devices, most recently Wind Turbine Generator (WTG) substructures.

He is highly experienced in the application and interpretation of advanced finite element analysis methods for the design process and has used this experience to great effect in the development and support of engineering software, primarily the ASAS: OFFSHORE suite for the oil and gas industry, now part of ANSYS. He is the author of numerous texts on structural design and analysis, was convenor of a panel covering Structural Analysis of Fixed Concrete Platforms for the ISO standard on offshore installations, and lectures for ASRANet and the Universities of Glasgow and Strathclyde on offshore structures and renewables.