

AGEING PLANT MINIMISING HAZARDS THROUGH BETTER DETECTION TECHNIQUES

Institution of
**MECHANICAL
ENGINEERS**

3 December 2014
Etc Venues, Paddington, London
www.imeche.org/events/S1826

Process Industries Division
Seminar



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AGEING PLANT MINIMISING HAZARDS THROUGH BETTER DETECTION TECHNIQUES

3 December 2014, Etc Venues, Paddington, London



DISCOVER HOW TO REDUCE COSTS AND HAZARDS WITH BETTER DETECTION.

To get the best out of structures that are highly susceptible to deterioration, because of their exposure to various chemicals, a greater emphasis must be placed on detection.

The **Ageing Plant** seminar will provide you with case studies showcasing the various types of inspection and detection techniques that can reduce operating costs, minimise hazards and ensure compliance with latest guidance.

OUR EXPERT SPEAKING PANEL INCLUDES:



STUART POINTER
TEAM LEADER MECHANICAL
ENGINEERING, HSE



STEFAN KUKULA
CHIEF EXECUTIVE,
EEMUA



PAUL STANWORTH
HM SPECIALIST INSPECTOR
OF HEALTH AND SAFETY,
HSE

BENEFITS OF ATTENDANCE:

- **Receive** key updates from HSE as they review the past 12 months
- **Acknowledge** current priorities of the Chemical and Downstream Oil Industry Forum (CDOIF)
- **Understand** how to successfully manage outsourced capabilities for your onsite inspections
- **Discuss** available NDT technologies
- **Learn** from other industries onsite inspection techniques

PARTNERS:



REGISTERED AIRTIGHTNESS TESTER OF DWELLINGS

See page 5 for full speaker list

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PROGRAMME

WEDNESDAY 3 DECEMBER 2014

08:30 REGISTRATION AND REFRESHMENTS

09:00 CHAIR'S OPENING REMARKS
Robin Luxmoore, Oil, Gas and Chemical Committee, Institution of Mechanical Engineers

REGULATION UPDATES AND REVISIONS OF INSPECTION PRACTICES

09:10 KEYNOTE: UPDATE ON THE COMAH COMPETENT AUTHORITY AGEING PLANT INTERVENTION PROGRAMME
Stuart Pointer, Team Leader Mechanical Engineering, Hazardous Installations Directorate, HSE

- An update on progress with the Ageing Plant programme
- Current priorities to combat the challenges of plant ageing
- Working with industry to develop guidance on contracting external specialist resources for integrity management roles

09:40 UNDERSTANDING INTEGRITY MANAGEMENT FROM AN INTERNAL PERSPECTIVE
Confirmed Representative, Senior Auditor, BP Audit

- Identifying the role of internal integrity management departments and their fit into the wider organisation
- A quick comparison and contrast between upstream and downstream audit processes
- BP's approach to ageing plant and its impact on facilities inspections

10:10 NETWORKING REFRESHMENT BREAK

10:40 THE CHEMICAL AND DOWNSTREAM OIL INDUSTRY FORUM WORKING GROUP ON AGEING PLANT
Paul Stanworth, HM Specialist Inspector of Health and Safety, Hazardous Installations Directorate, HSE

- Introduction to the Chemical and Downstream Oil Industry Forum (CDOIF)
- Issues identified with the management of Ageing Plant and the challenge to be an 'informed customer'
- Introduction of forthcoming guidance

11:10 MANAGING INSPECTIONS ON AGEING PLANT
Richard Hulmes, Chief Executive, SAFed

- Why, what and how much do I need to do?
- Planning inspections using competent persons, outsourcing inspections and managing contractors
- Regulation compliance, reducing risk and responsibilities

11:40 MORNING QUESTION AND ANSWER SESSION
Delegates will be given the opportunity to ask questions to the morning's speakers. Should delegates wish to put forward a question prior to the event please email your question along with your name to eventenquiries@imeche.org

