

ice | scotland

ice
Institution of Civil Engineers

civilscotland 12/15



President visits Scotland

Engineers must adapt

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Index of Groups

AACE Aberdeen Association of
Civil Engineers
DAB Dundee Area Branch
EAB Edinburgh Area Branch
GWOs Glasgow & West of Scotland
H&I Highlands & Islands Branch
MGS Municipal Group Scotland
PHEW Panel for Historical
Engineering Works
SGG Scottish Geotechnical Group
SHSG Scottish Hydraulics Study Group
SHG Scottish Hydrological Group

#thisiscivilengineering

Help us to spread the word by displaying banners at your construction site. The 'This Is Civil Engineering' campaign showcases the profession and shows the public what civil engineering is and how the project will benefit the community. This could be through protecting homes and businesses from floods, ensuring drinking water is clean or providing the roads and railways that keep people connected. New banners at the Shieldhall Tunnel, Ford Bridge in North Lanarkshire and Forth Replacement Crossing Project are celebrating the vital role civil engineering plays in society.

Social media

There are lots of ways to keep in touch with ICE Scotland:



Follow us on Twitter @ICEScotland



Join the ICE Scotland group



Follow us on Facebook



Checkout our photostream on Flickr
www.flickr.com/photos/icescotland

Front cover image:

ICE President Sir John Armit CBE FREng FICE FCGI visiting the construction site of the new 1.7 mile Queensferry Crossing over the River Forth during his three-day visit to Scotland at the end of November.

**The ICE Scotland Annual Report 2014-15**

A review of our work throughout the year and highlighting our members' achievements, this report gives an overview of the Institution's activities in Scotland and the efforts of staff and volunteers to ensure excellence in the industry through professional qualification; keep members' knowledge and skills up to date; inspire the next generation of civil engineers; and raise awareness of the profession and inform policy development.

It can be downloaded at www.ice.org.uk/near-you/uk/scotland/publications/ice-scotland-annual-report-2014-15

Chair's Update

Making a world of difference

Mac West
ICE Scotland Chair

"Our members' needs are changing and we are changing the way we work to meet those needs."

ICE's ambition to be the organisation of choice for built environment professionals everywhere requires us to think carefully about our relevance and credibility to members and employers. Our members' needs are changing and we are changing the way we work to meet those needs.

ICE is not recruiting or retaining enough members to achieve our ambition (ICE is losing two members a week). This is not about cash – professional qualification helps ensure the highest possible

standards in our industry, as well as our survival as an institution committed to public benefit.

ICE's three-year plan has three priorities which relate to increasing the number of people coming into membership; providing a whole-life learning package to our members; and identifying the big issues that will shape civil engineering over the next 15 years and make a difference to society.

We've had a successful year in Scotland with the revamped Saltire Awards and our State of the Nation Infrastructure Scorecard helping to raise the profile of the profession and inform the national debate. The recent visit of ICE President

Sir John Armit, newly appointed to the National Infrastructure Commission, opens doors for us at the highest level in government and boosts our own efforts to press home the need for high quality, well maintained and resilient infrastructure. A manifesto and series of meetings with government and opposition in the coming months will build on this work.

Our branches and special interest groups (SIGs) continue to provide lifelong learning opportunities and unrivalled networking opportunities for members across Scotland and their commitment to event recording is helping our members access knowledge how, when and where it's needed. Greater coordination of this activity in 2016 will improve this still further.

I would like to thank Professor Garry Pender, our outgoing Chair, for all his efforts over the last year and, in particular, for organising an Away Day which identified key priorities. I would also like to thank Ronnie Hunter for representing Scotland on Council and Chairing the State of the Nation Steering Group. Finally a large thank you to our policy manager Kelly Forbes, who worked tirelessly to pull the report together and to the Regional Support Team, who strive to support all our members while often juggling competing demands for their time.

I am keen to meet members across Scotland so please do contact me if there is a particular event you would like me to attend. I look forward to working with you to make a difference to our members' experience and our society in 2016.

