



Plans for my presidency

David Westmore

Presidential inauguration 25th Sept 2018

As your incoming President, it is with great pleasure that I welcome you to our 2018/2019 season. It will be a great honour for me to become your President in September and tread in the footsteps of some of the World's great engineers and scientists.

This session we have a great line up of lectures for you and I would certainly recommend that you encourage your friends and colleagues to attend (these lectures are freely open to the public and CPD certificates are available).

We shall continue to help our members improve their professional competency by means of our multi-disciplinary approach whilst also promoting the importance of professional engineering in society. We intend to accomplish this through a programme of quality lectures, visits to engineering establishments, improving links with other Institutions, resources such as our IESIS Strategy Papers and keeping the Institution relevant to the needs of engineers in the 21st century. As a multi-disciplinary Institution, we have the unique ability to speak for all professional engineering disciplines.

We shall continue to promote the importance of professional engineering to the public (e.g. IESIS Strategy Paper To Engineer),

to government (e.g. IESIS Energy Strategy Group) and through the IESIS Scottish Engineering Hall of Fame culminating in our renowned James Watt Dinner. This year, the dinner with the announcement of this year's inductees into the Scottish Engineering Hall of Fame, will be at the Radisson Blu on Friday 5th October - details on our web site. Members and non-members are welcome whether booking a table of 10 or coming individually or with partners or family friends. We hope to create an enjoyable evening for all whether you're an engineer or not, and we look forward to seeing you there.

The Institution will continue to support young and aspiring engineers via various education initiatives through our Education Fund. Last year we provided support to 'Primary Engineer'. Glasgow University's FemEng Society for their visit to Rwanda promoting engineering in the Rwandan schools, and the award of student prizes at Glasgow Caledonian University. Should any members wish to assist, please contact our Institution's secretary, Laura Clow. We also provide a website about careers in professional engineering – www.profeng.org



David is a Naval Architecture and Shipbuilding honours graduate from Newcastle University. After graduation in 1976, he started work in London with Sir J.H. Biles & Co. Ltd as an assistant Naval Architect working on a variety of ship types before moving up to Scotland to work as Naval Architect in their Paisley office. He moved back to London in 1983 as Associate Director of Clark & Standfield working mainly on floating drydocks before returning to Scotland as Clark & Standfield's Managing Director in 1989. In 1995 he became a director of Lobnitz Marine which encompassed Seadrec Ltd, Clark & Standfield Ltd and Alluvial Dredges Ltd, before taking over as Managing Director of the group in 2013. David is a Chartered Engineer and a Member of the Royal Institution of Naval Architects. He is also a Trustee of Clyde Maritime Trust with its responsibilities for Glasgow's Tall Ship, the 'Glenlee', and on the Master Court of the Incorporation of Hammermen of Glasgow which supports engineering students in Glasgow's Universities and Colleges with several awards and prizes.

New Members of Council 2018

Prof Ian M. Arbon is a Chartered Mechanical Engineer, a Registered European Engineer and a Chartered Environmentalist, with an MSc in 'Renewable Energy and the Environment' and an MBA. Formerly MD of several engineering-sector manufacturing companies (Howden Compressors Ltd; Caledonian Compressors Ltd; Peter Brotherhood Ltd), he now runs Engineered Solutions, a Sustainable Engineering and management consultancy, based in Scotland. Ian is a Fellow of IMechE; having chaired its Energy, Environment & Sustainability Group and its Renewable Power Committee. He is also a Fellow of American Society of Mechanical Engineers (ASME), the Energy Institute and the Institute of Refrigeration

Prof Tom Buggy - obtained both his BSc (Hons) and PhD in Physics from the University of Glasgow. Upon completing his PhD in 1982 he took up a position with Yarrow's Admiralty Research and Development (Yard) Ltd where he spent 14 years (now part of BAe Systems) progressing from Design Engineer to Principal Consultant. Until May 2018 Tom served for 16 years as Head of several academic Departments at Glasgow Caledonian University. He has also sought to use his academic position to support activities and initiatives that foster an understanding of the positive role of engineering (including IT) and engineers in society, the value of STEM as a career choice, and the importance of improving gender balance.