12:10 NETWORKING LUNCH

UNDERSTANDING NDT AS A VIABLE SOLUTION

- 13:10 CONTRIBUTING TO THE DEVELOPMENT OF VERSATILE NDT TECHNOLOGIES**
Iain Baillie, Chairman of BINDT Technical Committee
- Identifying the potential of NDT and acknowledging how to overcome possible challenges
 - Applications currently available to the chemical industry
 - Working with companies to integrate NDT technology into inspection processes
- 13:40 TECHNICAL SELECTION OF NDT TECHNIQUES WHEN EVALUATING THE MECHANICAL INTEGRITY OF INDUSTRIAL PLANT**
Stefan Kukula, Chief Executive, EEMUA
- Why advances in NDT techniques haven't necessarily been reflected in applicable real world trials
 - Using NDT techniques in situations where validations are yet to be completed
 - References and a methodology for establishing a technical justification for specific applications
- 14:10 NETWORKING REFRESHMENT BREAK**
- 14:40 NEWLY EMERGING NDT TECHNOLOGIES**
John Wintle, Senior Inspection Engineer, TWI
- Leading the research into newly developed NDT methods
 - Long range ultra-sonic testing; tried and tested
 - Working with industry to develop cost-effective, long term solutions

SHARING BEST PRACTICE ACROSS DIFFERENT INDUSTRIES

- 15:10 INSPECTION APPROACHES TO STORAGE TANKS: A REVISED PROCESS**
Simon Whatley, Principal Mechanical Engineer, Thames Water
- An overview of Thames Water's past integrity management approaches
 - The challenges of storing chemicals across the London network
 - The result: a brand new inspection process to maintain integrity across all storage tanks
- 15:40 FINAL QUESTION AND ANSWER SESSION**
- 16:10 CHAIR'S CLOSING REMARKS**
Robin Luxmoore, Oil, Gas and Chemical Committee, Institution of Mechanical Engineers
- 16:20 END OF SEMINAR**

Find out more about our speakers at www.imeche.org/events/S1826

- This programme is subject to change.
- The Institution is not responsible for the views or opinions expressed by individual speakers.

Organising committee:

Oil, Gas and Chemical Committee

Advisory Board:

- Robin Luxmoore, Institution of Mechanical Engineers
- Stefan Kukula, EEMUA
- Stuart Pointer, HSE
- Richard Hulmes, SAFed

SPEAKERS AND CONTRIBUTORS



THE POTENTIAL DEGRADATION OF PLANT AND EQUIPMENT DUE TO AGE-RELATED MECHANISMS SUCH AS CORROSION, EROSION AND FATIGUE IS A KEY ISSUE FOR INDUSTRY.

- Health and Safety Executive

**STUART POINTER KEYNOTE
TEAM LEADER MECHANICAL ENGINEERING, HAZARDOUS
INSTALLATIONS DIRECTORATE, HSE**

Stuart Pointer is a Principal Specialist Inspector in the Health & Safety Executive's Chemical Industries Division. He currently manages a team of field inspectors responsible for inspection and investigation work at onshore chemical and petrochemical facilities. In addition, Stuart is responsible for divisional policy on mechanical engineering matters. Prior to his current role Stuart held positions in HSE's headquarters as an operational field specialist.

**ROBIN LUXMOORE CHAIR
OIL, GAS AND CHEMICAL COMMITTEE, INSTITUTION OF
MECHANICAL ENGINEERS**

Robin Luxmoore graduated in Mechanical Engineering from the University of Aston, Birmingham in 1967 and then completed a Graduate Apprenticeship at Ruston & Hornsby in Lincoln. Robin then spent 15 years working in the nuclear industry on the development of remote handling equipment. His last job before retirement was working as part of a large UKAS accredited in-house inspection team providing services to a major company in the petrochemicals processing field. Since retirement Robin has continued to work in pressure equipment inspection but as a consultant to a number of organisations running their own in-house teams.

**PAUL STANWORTH
HM SPECIALIST INSPECTOR OF HEALTH AND SAFETY, HAZARDOUS
INSTALLATIONS DIRECTORATE, HSE**

Paul Stanworth is a Chartered Mechanical Engineer working in the Health and Safety Executive's Chemical Industries Division. His role involves providing engineering support to regulatory inspections and investigations, particularly those carried out as part of HSE's Ageing Plant work stream at major hazard sites subject to the COMAH regulations. Paul acted as the chair of the working group, with members from SAFed, EEMUA and HSE, which produced the industry guidance on integrity management that is to be discussed at this seminar.