New ICE Scotland Chair Mac West with State of the Nation Steering Group at its launch in Edinburgh last month.



New route for experienced Engineers and more Technician reviews

The membership team is back to full strength with new MDO Peter Robinson covering the North and East of Scotland and Donna Surgeoner in a 'player-manager role' covering the South and West.

Most of our membership guidance documents have been updated this year and we continue to strive to simplify application processes. Most membership submissions are now required digitally.

A new application route for non-members, who are experienced engineers and would like to apply for a Professional Review at Chartered (CEng) or Incorporated Engineer (IEng) level, is now available.

The Member Assessment is a combined assessment of qualifications and experience and lets potential members know if they are ready to apply for a Professional Review at their preferred grade or if other options are available.

The Technician application process has also been being revised and simplified and three Technician Professional Review sessions are planned in Scotland in 2016.

Do you know someone who should be a member of ICE and isn't? Put them in touch with Donna (donna.surgeon@ice.org.uk, tel: 01698 356471 or mob: 07584 213393) or Peter (peter.robinson@ice.org.uk, mob:07920 203033) and they will be happy to help.

Jack Bennett 1942-2015

We report the sad death of ICE Scotland member Jack Bennett, aged 73, after a period of illness.

Until last year Jack worked for Arch Henderson as Consultant Engineer and took particular interest in assisting the boarding of graduates to the company. His career took him around the world, including South Africa and Abu Dhabi, and he was an avid traveller and language learner.

Jack was proud he completed 50 years working as a civil engineer in 2014, and his family gifted £450 raised at his funeral to the ICE 'Shaping the World' charity.



Women in engineering

Emily braves the waves to begin career

By Emily Melville

After graduating from University of Strathclyde with a Master's degree in Civil Engineering, I joined BP and the Quad 204 Project as a Pipeline Engineer in September 2014.

Within a year I have worked on four of the 12 construction vessels operating in the field, gaining invaluable experience and an appreciation of the strong safety culture within the industry, company and project.

Primarily involved in the marine construction and subsea delivery scope, I have spent a total of six weeks on the rigid pipelay vessel Deep Blue. Two weeks were spent alongside for spooling pipe onto the vessel and then four weeks offshore installing seven of the 15 remaining flowlines for the 2015 installation campaign.

I also spent three weeks on the construction vessel Viking Neptun, installing the two largest manifolds on the project, two control distribution assembly structures and bundled jumpers that connect subsea wells to subsea manifolds.

The greatest experience for me has come from my team, who have and continue to transfer their knowledge and skills and take time out to answer my many questions. I have been given roles and responsibilities where I can make a real contribution to the

team and project, benefitting my continuous professional development.

Next year my responsibilities change and I will take on the lead role for the Jumper Assembly and Deployment package as I continue the positive and fulfilling start to my career.

Deep Blue at Evanton as Emily watches over pipe being spooled onto the vessel.



Quad 204

BP's Quad 204 Project is one of the largest and deepest developments in the UK Offshore Sector and a complex engineering challenge. The project focuses on Schiehallion and Loyal fields' re-development in the North Atlantic 150km west of the Shetland Islands in Quadrant (Block) 204 of the UKCS with water depths between 350m-500m.

To extend the field life by 20 years and exploit around 400 million barrels of resources still available, a new turret moored FPSO has been designed and constructed, together with a major overhaul of the subsea architecture, adding to the infrastructure already in place.

Up to eight construction vessels and a drill rig have been working in the field at any one time to counter the area's environmental conditions and short weather windows for installation activities.

A tribe called QUEST

ICE has a series of awards to help young people get a head start in their careers and build a stronger future industry. They equip young people with experience and knowledge that is good for their CV and career.

QUEST undergraduate scholarships give £2500 for every year of study (up to five years), paid work placements and a job upon graduation. The awards are open to young people starting a civil engineering degree in Autumn 2016. The next opportunity to apply is in April 2016.

QUEST technician scholarships are available to NC, HNC or HND full or part-time

students or modern apprentices. The next opportunity to apply is Autumn 2016.

