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Conference & Expo 2018 "A Ebropean event for the Corrosion Prevention" From the industry to the industry

The Conference & Expo organization is progressing at full speed; 150 abstracts had been accepted, divided in 5 parallel sessions for 2 days.

The preliminary program is available on the conference website:

www.naceitalia.it/genoa2018

Cost effective material solutions for well tubing and equipment Chair: Perry Ian Nice (Statoil)

The recent downturn in the price of Oil has forced the Oil & Gas Industry to become more focused upon costs. This has had a huge impact on the process of drilling and completing wells and has resulted in more cost-effective solutions. It has been achieved without compromising the risk to both safety and the environment, which is of prime im-



portance. This Session presentations covers examples of how end users and well component manufacturers have cooperated to implement cost effective solutions. It also includes new and recently introduced products and illustrates a production optimisation process and material stockists viewpoint.

Workshop on fugacity vs partial pressure approach in material susceptibility Chair: Sytze Huizinga (Sytze Corrosion Consultancy) & Roberto Morana (bp)

In corrosion studies, the effect of acid gases like CO_2 and H_2S has historically been linked to their partial pressure in a gas phase, based on the ideal gas law. In today's often harsh production conditions, however, non-ideal effects cause behaviour to significantly deviate from this simple law. This session is devoted to an assessment of these effects in sour environments, expressed as "fugacity".



Both theory and lab studies will be presented and their implications for field exposure discussed, linked to the international ISO15156/MR0175 standard.

Additive Manufacturing in the Oil & Gas Industry Chair: Roberto Morana (bp) & F. Cappuccini (BHGE)

Additive Manufacturing (AM) is the use of one or different manufacturing processes to build three dimensional components with minimal material wastage. Despite the already established use of AM technologies in industries for the man-



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36 papers will be presented in the Oil & Gas Upstream session, chaired by Lucrezia Scoppio (Pipe Team).

The session will be composed by the following sub-sessions.

ufacture of complex shaped parts, e.g. in the Aerospace sector or for the fabrication of medical tools, this is perceived as new technology for the Oil & Gas industry. In truth, Oil & Gas is an early adopter having used AM for producing clad overlays for years. However, many new applications, potentially disruptive, are still to be considered and properly evaluated.



Corrosion Performance of Martensitic SS forging and tubing alloys Chair: Perry Ian Nice (Statoil)

Martensitic stainless steels are frequently used for well components because of their good corrosion resistance and excellent mechanical properties. Thus, permitting economical well completion designs compared to higher alloyed stainless steels and nickel alloy. This Session presentations cover both existing and new tubing and bar stock (forged/rolled) alloys. Discussing the manufacturing processes and their expected H_2S/CO_2 containing well fluid corrosion performance. It will also touch upon the more recent quality issues associated with bar stock (13CrNiMo) alloys and how this is being addressed.

Forged and cast low alloyed and CRAs

Chair: Filippo Cappuccini (BHGE)

The development of new alloys and manufacturing methods is the key for the technology improvements of equipment operating in extreme conditions. In last decades severe applications have pushed steel makers to the invention of new competitive alloys with elevated properties in terms of corrosion resistance, mechanical properties or high



toughness. This Session presentations cover innovative forging and casting alloys produced with the scope to fill a gap in the current landscape of material classes, optimizing cost and performance ratio, and generating products that can compete with the most used steels or nickel alloys.

