

About ASRANet

ASRANet was established in 1999 with UK EPSRC support. The network brings 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 two disciplines together is seen as important for the future safety management of a wide range of engineering structures. However, the principles to be adopted in linking these two disciplines require further development, as well as effective dissemination. Furthermore, the Quantitative Risk Assessment (QRA) framework, within which SRA and ASA are to be incorporated, is an increasingly important subject occupying both industry and the research community.

Thus, the broad objectives of the Network 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 better understanding of industrial needs in incorporating SRA and ASA within a QRA framework.

Colloquium Objectives

Following the growing success of previous ASRANet Colloquia (Glasgow 2002, Barcelona 2004, Glasgow 2006), the Organising Committee now invites papers from researchers and practitioners in Advanced Analysis, Risk and Reliability for the 4th Colloquium, to be held in Athens on 25 – 27 June 2008.

The Colloquium 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 Session 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
- Risk-informed management
- Human and organisational factors
- Socio-economic factors in risk acceptance
- Risk communication
- Robustness

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

The programme will include some 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 **31st October 2007**. Upon review by the Technical Advisory Panel, notification will be given by **10th January 2008**.

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

Colloquium 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 **31st March 2008**.

Organising Committee

Prof. P.K. Das, Universities of Glasgow and Strathclyde, UK [**co-chair**]
Prof. M.K. Chryssanthopoulos, University of Surrey, UK [**co-chair**]
Dr G. Canisius, Scott Wilson, UK
Dr S. Yasseri, Kellogg, Brown & Root (KBR), UK
Prof. M. Samuelides, National Technical University of Athens, Greece

Technical Advisory Panel

Prof. M.J. Baker, University of Aberdeen, UK [**chair**]
Prof. N. Barltrop, Univ. Glasgow and Strathclyde, UK
Prof. C. Bucher, Vienna University of Tech., Austria
Prof. J.R. Casas, UPC, Spain
Dr. D.C. Charpis, University of Cyprus, Cyprus
Prof. M. Ciampoli, Università La Sapienza Roma, Italy
Prof. A. Der Kiureghian, University of California, USA
Prof. R. Dow, University of Newcastle, UK
Prof. M.H. Faber, ETH-Zurich, Switzerland
Prof. D. Frangopol, Lehigh University, USA
Dr P.A. Frieze, PAFA, UK
Prof. C. Guedes Soares, IST, Portugal
Prof. M. Holicky, Klokner Institute, Czech Republic
Prof. P. Friis-Hansen, DTU, Denmark
Dr P. Hess, US Navy, USA
Prof. H. Furuta, Kansai University, Japan
Prof. J. Kanda, University of Tokyo, Japan
Prof. V. Kostopoulos, University of Patras, Greece
Prof. M. Lemaire, Ifma, France
Prof. S. Mahadevan, Vanderbilt University, USA
Mr P. Marek, Technical University of Ostrava, Czech Republic
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 NNC Ltd, UK
Prof. R. Rackwitz, TU Munich, Germany
Prof. S.Rahman, Iowa University, USA
Mr T. Rhodes, Shell, UK
Mr. C. Serretella, ABS, USA
Mr P. Smedley, BP, UK
Prof. H.P. Sniady, Wroclaw University of Technology, Poland
Prof. J Sorensen, Aalborg University, Denmark
Prof. M. Stewart, University of Newcastle, Australia
Prof. W.H. Tang, Hong Kong University of Science & Technology, Hong Kong
Dr. D. Val, Heriot-Watt University, UK

REGISTRATION FORM

Name _____

(Please print)

Organisation _____

Address _____

Telephone _____

Fax _____

Email _____

I wish to register for the Colloquium at a cost of £350 [£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 / Demand Draft in pounds sterling payable to **ASRANet Ltd.** should be sent **15 April 2008** to:

Professor Purnendu K. Das,
47 Westbourne Crescent,
Bearsden,
Glasgow G61 4HB,
Scotland, UK

No refunds will be possible after 1st June 2008.

Cost

The cost of the colloquium will be £350 (pounds sterling) including registration, colloquium 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 Athens will be sent at a later date.

Venue

Holiday Inn
50 Michalacopoulou St
Athens, 11528 Greece

Contact

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Further information on ASRANet and updates on the Colloquium can be found on our website:
<http://www.asranet.com>

Network for Integrating Structural Analysis, Risk and Reliability



4th International ASRANet Colloquium



25 - 27 June 2008
Athens, Greece

Call for papers