Kenneth Watson Travel Awards are available to ICE Student members who are travelling after completing at least one year of their current course and after June 1st (no later than six months after the course end date). You can apply for group or individual funding between January and April 2016 (please note that all group members on the application form need to meet the award criteria). Travel awards are also available to qualified members.

More information: www.ice.org.uk/quest

Into Civil Engineering Awards

Three young Scots are the lucky recipients of an award which will enable them to study civil engineering without taking on student debt. The awards enable full time or part time students or apprentices in Further or Higher Education to cover living expenses for up to four years. Chloe Sinclair from Thurso and Johan Mearns from Rogart (pictured) are both in first year at Heriot Watt University whilst Sam Sneddon from Tarbert is at the University of Strathclyde.

This initiative has been made possible thanks to a generous donation to the Institution by Mr. Gordon Mackay, a retired solicitor, based in Govan, Glasgow.

Mr Mackay said: "Civil Engineers make such a valuable contribution to society that I'm keen to support young people into the profession particularly from rural areas of Scotland."



Left to right: Sam Lee (QUEST), Chloe Sinclair (Into Civil Engineering), Katherine Montgomery (QUEST), Johan Mearns (Into Civil Engineering), Marion Boswell (QUEST) and Adam Steele (QUEST Year 4).

Four awards of £4000 per year for the duration of their studies are available to young people aged 21 and under living in Scotland for study in Scotland.

Next deadline: 31 March 2016

Further information: www.ice.org.uk/near-you/uk/scotland/awards

Mentoring

Mentoring can be vital for your development, whether you're being mentored or sharing your experiences with others. ICE's mentoring scheme pairs professionally qualified members – who are looking for guidance and advice – with experienced engineering professionals.

Mentoring can really help to shape your career and even boost your future salary. Being a mentor is great for your own CPD, as well as being rewarding.

More info: www.ice.org.uk/my-ice/membership-documents/mentor-supported-training

T-off time for technicians

Since December 7th all ICE technician members are now able to use EngTech MICE instead of TMICE.

Earlier this year members voted in favour of the change to ICE's Royal Charter to allow this to happen. The change has now been formally approved by Privy Council.

Technician members will still be referred to as such and will not be corporate members (ie will not have voting rights on changes to the Royal Charter and by-laws). There is no change in post-nominal letters for other grades of membership.

1350 years of membership

At the Glasgow & West of Scotland Branch 112th Annual Dinner, held on November 26th, guest of honour, ICE President Sir John Armitt, recognised members who had achieved 50 years membership with ICE, at a special ceremony prior to the dinner.

Those recognised were:

John McMurchie	Richard Faulkner
James Mair	Kerry Forrest
Robert Rankin	Alexander Easton
William Simpson	Carlo Dinardo
John Carruthers	Adrian Laycock
John Adams	Stephen Lockley
John Anderson	Peter Barrett
Douglas Campbell	Edward Reynolds
Alastair Lapsley	Charles Brown
William Davidson	Lawrence Smith
David McCaig	Anthony Mitchell
James Anderson	Gordon Graham
John Borland	Brian Auburn
David Sherriff	

Tower power at SECC

Over 3000 pupils and teachers got the chance to see what civil engineers can do at Glasgow's SECC in November.

ICE volunteers from Aecom, Scottish Water, Transport Scotland, Carillion, CH2M, Arup, the Forth Crossing JV and McLaughlin and Harvey manned the stand at Skills Scotland, a careers and skills event for secondary and college students, to promote civil engineering and the exciting educational and career routes on offer.



Maria Lucey from Scottish Water on the busy ICE stand

For the first time we rivalled cookery and dance demonstrations on the Skills Scotland stage by running the spaghetti tower competition; challenging teams of pupils to build the tallest tower in 15 minutes using spaghetti and marshmallows. With the ICE Happiness video playing in the background, the competition was compered throughout and enticed pupils and teachers to visit the stand afterwards. The winning team were presented with Amazon vouchers donated by Carillion.