Prof Stuart W Cameron - Recently retired as Chief Engineer with Doosan Babcock in the UK after 40 years and continues as a consultant on strategic issues and advisor to the Engineering Centre of Excellence. Stuart joined the ASME Board of Governors in 2016 and is a member of their Strategy Advisory Committee. He is a Fellow of the Royal Academy of Engineering and a Fellow of the Institution of Mechanical Engineers in the UK where he was Vice President. He was on the initial Advisory Board of Primary Engineer. He was awarded an MBE in 2010 by the Queen for voluntary services to mechanical engineering.

William G Dunbar – After graduating in Civil Engineering from the University of Glasgow, William joined T Harley Haddow & Partners working on the design of the new Mathematics and Basic Science (Boyd Orr) Buildings for the University of Glasgow. This experience led to corporate membership of The Institution of Structural Engineers before joining Cowan & Linn and then Waterman Partners, being appointed to the Partnership of Watermans in 1977.

He extended the activities of the practice into the marine environment for the fishing industry. He was appointed Chairman of Crouch Hogg Waterman and a Director of the consulting engineer Halcrow when the two practices came together in 1997, retiring in February 2012.

Lewis Hammell - graduated in 2016 from Strathclyde University with a Master's degree in Naval Architecture and Marine Engineering. Lewis is currently employed by Caledonian Maritime Assets Limited (CMAL) as a graduate Naval Architect within the vessels team. He is currently involved in the design and build of the first two innovative UK LNG dual-fuel passenger ferries under construction on the Clyde at Ferguson Marine covering various disciplines: steelwork, fabrication, surveys, inspections, design work, plan approvals, machinery and electrical systems, and project management. His main role in the small vessels team is the design and outfit of the passenger and crew accommodation.

Declan MacDonald - After graduating from the University of Strathclyde with a degree in Naval Architecture, Declan began working with Caledonian Maritime Assets in the Summer of 2016. Currently involved with the design and build of two new dual fuelled LNG vessels, he has also worked on several projects within the existing CALMAC fleet and, looking at future designs to reduce greenhouse gas emissions. Declan's first major role was assisting with the build of the MV Carvorra.

Ruth McIntosh - (IESIS Treasurer) - Ruth is a Chartered Civil Engineer, having graduated from the University of Strathclyde in 1996. With a background in consulting civil engineering, specialising in Maritime Civil Engineering & Port Master Planning, Ruth joined Caledonian Maritime Assets Ltd in 2008, moving from a consulting engineer to a client role. As Principal Civil Engineer, she has led the development of plans for long term asset management of ferry terminals around the west coast of Scotland, working to deliver civil engineering projects at ports with a range of stakeholders and public sector organisations.

Norman Wardil – Now retired, Norman is an experienced Marine Engineer. He started his career as an Apprentice with BP in the early sixties (possibly one of the best training schemes of its time) eventually sailing as Chief Engineer. A short period was spent in Combustion Engineering learning about flames before he returned to the Marine environment as a Superintendent.



Presidential Address

Floating Docks – Past, Present, Future

David Westmore

Tuesday 25th September 2018

MD, Lobnitz Marine Holdings Limited

David Westmore will present a fascinating history of the development of floating docks from their early beginnings to the modern goliaths of today. He will explore the different types of floating docks and how changing technology and ships have influenced their design and what the future holds.

David is a Naval Architect. He has worked for 35 years with Clark & Standfield, a subsidiary of the Lobnitz Marine Group. Clark & Standfield is one of the leading experts in the design of floating docks having designed, since formed in 1873, more than 200 floating docks ranging in lift capacity from 300 to 110,000 tonnes including some 60 Admiralty floating docks.

17.45 for 18.15, The Trust Hall, Clydeport Building, 16 Robertson Street, Glasgow, G2 8DS

Graphene! - What do we do with it now?

Prof Karl Coleman

Tuesday 23rd October 2018

University of Durham

Graphene is not just an exciting prospect for electronics. Karl Coleman will look at graphene and what it can do for engineering. He has researched and taught at the universities of Leicester, Strasburg, Oxford and now Durham. Karl will discuss the ways in which graphene can be combined with other materials to enhance performance. Karl started his own business on Teeside, which develops ways of using graphene for such down to earth applications as paints and coatings, lubricants and composite materials.

