

Spring/Summer 2016

**ice**  
Institution of Civil Engineers

# ICE Local

The newsletter of the Institution of Civil Engineers in Yorkshire and Humber





## ICE Yorkshire and Humber Regional Support Team

Regional Director  
*Penny Marshall*

Regional Coordinator  
*Derryn Potter*

Marketing Communications Executive  
*Stephanie Thomas*

### Membership Team

Membership Manager North  
*Gillian Elvy*

Membership Development Officers  
*Robin Bailey*  
*Elizabeth Thompson*

Index of groups

G&S	Graduates and Students' Committee
HCN	Humber Civils Network
NPP	Northern Powerhouse Panel
RAB	Regional Advisory Board
RICE	Retired Members' Group
TG	Transportation Group
YGG	Yorkshire Geotechnical Group
YHIA	Yorkshire & Humber Infrastructure Alliance

There are lots of ways to keep in touch with ICE Yorkshire and Humber



Twitter: @ICEYorksHumber



LinkedIn:  
**ICE Yorkshire and Humber Region**



G&S Facebook:  
**www.facebook.com/ICEGSYH**



Instagram: **iceyorkshumber**

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Front cover image:  
Centenary Award winners Leeds Station  
Southern Entrance

### #thisiscivilengineering

Design Create Solve Innovate – civil engineers shaping the world

Join the conversation to help promote civil engineering and its role in society.

#### #ThisIsCivilEngineering Instagram Photo Challenge

Did you know ICE holds a global Instagram photo challenge, with a different theme each month and prizes to be won?

While there are lots of fantastic examples of civil engineering in Yorkshire and Humber, our region is not being represented in the competition!

All you need to do is:

1. Take a photograph on this month's theme (see: [www.ice.org.uk/photochallenge](http://www.ice.org.uk/photochallenge))
2. Upload your photo to your Instagram account
3. Tag your photo with **#ThisIsCivilEngineering**

That's it. Happy snapping!



Chair's update

## Latest

*"Widening the appeal of our knowledge events to a broader audience can only help us in raising the profile of civil engineering as a profession."*

## news from Yorkshire and Humber



**Nick Chamberlain**  
**ICE Yorkshire and Humber Chair**

Congratulations to all those who entered a project for this year's ICE Yorkshire and Humber Awards. The awards were presented by ICE President Sir John Armitt CBE at the Annual Gala Dinner in March, and this edition of *ICE Local* gives further details of the prizewinners. With the range of entries we received, the winning projects have beaten off some stiff competition and really do demonstrate excellence.

In addition to the project awards, we also presented awards to those members of our Regional Education Team (RET) who have made a significant contribution to promoting civil engineering as a profession to future generations of potential engineers. Congratulations to David O'Mahony from Network Rail, who was awarded the New Ambassador Award and Matthew Stott from Atkins, who was awarded the Special Recognition Award.

We also recognise those employers who have contributed towards the delivery of educational activities

through the significant support they give to their staff to undertake RET activities. This year, the Cable Cup was awarded to Network Rail.

Our final award was made to ICE graduate member Penny Gilg, who won the ICE Yorkshire and Humber Emerging Engineers Award, for her paper and presentation: "Leeds Station Southern Entrance - detailed design and build".

The Annual Gala Dinner was the culmination of the Sir John Armitt's visit to the region, which also included a visit to the Tram Train project in Rotherham, as part of ICE's "This is Civil Engineering" campaign. Sir John also judged the INPUT Bridges Challenge at Fir Vale School in Sheffield and chaired a round table discussion with senior decision makers from the Sheffield City Region, discussing the challenges and opportunities devolution will present.

The Graduates and Students' Committee organised a lively debate, also themed around devolution, which was well attended

by members of all grades, as well as non-members. I believe widening the appeal of our knowledge events to a broader audience can only help us in raising the profile of civil engineering as a profession.

The AGM this year has been brought forward to Tuesday 14 June 2016, so as to allow us to hold a debate on the potential implications of the EU Referendum on the Construction Industry. I hope you will be able to attend what I'm sure will be another lively and thought-provoking debate.