Over the course of the exhibition pupils, flexible learning teachers, and secondary school teachers attended the stand to hear more, some with the intention of promoting the career back in their schools and introducing some of the pre-19 events we support.

QUEST helps Malawi volunteer

Last summer saw two Strathclyde University undergraduates – one with the help of Institution of Civil Engineers' QUEST Kenneth Watson Travel Award – undertake voluntary work in the Mulanje region of Malawi constructing 'Hugh Piggott' wind turbines with a team of ten other engineers.

Following completion of their first year studies, Peter Donald and Lewis Russell joined other volunteers with the charity *Students for Malawi* and involved in a Scottish Government funded project aimed at reducing the use of paraffin oil that is used mainly for lighting the homes of local people in rural villages.

The paraffin fuel is known to emit harmful fumes resulting in health problems for the populace. The project involved constructing an alternative energy supply via the fabrication and installation of a series of wind turbines providing a renewable option and cheaper alternative. The project also provides jobs for local women allowing them to support their families.



The students undertook roles and responsibilities aligned to civil engineering often having to find unorthodox solutions to resolve problems.

An ongoing project, both Peter and Lewis will return to Malawi next summer to take on leadership roles. On their return the pair presented an account of their work to help inspire new first year students.

Lewis Russell, aided by the QUEST award, said: "I hope many more students take the opportunity to be involved in projects like this. I learned a lot from this experience, and it has given me a great taste of real world engineering."

Any other students who want to be involved in such work can contact the QUEST Travel Award scheme at www.ice.org.uk/careers-and-professional-development/further-and-higher-education/already-started-higher-education-or-apprenticeship#Travel and can access the Students for Malawi website at www.studentsformalawi.co.uk

Engineers of the future

It has been a busy time as potential engineers of the future are introduced to the world of civil engineering.

The Bridges to Schools programme has been active with events to mark Engineering Day at Calderwood Primary; to highlight Tomorrow's Engineers Week at Belmont Academy in Ayr; and to promote STEM week at David Livingstone Memorial Primary in Blantyre and Gargieston Primary in Kilmarnock.

ICE volunteers shared their enthusiasm for

civil engineering at evening careers events held at secondary schools in the Glasgow area, and by supporting the ICE Stand at the Skills Scotland, a careers and skills event for secondary and college students, at the SECC in November.

During November focus was put on civil engineering career opportunities at careers conventions for Kirkcaldy schools and for Angus schools, and during an Engineering Day organised for first-year students at the University of Dundee.

Marine Energy – Will it ever be economically viable?

David Collier, MAYGEN Contracts Manager for Delivery explored investor interest in the marine energy and technical challenges faced by developers at this Edinburgh lecture in September.

Marine energy is the last significant renewable energy resource in the world today that is, as yet, untapped. Work done in 2012 established the practicable extractable power from wave energy was equivalent to some 22% of UK energy demand, whilst energy developed from tidal stream sources could potentially realise around 7% of UK demand. The Orkney Islands block the tidal flow from the Atlantic Ocean to the North Sea, so the waters around the Pentland Firth are of particular interest as a source of tidal stream energy. Wave energy is potentially greatest off the west coasts of Orkney and Shetland, the West of Scotland and the South West of England.

The European Marine Energy Centre (EMEC) Ltd is a UKAS accredited test and research centre, based in the Orkney Islands, focusing on wave and tidal power development. David outlined examples and calculations to demonstrate the costs of producing energy from marine sources, against the costs from more traditional sources and from other renewables such as wind. He concluded with his personal view that an economic solution would eventually be found for wave energy and that tidal stream energy had already commenced its journey to become commercial, although significant investment in technical support is still required to achieve this goal.

EMEC's website is a valuable source of information on current wave and tidal devices and industry research www.emec.org.uk



Among the diverse examples of engineering structures visited in Dumfries and Galloway, were Tongland Power Station, the lowest of the power stations of the 1930's Galloway Hydro-Electric Scheme; Telford's earliest large span masonry arch bridge at Tongland; Rennie's elegant Ken & Cree Bridges; 1749 Southernness Lighthouse; Loch Ken bowstring lattice girder Viaduct; and Parton Privy, a fascinating example of Victorian sanitary engineering.

