

The opening events of the 2017-2018 session kicked things off to a very good start, at the Aberdeen Branch.

| Event Date | Total Attendance | Number of CPD Certificates Requested |
|------------|------------------|--------------------------------------|
| 26/09/2017 | 52               | 41                                   |
| 31/10/2017 | 48               | 23                                   |

Firstly in September 2017, a joint event with TWI and a very interesting presentation by Susan Jacob of CAN (Offshore) Ltd entitled “An Investigation into the Wrinkling Phenomenon on Corrosion Resistant Alloy (CRA) Pipelines and Its Impact on Pipeline Integrity” focussing on issues arising with both the laying and subsequent inspection of thin CRA internally clad pipelines.

CRA’s have been increasingly deployed for new and replacement Pipe Lay Projects however they can be problematic and great care must be taken at the installation stage to prevent wrinkling, as Susan highlighted.

This topic will be subject of a more detailed Technical Paper in Corrosion Management (CM) Magazine for January/February 2018, which is a special CM Pipelines issue. The upcoming paper will aim to respond in more detail to the many questions raised by attendees who clearly enjoyed the evening including:

1. The definitive evidence as to whether pipelay procedures adequately did in this instance address the potential risk of wrinkling and whether (10 yrs on), more modern methods of fitting CRA Liners are any more resistant to this CRA wrinkling phenomenon.
2. The definitive evidence as to whether applying internal pressure can eliminate the wrinkling risk.
3. The definitive evidence as to whether cleaning tools irreparably damage the CRA Liner and whether perhaps increased Anti-Scale CI and Reduced Cleaning Frequency is a safer approach ?
4. The ability of the Intelligent Pigging (IP) Tool to detect thinning changes in a 3mm thick CRA Liner and / or small perforations or tears of 3mm thick CRA Liner and whether there is a likelihood of ongoing corrosion in the CRA/Carrier Annulus in cases where CRA dis-bondment has occurred.

The October Special event focussed on offshore external corrosion and repair solutions, which most importantly brought together specialists from 2 (normally competing) companies.

Consultants - Ian Taylor and Nabeel Khan of IMG Composites Ltd and Gareth Urukalo, Senior Technical Engineer of ICR Integrity Ltd worked together to provide a most objective insight into the development and application of 2 key standards ISO24817: 2015 and the increasingly used ASME PCC-2 Code with 2 papers entitled "Established Composite Engineering in 2017 and Composite Repairs – A long Life-time Repair Solution".

Composite Repair have been used extensively in the last 10 years to extend the operating lives of Process Systems, particularly but not exclusively for piping systems, systems that would otherwise have required costly interventions and loss of production and outages that may ultimately have caused the facilities to cease production altogether !

The talks considered some key questions that once again generated much interest from the gathered audience.

1. What type of defects can be repaired?
2. What qualification is required?
3. How to design a repair?
4. What are the key issues involved in repair application?
5. How to maintain, inspect and validate the repair once in service?

What came across was the increasing industry confidence that these composite repairs can provide fully engineered long-term repair solutions, providing additional structural strength (and subject to necessary quality controls, such as a high standard of surface preparation), provide to Energy operators a guaranteed service life.

The new world of composites was wonderfully illustrated with many practical 'day to day' examples such as the new A380 Airliner and the new Bus for London, which contain a very high percentage of composites.

For example, the four key structural composite parts which make up the rear end of the new bus support the weight of the engine, the passengers on the platform, the staircase and the upper deck. Using these composite materials has resulted in the saving of several hundred kilograms from the structural weight of the bus, compared to traditional materials and of course very significant fuel savings.

## Aberdeen Branch – Nov.17, Event Write-Up

For information about all forthcoming Aberdeen branch activities, please contact our New Session Chair, Dr Yunnan Gao, [ICorrABZ@gmail.com](mailto:ICorrABZ@gmail.com), alternatively a calendar of local events of interest to corrosion professionals in the Aberdeen area and the opportunity to sign up to the branch mailing list is available at <https://sites.google.com/site/icorrabz/home>

Aberdeen Branch have also established their new Media Centre on LinkedIn, which can be found at <https://www.linkedin.com/in/aberdeen-icorr/recent-activity/>

## Aberdeen – ICorr Final 2017 Meeting - Photo Strip

**ICorr Aberdeen Chair presents a Certificate of Appreciation to Speaker Susan Jacob of CAN (Offshore) Ltd.**



Aberdeen Branch – Nov.17, Event Write-Up

**Chair Dr. Yunnan Gao introduces the October Special Event with TWI.**



## New Aberdeen Group Photo 2017-2018 Session



**ICorr Aberdeen Branch – 2017 / 2018 Committee:** L-R, Stephen Tate (Publicity Secretary), Nigel Owen (Branch Secretary), Philip ENEGELA (University Liaison & CPD Officer), Muhammad Ejaz (Past Chair), Yunnan Gao (Present Chair), Alistair Seton (Financial Officer), Amir Attarchi (Event Co-ordinator), Hooman Takhtechian (Vice Chair). **Other Committee Members are:** Abdulmotaleb Suleiman, Bryn Roberts, Eugene Ogoosi (Past Chair) and Frances Chalmers (Past Chair).