## Yorkshire & Humber Awards 2016



### Centenary Award Leeds Station Southern Entrance

Client: West Yorkshire Combined Authority (WYCA); Network Rail  
Designers: Carillion Rail Ltd; Mott MacDonald; AHR Architects  
Contractors: Carillion Rail Ltd; William Hare Structural Engineers

Leeds Station Southern Entrance (LSSE) is a striking landmark constructed directly above the River Aire. It fulfils the brief of an iconic gateway, connecting the station to the new South Bank Urban Village Community, providing a catalyst for further economic growth. New ramps and bridges provide stepped and step free access from the banks of the River Aire, and Dark Neville Street to a new concourse located directly above the river channel. From here lifts, escalators or stairs transport passengers 12m vertically to a new ticket hall positioned above the electrified railway, connecting to the existing station concourse beyond.

#### Judges' comments

Delivering this iconic extension to Leeds Station within the highly constrained site in the heart of the city centre is a remarkable achievement. The project team had to work around electrified railways, a river, residential properties and significant volumes of pedestrians to create a structure which will encourage the regeneration of south Leeds.



### Smeaton Award YMS/1 B/U Scarborough Railway Bridge over River Ouse

Client: Network Rail  
Designer: Network Rail  
Contractor: Story Contracting

Underbridge YMS/1 is located 100m north of York railway station spanning over the River Ouse. A 2x24m span bridge carries a twin track up and down the York to Scarborough line. The original railway bridge over the River Ouse was opened in 1845, known as Stephenson's Scarborough Railway Bridge. The bridge was renewed in 1875 using the original abutments and the central pier. This wrought iron construction by the iron-founder John Butler, of Leeds, survived 140 years before this latest reconstruction of the river spans. A bespoke orthotropic weathering steel plate fabricated railway bridge was installed using 500 tonne crawler cranes during the February 2015 school holidays.

#### Judges' comments

The project team demonstrated excellence in community relations and the promotion of engineering, through capitalising on the opportunity to engage the public in a high profile project. The highly constrained site presented numerous challenges and the project team had to develop an intricate installation methodology. The opportunity was taken to capitalise on the disruptive access with a number of other schemes undertaken on the route in parallel, minimising future disruption to travellers.



L-R: Sir John Armitt with David O'Mahony and Matthew Stott



Network Rail, winners of the Company Award (Cable Cup)

## Regional Education Awards

### Congratulations to:

**New Ambassador Award**  
**David O'Mahony**  
Civils Design Engineer,  
Network Rail

David works on a variety of schemes ranging from OLE structure assessment, carbon footprinting of bridges, diversity impact assessments for renewal schemes to major projects like East West Rail to Crossrail 2. He said "The rail engineering sector will be responsible for some of the UK's largest and most vital infrastructure projects in the coming years resulting in a demand for engineering skills. It is important for us ICE members to promote STEM subjects to inspire the next generation of engineers."

**Special Recognition Award**  
**Matthew Stott**  
Geotechnical Engineer, Atkins

Matthew is a Geotechnical Engineer with Atkins in London, having recently left Leeds, and has been trying to make sense of the ground since graduating with a civil engineering degree

in 2014. He enjoys working in an industry where he can help to overcome the mounting challenges society faces using both centuries of experience and the latest technology. He has been an active STEM ambassador since 2011 and passionately believes in inspiring young people and students from a diverse range of backgrounds to be the next generation of civil engineers.

### Company Award (Cable Cup) Network Rail

The Cable Cup is presented to a company that has contributed significantly to the promotion of the profession by stimulating an interest in science, technology, engineering and maths (STEM) in students. For inspiring young people about civil engineering careers, and supporting their graduates in developing their skills to become a professional engineer.





Left: Sir John Armitt on site at the Sheffield-Rotherham Tram Train project; Above: at the Gala Dinner

## Civil engineers play a major role in society

Civil engineers play a major role in society, or so we often tell ourselves. It is only our modesty that stops the world knowing about all the great work we do as civil engineers and the words "it's all in a day's work" are often muttered when questioned in the great outdoors.