The visit culminated with stops at Glenlair House, the home of James Clerk Maxwell, and Glenlair Bridge built by his cousin William Dyce Cay who also worked on the Portpatrick Railway and Aberdeen harbour.

Pioneering Spirit in North Sea Decommissioning

Aberdeen Association members heard about the exciting opportunities for civil and structural engineers, which a £40 billion predicted spend on decommissioning of North Sea installations represents.

The Brent Delta is the first of four platforms to be decommissioned in the Brent field which is located over 100 miles north east of Shetland. The enormous Delta rig stands 300m from sea bed to rig top. The topside comprises the main structural base mounted on top of the platform legs and all the equipment, service installations and accommodation units. The removal of the full topside installation in one lift represents the biggest single lift (23,500 tonnes) carried out worldwide to date. A huge amount of structural design and installation has already taken place to alter and prepare the topside for lifting including installing a number of lifting points each comprising 120 tonnes of heavy structural steel.

A purpose built double hulled lift and transport vessel the 'Pioneering Spirit' will carry out the lift and transportation of the topside for dismantling and recycling (97%) in Teeside. The part of the lift operation which takes the weight of the topside could be as short as 10 seconds.

The planned sequence:

- 1 Shut down production and plug wells
- 2 Clear and decontaminate platform
- 3 Carry out structural alterations
- 4 Install shear restraint and cut legs
- 5 Move lift vessel into position, align lifting beams and locate into lifting points
- 6 Lift topside unit and transport to Teeside

Further information: www.shell.co.uk/sustainability/decommissioning.html

Video footage www.energyvoice.com

Earthworks explored

Attended by 101 people, speaker Paul Nowak from Atkins began the talk with an overview of earthworks from historic to modern times covering aspects such as construction methods, analysis techniques, factors of safety, and computer analysis.

Common misconceptions associated with Eurocode 7 were also used to highlight the need for engineering judgement in Geotechnics.

Specific highly visible examples demonstrated the different failure methods for cuttings and embankments which represent catastrophic Ultimate Limit State (ULS) failures. Conversely, the importance of the Service Limit State (SLS) was also highlighted by the fact that only 5mm of differential movement between rail tracks is required to prevent safe operation.

The talk then moved on to discuss the discrepancies in soil classification between conventional geotechnics and earthworks before explaining how earthworks quality control can be specified, including the UK Specification for Highway Works (SHW). The opportunities for the inclusion of waste materials such as PFA in earthworks to reduce landfill costs were examined and offset against potential challenges such as the impact of contamination.

Finally the issue was raised of whether historic earthworks should be required to meet modern design standards, which much of the UK's Victorian infrastructure may not meet whilst still performing adequately. The event closed with a lively debate on the use of recycled material and the impact of global warming on earthworks design.

Emerging Engineers sought

The Emerging Engineers Awards 2016 (formerly the Graduate and Student Papers Competition) has been launched.

The Award promotes and rewards excellence in the originality and communication of civil engineering ideas and research. It offers ICE graduate and student members (including trainee technicians) the opportunity to submit a paper on any civil engineering related topic in the format of research, a report or essay.

By entering, participants get the chance to promote new ideas, develop self-marketing skills and confidence in public speaking, improve writing and verbal skills in readiness for Professional Review, add to their CPD record, and win cash prizes (amounts vary according to branches and regions).

Entries should preferably be based on your own work and can be adapted from

university/employment research papers, project reports, quarterly employment reports, written exercises or professional review reports.

Branches are holding heats with the winners going forward to the Scottish regional final on March 29th, 2016. The Scottish winner will then be shortlisted for the Global Final.

For further details:
Dundee area branch: contact a.minto@dundee.ac.uk and synopsis closure date December 31st.

Edinburgh area branch: contact jane.templeton@jacobs.com, 400-word synopsis closure date December 23rd.

