

# JOIN US...

# Non-Intrusive Inspection (NII) Workshop

Sonomatic
The Core Business Park
Murcar, Bridge of Don
AB23 8AN

November 27<sup>th</sup> - 28<sup>th</sup> 2018

Registration 9:00 Workshop 9:30 - 16:00



Non-intrusive inspection (NII) allows comprehensive inspection of pressure vessels and storage tanks to be performed while on-line, eliminating the need for the inspection to be carried out only during shut downs. This minimises shut down durations and allows process plant operators to maximise production. As such NII is being used increasingly by operators worldwide. Sonomatic has played a major role in the development of NII practices and has worked with many of the world's leading Oil and Gas companies in delivering effective NII projects.

This two-day workshop will provide attendees with a good knowledge of the main principles of NII assessment, planning, implementation and evaluation according to the HOIS Recommended Practice (DNVGL-RP-G103). Examples of actual NII assessments, work scopes, inspections and evaluations will be discussed.

Attendees are welcome to book into day 1 if they only require a general understanding of the NII assessment.

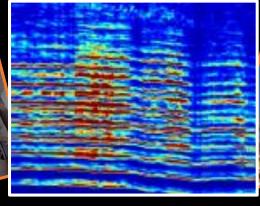
One Day Session - £250 Two Day Session - £500

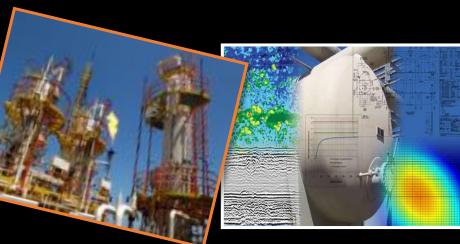
To register or for more information, please contact:

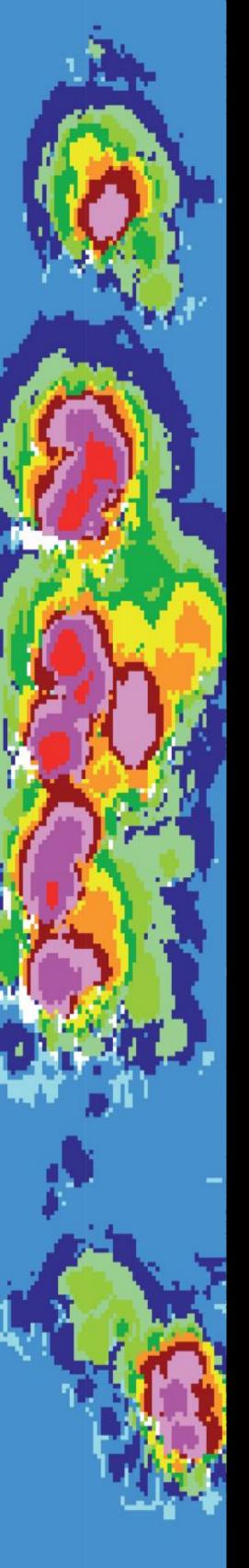
**Erica Anderson,** Global Marketing Manager erica.anderson@sonomatic.com

**Dr. Susan Osbeck**, Principal Consultant susan.osbeck@sonomatic.com









### **EVENT SCHEDULE**



The following topics will be covered over the course of the two days.

#### Day 1 (Tuesday, November 27th 2018)

### **Background to NII**

- Role of vessel inspection within an Integrity Management system
- Non-Intrusive Inspection (NII) vs Internal Visual Inspection (IVI)
- Overview of the HOIS NII Guidance (DNVGL-RP-G103)

#### **NII Assessment**

- Screening vessels for NII suitability
- Detailed corrosion risk assessments
- Defining NII requirements including:
  - Selection of inspection strategy
  - Calculation of required coverage
  - Probability of detection requirements

#### Day 2 (Wednesday, November 28th 2018)

### **NII Work Scope Development**

- Overview of inspection techniques and suitability
- Development of work scopes to meet the NII requirements
- Demonstration of inspection techniques
- Enactment of the inspection

#### **Evaluation**

- Defining conformances
- Analysing results
- Justification for replacing IVI
- Updating RBI

### YOUR PRESENTERS



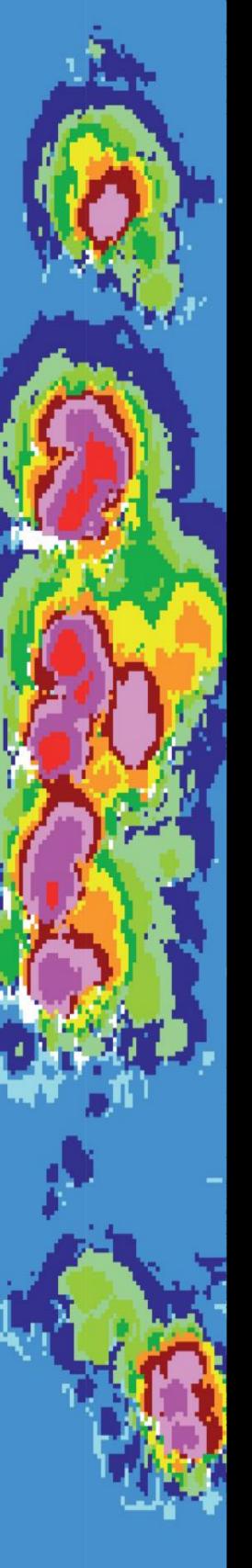
#### Susan Osbeck, Principal Consultant, BSc Hons, MSc, PhD, CPhys

Susan is a principal consultant within Sonomatic's Engineering team providing integrity-related services to clients. She has degrees in Physics and a PhD in Engineering. She has experience in NII projects, software development, and performing statistical analysis to maximise the value of inspection data. She has many years experience of data analysis within a variety of fields including radiation protection, chemistry, surface engineering, and mechanical engineering. Susan has extensive experience in the NII process, undertaking and managing several large scale NII screening projects covering over 500 pressure vessels and tanks.

#### Mark Stone, Integrity Support Services Manager, BSc Eng Mech, PhD

Mark is responsible for developing Sonomatic's integrity capability and leads a team delivering innovative integrity-related services to clients worldwide. He has over 25 years of experience in Integrity Engineering and NDT, driving better integration of inspection and data analysis as part of more effective integrity management approaches. Mark is primary author of industry Recommended Practices on Non-Intrusive Inspection and Statistical Analysis of Inspection Data and is involved in ongoing developments in both of these areas.





# **NII PROCESS**



- Assessment
- Identify suitable vessels
- Inspect before or during shutdown
- Analyse and evaluate data
- Justify NII vs. IVI and update RBI
- Prioritise vessels
- Reduce Shutdown Requirements

# **OUR EXPERIENCE**



Sonomatic staff are at the forefront of development of NII approaches and are leaders in implementation. Our clients include many of the major international operators and a significant level of project experience has been built up. Our involvement at the assessment, planning, implementation, and evaluation stages covers over 1000 major process vessels in the North Sea. Projects have ranged from NII on single vessels to review for NII suitability of all pressure vessels for an asset.

