



Offshore Energy Technical Group Meeting: British Manufacturing and Fabrication in the Offshore Energy Industry Speaker Biographies

Chris Stevens, Technologist, Tata Steel

Chris Stevens is a Technologist at Tata Steel's 20" HFI Pipe mill based in Hartlepool. Chris graduated with a BEng in Materials Engineering in 2011 whilst in his first spell with Tata Steel before working as a Technical Auditor for a major Oil & Gas company, visiting many of the world's seamless and welded pipe mills. Chris retuned to Tata Steel in November 2018 with an aim to assist Tata in becoming the world leader in HFI welded pipe.

The primary focus of Chris' work is a 'Welding Excellence' program which aims to extend Tata's low temperature impact capability and sour service performance. Through a combination of innovation, efficiency and integrity Chris and his team aim to optimise the welding process to extend the operational envelope of the world leading HFI welded pipe produced at the Tata Steel Hartlepool 20" pipe mill.

Dave MacWilliam, VP Engineering, Claxton Engineering

Dave MacWilliam is VP Engineering for the field technology business of Claxton Engineering which was recently acquired from Proserv. For over five years Dave led the engineering function of over 200 engineers and designers at Proserv, co-ordinated the new product development activities as well as managed the start-up of an engineering centre in Chennai, India. He has 34 years of oil industry know-how in a variety of positions covering operations, manufacturing and engineering in several service companies such as Schlumberger and Hunting. Dave is currently focussed in on a number of innovative developments for Claxton one of which is subsea laser cutting.

Geoff Warburton, Part-Time Consultant, Rolled Alloys

Geoff is currently working as a part time consultant for a couple of clients after retiring from Rolled Alloys in 2015. He is a Metallurgist, qualified to degree level, with experience in welding, casting, manufacturing processes and products.

Geoff has worked with duplex stainless steels for over 45 years and was the Foundry Metallurgist for Mather & Platt Ltd when ZERON 100 (the first Super Duplex Stainless steel) was introduced for sea water injection pump duty in the North Sea in 1984.

Mather & Platt was subsequently bought by Weir Group and a wrought ZERON 100 Super Duplex stainless steel alloy was developed and introduced in 1989.

Geoff became the Welding Engineer for the wrought business, becoming the Technical Manager and then Director. he led the development and the manufacture of a wide range of product forms with different steelworks around the world and have established the manufacture of many product forms such as castings, plate, seamless pipe, welded pipe, fittings, welding wire and forgings.





Geoff has successfully managed the manufacture and installation of pipework systems, pressure vessels, heat exchangers and other subsea products for several projects and with various fabricators and end clients. I have provided technical expertise across a range of manufacturing, heat treatment and welding processes, educating and training manufacturers, fabricators and end users to ensure a successful execution of the projects.

He has established the alloy in several major standards worldwide to enable its use in many different industries and countries.

Rolled Alloys acquired the wrought alloy stockholding business from Weir in 2008 and Geoff worked in similar role with them until he retired in 2015.

Geoff has been on the full journey as the material grade has grown from the original idea to today where it has become an important alloy used in many industries and territories.

Joao Melo, Engineering Manager, Oceaneering

Joao Melo is a Mechanical Engineer with over 15 years of industry experience, most of it in the Umbilicals, Subsea Connection and Distribution business. He has held positions in Engineering, Project Management and Technical Sales, and now works as the Engineering Manager for Oceaneering - Subsea Distribution Solutions in the UK.

Chris Punshon BMet CEng MIMMM FWeldl, Industry Group Manager, Power, Equipment and Infrastructure

Chris joined TWI in **1983** as a project leader following graduation with an Honours degree from Sheffield University in Metallurgy **BMet (hons)** after a brief period post-graduation **1982-83** working again as a heavy goods vehicle fitter and arable/livestock farming.

He has conducted a significant number of large and varied research programs mainly focused on the power sector as well as oil and gas and marine industries examining the relationships between materials, properties and performance in a wide range of materials and environments. For several years he was responsible for the development of advanced joining process technologies for pipelines and pressure plant seeing development from grass roots R&D to commercialisation, code approval and industrial exploitation.

His various roles within TWI since involved definition of a renewed business strategy focusing on TWI key strengths and the emerging opportunities in nuclear fusion and fission and renewable energy sectors including offshore wind, solar PV, hydro, tidal stream and a feeding a childhood passion for geothermal energy.

In **2017**, following a re-structuring of the business development team Chris was made responsible for the Industry Group at TWI covering Power, Materials equipment and Infrastructure.