Glasgow & West of Scotland area branch: contact marty23lee@gmail.com, 300-word synopsis by December 7th.

Capture the knowledge

Members are reminded that they can keep abreast of all forthcoming knowledge events in Scotland by looking at the ICE Scotland Knowledge Events calendar.

It can be found at www.ice.org.uk/near-you/uk/scotland/publications/knowledge-events-calendar

The image shows a calendar grid for ICE Scotland Knowledge Events for 2015/16. The grid is organized by month (January to December) and lists various events with their dates and locations. The events are color-coded by region: North (red), Central (green), South (blue), and Glasgow & West of Scotland (purple). The calendar includes details such as event titles, dates, and locations.

The Saltire Civil Engineering Awards

The Saltire Civil Engineering Awards 2015, the premier showcase for engineering excellence in Scotland, were awarded at a ceremony held at the National Museum of Scotland, Edinburgh.

ICE Scotland's annual Awards run in partnership with the Saltire Society and the flagship event was attended by more than 100 industry leaders. ICE Past President Geoff French and BBC Scotland presenter John Beattie hosted the ceremony and announced the winners.

Information about all the shortlisted projects and a short video film featuring the award winning entries is available at <https://www.ice.org.uk/near-you/uk/scotland/awards/saltire-awards>

WINNER Haymarket Station Capacity Improvement



Client: Network Rail | Consultant: CH2M Hill
Contractor: Morgan Sindall | Architect: IDP Architects
The £25 million redevelopment of Edinburgh's Haymarket Station – Scotland's fourth busiest railway station.

COMMENDED Borders Railway



Clients: Transport Scotland; Network Rail
Principal Contractor: BAM Nuttall
The longest new domestic rail line to be built in the UK for over 100 years with seven new stations, 61km of track including 3 passing loops, and capacity for further dualling and electrification.

COMMENDED Ullapool Harbour Berth Improvement



Client: Ullapool Harbour Trustees/Caledonian Maritime Assets
Designer: Wallace Stone LLP | Contractor: RJ McLeod Ltd
An increase in traffic and a new larger ferry were the key drivers behind this project.

COMMENDED River Ness Flood Alleviation



Client: Highland Council | Designer: Mott MacDonald
Contractors: Coffey Group, Morgan Sindall, McLaughlin & Harvey Construction Ltd
The River Ness Flood Alleviation Scheme provides flood protection to over 1000 properties in the heart of Inverness and reconnects the riverfront with the city centre.

COMMENDED Hampden Park Redevelopment



Client: Glasgow 2014 | Contractor: WH Malcolm Ltd
Architect: Holmes Miller
The temporary transformation of Scotland's National Stadium to host track and field and the Glasgow 2014 Commonwealth Games closing ceremony.

ICE enters Holyrood election debate

The launch of our flagship State of the Nation Scotland: Infrastructure report marks the start of ICE Scotland's engagement with Government and opposition politicians and decision-makers in advance of May 2016 Holyrood elections. Derek MacKay MSP, Minister for Transport and Islands standing in for the Cabinet Secretary for Infrastructure and Cities welcomed ICE Scotland's 'thoughtful contribution to the debate', and reaffirmed the Scottish Government's commitment to continued investment in Scotland's infrastructure.

The report received greater attention than ever before with local roads and energy sparking the media's interest and informing debate.

State of the Nation Scotland 2015 assesses the performance of Scotland's economic infrastructure grading them from A to E and provides overall and sector specific recommendations. Strategic transport and waste infrastructure have improved over this parliamentary term, flooding and water infrastructure has maintained their positions, but energy and local transport have declined – causing considerable concern.

State of the Nation 2015 will form the basis of ICE Scotland's manifesto, to be published in advance of the May 2016 Holyrood elections.