**RICHARD HULMES
CHIEF EXECUTIVE, SAFED**

Richard Hulmes is a Chartered Engineer and lawyer, currently Chief Executive of the Safety Assessment Federation, which carries out the statutory inspections of workplace equipment and consumer goods. Previously a Colonel in the Royal Electrical & Mechanical Engineers, Richard was responsible for the management of defence equipment and was an Ordnance Board member responsible for the safety of munitions. He was Chair of the NATO Weapons System Design committee and COBRA member for Gulf War 2. Richard also represents BSI on ISO Committees, a member of the United Kingdom Accreditation Service and the Electrical Safety Council.

**STEFAN KUKULA
CHIEF EXECUTIVE, EEMUA**

Stefan Kukula started his career at the National Nuclear Corporation, and spent six years working in Japan for Kobe Steel. He has also worked for Dyson, Morgan Crucible, and was Technical Director of a leading UK manufacturer of gas detectors for industrial safety. He is a Fellow of the Institution of Mechanical Engineers.

SPEAKERS AND CONTRIBUTORS



THE INSTITUTION IS DELIGHTED TO HAVE SECURED AN INSPIRING LINE-UP OF SPEAKERS THAT WILL PROVIDE TANGIBLE CASE STUDIES OF THE CHALLENGES OF AGEING PLANT, AS WELL AS AN INSIGHT INTO ADVANCED INSPECTION TECHNIQUES.

**- Robin Luxmoore,
Oil, Gas and Chemical
Committee, Institution of
Mechanical Engineers**

JOHN WINTLE SENIOR INSPECTION ENGINEER, TWI

John Wintle is a Mechanical Engineer, consultant and leading authority on structural integrity and asset management of installations, welded structures and plant components. He has published many papers and best practice reports for the HSE and the Energy Institute on topics including risk-based inspection, management of ageing and life extension, and inspection of high-hazard plant. John has acquired significant international experience through his work on European projects, codes and standards committees and through other networks. He was appointed Fellow of the Institution of Mechanical Engineers in 2006, chairing its Pressure Systems Group from 2008 to 2012. He became Visiting Professor at the University of Strathclyde in 2013.

SIMON WHATLEY PRINCIPAL MECHANICAL ENGINEER, THAMES WATER

Simon Whatley took over as Chair of the Fluid Machinery Group in 2012 and also represents the group at the Institution's council meetings. Simon is Principal Mechanical Engineer at Thames Water and is responsible for Mechanical Strategy and Standards. Simon now sits in the Operations Directorate and is also responsible for challenging assumptions in the operation and maintenance of major asset groups like pumping stations, aeration and preliminary treatment. Simon also sits on the Pump Centre Council that is a forum for sharing knowledge in equipment used in the water and power industries, as well as preparing the Water Industry Mechanical and Electrical Standards (WIMES), as a common platform for the industry.

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BOOKING FORM

EVENT CODE: S1826AB

EARLY BIRD ENDS 17 OCTOBER

AGEING PLANT

MINIMISING HAZARDS THROUGH

BETTER DETECTION TECHNIQUES

3 December 2014, Etc Venues,

Paddington, London. W2 1LA

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Member, Institution of Mechanical Engineers	£233.75+VAT	£275.00+VAT	£
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Non-member	£312.80+VAT	£368.00+VAT	£
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11-12 November 2014
Aberdeen

PRODUCTION EFFICIENCY: REVERSING A DECLINING TREND

With greater investment needed to maintain ageing assets in order to increase their level of production, comes an opportunity for the offshore industry to share best practice and learn from their partners. The solutions to improve production efficiency are not quick but the initiative to action improvements are and need to be shared so that financial investment continues across the UKCS.

www.imeche.org/events/C1419



3 December 2014
London

AGEING PLANT: MINIMISING HAZARDS THROUGH BETTER DETECTION TECHNIQUES

To get the best out of structures that are highly susceptible to deterioration, a greater emphasis must be placed on detection. This event will provide case studies showcasing the various different types of detection techniques that ultimately are able to reduce operating costs, reduce hazards and ensure compliance with latest guidance.

www.imeche.org/events/S1826



9 December 2014
Aberdeen

PIPING AND PIPELINE RISK-BASED INSPECTION

The UK oil and gas industry is facing its greatest challenge yet as the demand for energy across the UK continues to grow. A consequence of this is the pressing need for operators to ensure greater asset integrity both on and offshore.

www.imeche.org/events/C1420

INFORMATION AND BOOKINGS

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1 Birdcage Walk
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