18.00 for 18.30, the Laphroaig Room, Teacher Building, 14 St Enoch Street, Glasgow, G1 4DB

Airbus 350 - Design & Development

Gordon McConnell

Tuesday 13th November 2018

Chief Engineer Airbus 350

MacMillan Lecture

The Airbus 350 is a long range wide-body jet airliner that entered service in 2015. An important feature is the aircraft's all-new carbon fibre reinforced plastic wing and fuselage that results in lower fuel consumption, as well as lower maintenance costs. Gordon McConnell, Chief Engineer on the Airbus 350 project, will take us through the steps from design to entering service.

In 2014 Gordon was awarded the Royal Aeronautical Society's Gold Medal for work of an outstanding nature in Aerospace. The Council of European Aerospace Societies made their 2016 award to Gordon, stating that 'Through his exceptional leadership in technical and engineering development and personal contribution to the success of Airbus, has made an outstanding contribution to European aerospace.'

18.00 for 18.30, Carnegie Room, Charles Oakley Building, Glasgow Caledonian University, Glasgow, G4 0BA

Scotland's unsung genius

James Clerk Maxwell and his contributions to engineering science

Prof Iain A MacLeod

Tuesday 4th December 2018

Past President IESIS

Joint Meeting with RINA

Iain Macleod will discuss what may be learned from the educational and lifestyle experiences that, combined with immense natural ability, allowed James Clerk Maxwell (born in Edinburgh, 1831) to become one of the greatest physicists of all time. Iain will explain how a significant proportion of modern physics and engineering science leads back to Clerk Maxwell's work. Iain is an IESIS Past President.

18.00 for 18.30, Room 301, McCance Building, Richmond Street, Glasgow, G1 1XQ

Ahead of the wave - The new reality for shipping

Douglas Lang

MD, Anglo Eastern (UK) Ltd

The fundamentals of ship operation have changed little for centuries, but a transition has started and is accelerating. There are developments in areas of manufacturing, technology, operations and environmental concerns. Traditional boundaries are disappearing, manufacturers are moving further downstream, new transformative digital technology has the potential to enable industry wide re-modelling and all the while the "greening" process needs to accelerate. Douglas Lang will tell us where the new reality is heading.

Douglas is Group Managing Director (offshore) of Anglo Eastern which offers vessel, crewing and technical consultancy management services. Douglas worked with Denholm, the well-known Glasgow ship management company prior to its merger with Anglo Eastern in 2001. He is a Naval Architect with experience that includes 10 years in research in offshore facilities.

18.00 for 18.30, Room K325, John Anderson Building, Rottenrow East, Glasgow, G4 0NG

Tuesday 15th January 2019

Joint meeting with IMarEST/RINA

Barren to Bountiful - How engineered crop growth is reducing hunger in the world

Dr Keith Dawson

President of the Scottish Society of Crop Research

This lecture will take an optimistic view of developments in the provision of food. Despite growing global population, the proportion of people who are undernourished is significantly declining. Keith Dawson will describe how the use of science and an engineered approach has been able to increase food production and help to address the question of food security.

Keith is an internationally renowned soil scientist who does work in developing countries to greatly improve their agricultural yield.

18.00 for 18.30, Room 301, McCance Building, Richmond Street, Glasgow, G1 1XQ

Tuesday 12th February 2019

Carbon Fibre – the evolution of a new material

John Davidson

Product Director Cygnet Texkimp

John Davidson has been in the carbon fibre industry for over 36 years and was involved in the early years of the industry in the UK. He has been involved in the whole value chain, from polymerisation to recycling of composite parts. He will take us through the story of carbon fibre in the UK from its beginning to looking at future applications and uses.

18.00 for 18.30, Room 301, McCance Building, Richmond Street, Glasgow, G1 1XQ

Tuesday 12th March 2019

The Bloodhound Project - The engineering behind the 1,000mph World Land Speed Record attempt

Mark Chapman

Engineering Director, Bloodhound Programme Ltd.

The Bloodhound Project is a high-technology project, focused around a 1,000mph world land speed record attempt. It aims to inspire the next generation by bringing science, technology, engineering and mathematics to life in an exciting way. In the second quarter of 2019, Bloodhound supersonic car will run for the first time on its specially created race track at Hakskeen Pan, South Africa. Mark Chapman has experience in a variety of engineering projects including many years in aerospace engineering. He joined the Bloodhound Project in 2008.

AGM 17.45 -18.00

18.00 for 18.30, Room 301, McCance Building, Richmond Street, Glasgow, G1 1XQ

Tuesday 23rd April 2019

CPD certificates will be available on the evenings



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