In his speech to guests attending the 61<sup>st</sup> Yorkshire and Humber Annual Gala Dinner in Sheffield, ICE President Sir John Armitt reminded us of the events 152 years ago, when "a wall of water smashed its way through Sheffield as the Dale Dyke Dam failed on its first filling." 300 people died as a result of the event, demonstrating that when civil engineering is done wrong death and destruction can ensue.

But it is my firm belief that, despite this terrible accident, these people did not die in vain – the incident enabled us to learn from the mistakes and standards now are better than they have ever been. Countless lives have been saved since, not just from better standards in construction, but due to our role in providing clean and safe drinking water. Cholera, typhoid and diphtheria are afflictions rare in the modern world.

The challenge now is communication, as Sir John highlighted: "In societies around the world which lack basic infrastructure, modern communication systems are

raising awareness of what the best in living standards can be. They are already driving massive demand for fundamental infrastructure in the future."

There are challenges, as he pointed out - skills, lack of basic infrastructure, financial and political, and the resolution to these requires us to challenge ourselves. "So we must push one another. We must become more tolerant of risk taking."

This wasn't the expected speech given at such dinners about how civil engineers quietly save the world, it was a personal challenge to each and every one of us to consider pushing each other and taking the right risks, the world is changing and not only must we change with it, we must lead the change.

Sir John finished by reminding us that the ICE is made up of us, the civil engineers. We are responsible for the future of the Institution and of the infrastructure we provide to the world and society - we are responsible for explaining the need, in clearly understandable language.

Let us all remind ourselves that "All engineering is about optimism and discovery."

Mark Calvert EngTech MICE

## Yorkshire team reaches final of MERIT game



Congratulations to the team from Mott MacDonald in Sheffield for reaching the final of this year's MERIT construction game, the only UK team to reach the final!

MERIT – or management, enterprise, risk, innovation and teamwork – is a web-based computer simulation which allows young professionals, working in groups and acting as a board of directors and managers, to run their own construction company.

Afroditi Douramani, Richard Fielder, Mathew Gemmell, Adam Jolly, Michael Smith and Samantha Tobin, or team "Nott Macdonalds", narrowly missed out on a top three placing when they were pipped to the post by the team from Arup's Hong Kong office.

To find out more about MERIT game and future competitions, visit [www.meritgame.com](http://www.meritgame.com)

## RedR UK - building back better in Nepal



On 25 April 2015, an earthquake of magnitude 7.8 struck Nepal, killing 8,881 people and injuring more than 22,000. In the days following the disaster, water, sanitation and hygiene and shelter were identified as urgent needs.

RedR has been responding to these needs. They train local and international NGO staff, volunteers and communities, ensuring that they have the skills to help the country recover from the earthquakes - and to prepare for and mitigate the impact of future disasters.

"It's vital that affected communities are able not just to rebuild their houses, but to 'build back better', using resilient construction techniques to ensure their homes are stronger and safer than they were before," says RedR UK CEO Martin McCann.

Purna Bahadur Thami was selected by his community to undertake RedR's safer shelter training. Before attending the training, Purna had no practical experience of shelter construction; however, his objective was very clear: "I want to become a good trainer so the community can build back safer."

Purna is now working with local NGO CWIN, delivering 'Build Back Safer' messages to earthquake-affected communities in Dolakha District as part of an awareness-raising programme. "When we equip people with skills like these, we're empowering them to save lives the next time disaster strikes," observes Martin McCann.

One year after the earthquakes, RedR has trained 449 people working to help Nepal

rebuild and recover. The impact of their work is multiplied across the country, as they train aid workers who will share their skills with colleagues and community members.

### About RedR

RedR UK is an international disaster relief charity providing training and technical expertise to aid workers around the world.

### Get involved

The ICE is a RedR patron and has been providing them with essential support for many years.

There are many opportunities for ICE members to get involved with RedR, including fundraising activities, such as exciting sports challenges and practical workshop weekends, as well as by providing technical expertise to aid workers in the field through their online support system.