The report can be viewed at www.ice.org.uk/media-and-policy/policy

Sir John meets Scotland's infrastructure decision-makers



Sir John Armit's visit to Scotland brought an opportunity to engage with senior decision-makers involved in the procurement of infrastructure ranging from the energy companies to Scottish Water, Transport Scotland and local government. Representatives from the Scottish Government and Scottish Parliament were also present at the Chatham House Rules discussion chaired by Iain Docherty, Professor of Public Policy and Governance at the University of Glasgow.

The newly formed UK National Infrastructure Commission (NIC), on which Sir John sits, was a key theme of the evening's discussions and attendees were keen to hear how NIC might relate to Scotland or indeed whether

Scotland needs its own Infrastructure Commission. Sir John listened with interest to views on energy and cross-border transport issues which may be impacted by the NIC's work. Other issues included the challenges of a segregated supply chain, front end design and competition for investment in a global market.

Scotland's experiences of devolution and its impact on infrastructure delivery were shared with a view to informing the UK government's current efforts to devolve infrastructure spend to English regions. Those present emphasised the importance of strategic investment in devolving regions rather than using increased powers and funding to fulfil local 'wishlists'.

President's visit



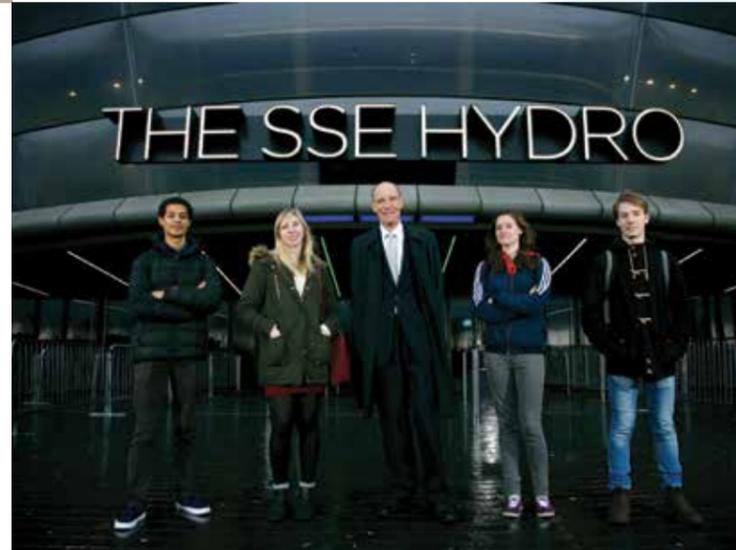
Queensferry Crossing from North Queensferry.



Sir John Learns about Forth Replacement Crossing with Lawrence Shackman, Project Manager, Transport Scotland and Alan Platt Construction Director, Forth Crossing Bridge Constructors.



Sir John with FCBC's Alan Platt (L) and Mac West, ICE Scotland Chair (R) from South abutment.



(LtoR tbc) Leon Ballin (Quest scholar), Leanne Evans, Callum Mclean, Rachel Houston. University of Strathclyde Students who competed for the Strathclyde ICE Student President prize. Winner Claire Stevenson had to go to work so missed out on the chance to meet Sir John.



As former Chair of the Olympic Delivery Authority Sir John enjoyed the opportunity to learn about Commonwealth Games Legacy for the city of Glasgow. He's pictured here in the SSE Hydro auditorium.

Low carbon future takes shape

ICE's involvement with the Low Carbon Infrastructure Task Force has proved to be a useful platform for the Institution to communicate the messages emerging from our State of the Nation report on enhancing the resilience of infrastructure networks to climate and demographic change. The Task Force, which is chaired by ICE Scotland Director Sara Thiam and includes ICE members Paul Steen and Brian Veitch, brings together key organisations from the infrastructure

sector to make the case for low carbon investment and identify potential projects. The outputs from the Scotland's Way Ahead Project include a report making the case for investment in low carbon infrastructure and a long list of projects. The long list has now been peer reviewed and the Task Force will meet in December to shortlist the projects to be announced in early 2016.

www.scotlandswayahead.org.uk

Innovation support

A new source of support is available to engineering and construction companies with ideas to help grow their business or gain competitive advantage. The newly established Construction Scotland Innovation Centre (CSIC) is industry-led and demand-driven and has been created with Scottish Funding Council, University and Scottish Enterprise support. The Centre can support industry-led innovation that will create economic impact for Scotland including product and process development, mapping of expertise and access to finance.

