

## About ASRANet

ASRANet was established in 1999 with UK EPSRC support, in order to bring together researchers and practitioners with interests in using Structural Reliability Analysis (SRA) with Advanced Structural Analysis (ASA) to solve challenging engineering problems. The need to draw these disciplines together was seen as important for the future safety management of a wide range of engineering structures. More than a decade on, the early promise has been fully justified but further development and effective dissemination remain key to their successful implementation in different situations. Furthermore, the Quantitative Risk Assessment (QRA) framework, within which SRA and ASA are incorporated is an increasingly important subject occupying industry, as well as policy makers and regulators.

Thus, the broad objectives ASRANet are:

- To identify the research required, in conjunction with industry actively involved in these areas
- To document current practices and trends
- To establish 'best practice' guidelines
- To generate case studies and benchmark test results
- To ensure that research results are disseminated to industry, and to help practitioners use these results
- To promote understanding of industrial and regulatory needs in adopting risk management procedures.

## Conference Objectives

Following the success of previous ASRANet Colloquia (Glasgow 2002, Barcelona 2004, Glasgow 2006, Athens 2008, and Edinburgh 2010), the Organising Committee now invites papers from researchers and practitioners in Advanced Analysis, Risk and Reliability for the 6th Conference, to be held in London Croydon during 2-4 July 2012.

The Conference intends to draw on recent experience in order to explore the full range of methods and procedures relevant to uncertainty modelling, reliability assessment and risk-based life-cycle management of engineering structures. Contributions involving generic methodologies and case studies, as well as comparative assessment across different industrial sectors are welcomed.

## Proposed Themes

- Stochastic computational mechanics
- Reliability-based design optimisation
- Systems reliability
- Probabilistic deterioration analysis
- Probabilistic multi-scale material modelling
- Intelligent use of monitored data
- Life-cycle assessment and optimization
- Failure consequence analysis
- Risk integration and control
- Human and organisational factors
- Socio-economic factors in risk acceptance
- Risk communication
- Risk Management

Applications may include bridges, power plants, marine and offshore structures, tall buildings, masts and towers, pipelines, automotive, Nuclear Structures and aerospace structural systems etc. Approaches for both individual structures and infrastructure networks will be of interest, particularly in the context of meeting cost, reliability and sustainability criteria.

The programme will include invited papers whose aim will be to present the main issues relevant to the above themes and application areas, thus providing additional impetus for an open exchange of ideas.

## Call for papers

Abstracts of about 300 words on any of the above topics are invited by **31<sup>th</sup> October 2011**. Upon review by the Technical Advisory Panel, notification will be given by **30<sup>th</sup> November 2011**.

Abstracts should be sent to Professor P.K. Das, whose full contact details are given overleaf.

Conference Proceedings will be available in CD-ROM format, with printed summaries, at registration. In order to ensure the production of the Proceedings in time, final manuscripts will be required by **10th April 2012**.

## Organising Committee

**Prof. P.K. Das**, Director, ASRANet Ltd [**Chair**]  
**Prof. M.K. Chryssanthopoulos**, University of Surrey, UK  
**Professor S. Adhikari**, University of Swansea, UK

## Technical Advisory Panel

**Dr. R.V.Ahilan**, GL Noble Denton, London  
**Prof. S.K. Au**, City University, Hong Kong  
**Prof. M.J. Baker**, University of Aberdeen, UK [**Chair**]  
**Prof. N. Barltrop**, University of Strathclyde, UK  
**Dr. R. Basu**, ABS, USA  
**Prof. J.R. Casas**, UPC, Spain  
**Dr. D.C. Charmpis**, University of Cyprus, Cyprus  
**Prof. M. Ciampoli**, Università La Sapienza Roma, Italy  
**Prof. R. Dow**, University of Newcastle, UK  
**Dr P.A. Frieze**, PAFA, UK  
**Prof. C. Guedes Soares**, IST, Portugal  
**Prof. M. Holicky**, Klokner Institute, Czech Republic  
**Prof. P. Friis-Hansen**, DNV, Norway  
**Dr P. Hess**, US Navy, USA  
**Prof. D. Frangopol**, Lehigh University, USA  
**Prof. H. Furuta**, Kansai University, Japan  
**Prof. V. Kostopoulos**, University of Patras, Greece  
**Prof. S. Mahadevan**, Vanderbilt University, USA  
**Prof. M. Lemaire**, IFMA, France  
**Prof. R. Melchers**, University of Newcastle, Australia  
**Prof. D. Menon**, I.I.T, India  
**Prof. T. Moan**, NTNU, Norway  
**Prof. T. Onoufriou**, Cyprus University of Technology  
**Prof. J. Paik**, Pusan National University, Korea  
**Prof. K.K.Phoon**, National University of Singapore  
**Dr N. Prinja**, AMEC Power & Process, UK  
**Prof. S.Rahman**, Iowa University, USA  
**Mr T. Rhodes**, Shell, UK  
**Prof. M. Samuelides**, Technical University of Athens  
**Mr P. Smedley**, BP, UK  
**Prof. J Sorensen**, Aalborg University, Denmark  
**Prof. M. Stewart**, University of Newcastle, Australia  
**Prof. W.Y.Tang**, Jiatong University, China  
**Prof. D. Val**, Heriot-Watt University, UK

## REGISTRATION FORM

Name \_\_\_\_\_  
(Please print)

Organisation \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone \_\_\_\_\_

Fax \_\_\_\_\_

Email \_\_\_\_\_

I wish to register for the Conference at a cost of £400 [£250 for students only]

Please invoice me at the above address

Please send me information on local hotels

Signature \_\_\_\_\_

Date \_\_\_\_\_

The completed form together with a cheque in pounds sterling payable to **ASRANet Ltd.** should be sent by **15 April 2012** to:

ASRANet Ltd.  
50 Richmond Street  
Glasgow G1 1XP, Scotland, UK

**No refunds will be possible after 1st June 2012.**

## Cost

The cost of the conference will be £400 (pounds sterling) including registration, conference CD-ROM, papers and conference dinner for authors and delegates. Students may apply to attend at the reduced rate of £250.

## Accommodation

Details of accommodation in Croydon will be sent at a later date.

## Venue

Jurys Inn  
Wellesley Road  
Croydon, CR0 9XY  
London

## Contact

Professor P.K. Das  
ASRANet Ltd.  
50 Richmond Street  
Glasgow G1 1XP  
Scotland, UK

Tel: +44 (0)141 552 7287/ +44 (0)141 303 8217

Fax: +44 (0)141 552 3886

Email: [asranet@live.co.uk](mailto:asranet@live.co.uk)

Web [www.asranet.com](http://www.asranet.com)

Further information on ASRANet and updates on the Conference can be found on our website:

<http://www.asranet.com>

## Network for Integrating Structural Analysis, Risk and Reliability



## 6<sup>th</sup> International ASRANet Conference

London, Croydon  
2-4 July 2012

**Call for papers**