If you wish to learn more about RedR and how to get involved, please visit [www.redr.org.uk](http://www.redr.org.uk) or call 020 7840 6014

## ICE obituary notices

Dr James Anthony Gaffney CBE BSc (Eng) DSc FEng FICE

Tony, who died in March at the age of 87, joined the ICE in 1950 and was President of the Institution from 1983-84. At the time of his Presidency he was Director of Engineering Services at West Yorkshire Metropolitan County Council.

Gerard Hodgkinson CEng MICE  
Gerry, from Wetherby, joined the ICE in 1964 was an ICE Yorkshire and Humber member and member of the Retired Members' group. He passed away in April aged 79.

## Coming up to Retirement?

Did you know that retired engineers benefit from a substantially discounted ICE membership subscription rate of just £62.50? (2016). The retired member rate is available to members who have reached the age of 60 (on 1 January), are no longer in full time employment, and earning less than £13,900 per annum, excluding pension income. So, if you're taking full or partial early retirement the reduced subscription may apply.

As well as all the normal benefits of ICE membership, the Yorkshire and Humber region has a very active retired members' group, affectionately referred to as 'RICE' (Retired ICE). Any ICE member can attend RICE events, but by formally joining you receive detailed meeting notices directly from the Honorary Secretary and become part of a group of around 120 people.



The group arranges a programme of daytime lectures, social events, site visits, and activities in a relaxed and sociable environment free from the pressures of working life. An optional lunch is normally arranged, giving further opportunity to meet former colleagues and make new friends with similar interests.

There is currently no joining fee or annual subscription to the group. To join or for further information, please visit:

[www.ice.org.uk/yh/committees#RICE](http://www.ice.org.uk/yh/committees#RICE)

## Who's your Mentor?



**If you don't have one, you could be missing out on support, development opportunities, and potentially a higher salary!**

Studies show that professionals who have a mentor earn more annually than those who don't and 75% of interviewed executives say mentoring has played a key role in their careers.

The ICE Mentor Match scheme can help to connect you with a suitable mentor. This could be someone who has overcome the same challenges you have, an experienced independent advisor who can talk through your development needs, or even just an impartial sounding board to help you achieve your career goals.

For more information on the scheme and how to sign up, visit: [www.ice.mentormatch.me](http://www.ice.mentormatch.me)

## Enhance your career, become a Chartered Manager



Becoming an Incorporated or Chartered Engineer is a great achievement, but you don't have to stop there. One way to enhance your career prospects, boost your earnings and gain new professional qualifications is to apply to become a Chartered Manager (CMgr).

If you are an Incorporated (IEng) or Chartered Engineer (CEng) with five years' management experience, you can benefit from our privileged partnership with the Chartered Management Institute (CMI), giving you access to a dedicated application route and a reduced CMI membership fee.

To learn more about how you can get credit for your senior management skills and complement your civil engineering expertise, please join us at our next ICE/CMI webinar on Thursday 23 June 2016, 12.30-13.30 (free of charge).

Please visit [www.ice.org.uk/cmgr](http://www.ice.org.uk/cmgr) or feel free to contact us for advice at [cmgr@ice.org.uk](mailto:cmgr@ice.org.uk)

### Forthcoming events highlights

Date	Event	Bookings
14 June 18.00, Wakefield	<b>ICE Yorkshire and Humber AGM</b> Refreshments from 17.30	Please visit: <a href="http://www.ice.org.uk/events">www.ice.org.uk/events</a>
14 June 18.30, Wakefield	<b>Brexit Debate</b> In or out? What will be the best outcome of the EU referendum for civil engineering and society in the UK?	
24 June 13.00-14.00, online	Lunch and Learn webinar <b>Talking Climate: How to Communicate Climate Impacts to the Public</b> Jenny Cooke CEng MICE, Senior Asset Engineer (Geotechnics) at Network Rail	
29 June - 4 August	<b>Fast-track Career Appraisal workshops</b> Four-part event in York	
12, 13 and 19 July	<b>Supervising Civil Engineers' (SCE) forums</b> 12 July 13 July 19 July Leeds (18.00-20.00) York (12.00-14.00) Sheffield (12.00-14.00)	
19 September - 21 November	<b>Fast-track Career Appraisal workshops</b> Four-part event in Leeds	