Contact: hello@cs-ic.org
www.cs-ic.org/innovationcentre/



Sir John talked innovation and the need for the industry to innovate and embrace new technologies at Scotland Build at the SECC auditorium.



Sir Chris Hoy Velodrome LtoR Aaron Matthew, President's Apprentice, Alan Frew, Chairman ICE Glasgow West of Scotland Branch, Nicky Waterson, Glasgow Life, Sports Operations Manager, Sir John, Sara Thiam, ICE Scotland Director.



Clr Archie Graham (not pictured) joined Sir John's delegation at Tollcross International Swimming Centre to share lessons on legacy.

Glasgow & West of Scotland 112th Annual Dinner

ICE President Sir John Armit CBE FREng FICE FCGI, a Commissioner on the UK Government's National Infrastructure Commission and former Chairman of the 2012 London Olympic Delivery Authority, gave the keynote at the dinner on November 26th.

Former Scotland international rugby captain and British & NI Lions player, was guest speaker.

Around 650 guests enjoyed a convivial evening and raised £7,286 for RedrUK and ICE Benevolent Funds.



Glasgow annual dinner top table with Sir John Armit third from left front row; Branch Chair Alan Frew centre front row (kilted); and Andy Nicol second from left on the back row.

6th February 2016

Aberdeen Association of Civil Engineers 101st Annual Dinner



The 101st Annual Dinner will be held at the Marcliffe at Pitfodells on Saturday 6th February 2016.

Beginning at 6.30pm for 7pm, tickets are £49 each and dress code is formal.

For further details contact Clive Kennedy at fice.aberdeen@btinternet.com

PHEW Summer Visit 2016 – Caithness & Orkney

The 2016 Summer Visit is being planned for Caithness and Orkney from June 30th to July 4th. The visit will include two night hotel accommodation in Wick and two more nights in Stromness. Travel will be by coach from, and returning to, Inverness. The inclusive cost is expected to be around £500 per person.

Provisionally the visit will include the Fleet Mound (Telford), Helmsdale, Berridale Church, Whaligoe Steps, Dounreay, Dunnet Head lighthouse, The Churchill Barriers, Cantick Head Lighthouse, Kirkwall Harbour, Lyness Oil tank & Flotta Oil Terminal.

Enquiries or further information from Sandra Purves on 0131 556 4503 or at spurves004@btinternet.com



THIS HANDBOOK FOR VOLUNTEERS provides invaluable advice about going into schools to inspire young people into the profession and a host of useful activities. ICE Scotland also has a useful presentation template that can be used.

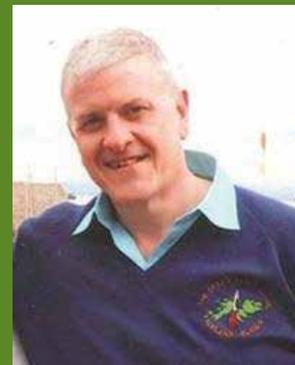
Contact: lynn.dow@ice.org.uk

New voice for ICE

Rory MacLeod has started working in the communications role based in the Glasgow office.

An experienced marketing & communications specialist, Rory has a strong record of achievement across the media industry including marketing; media relations; corporate and public affairs; newspapers; radio; television; Press & PR; agency work; and freelance/consultancy work.

He has family connections in engineering (shipbuilding in particular) and architecture, but after military service Rory followed a career in journalism, PR, and then marketing, which has seen him work around the globe and for UK-based international companies. He also has worked on both sides of a membership organisation and was President of the National Union of Journalists at one point.



Rory says of ICE: *"I am really looking forward to working with an organisation which has such a strong and valuable brand. The kudos, excellence and status the brand possesses have been hard-gained over many years and the ICE brand has developed a powerful presence in the world of engineering and infrastructure and beyond."*