

New Civil Engineer

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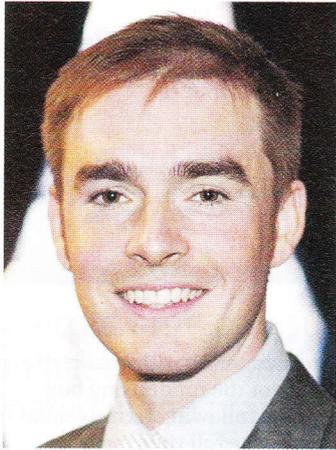
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FUTURE LEADERS STEP UP

BRIGHTEST YOUNG STARS RECOGNISED AT
NCE'S GRADUATE AWARDS 2013

COVER STORY: NCE GRADUATE AWARDS



Third Place
Neill Brauders

"Water engineering is my passion," Mott MacDonald graduate engineer Neill Brauders told the awards judges. From a child helping to design a new drainage system for his dad's flooded garden to, next year, hoping to see his design of an interactive hydro power model centre stage at a Science Museum exhibition encouraging young engineers, he has grabbed every opportunity to develop his passion.

On the way he has had two papers published by leading water journals. Both were the result of university research, but could not have been on more diverse subjects – *The behaviour of Irish river banks* was followed by *Remote rainfall sensing techniques for Ecuador's rainforests*.

His career so far has included two universities. At Dublin's University College, the walls of his flat boasted half a dozen certificates for prizes and awards. His favourite is for leading the team that created a simple model demonstrating hydroelectricity.

At Dublin he founded a now 400-strong civil engineering society because, he says "they didn't have one". He also captained and developed the kick-boxing club – his other passion – turning it into Ireland's largest martial arts organisation.

From Dublin, Brauders progressed to an MSc in hydrology and water resource engineering at Imperial College before joining Mott MacDonald's water and environment division. Here he heads up the company's Young Professional's Excellence Network. His role is to organise industry seminars, breakfast talks and away-weekends, all designed to inspire Mott's 300 graduates in his division.

WINNERS CELEBRATE

Six of the best from the class of 2012 graduate civil engineers were praised in front of 200 invited guests.

1. Winner Joe Smith with ICE President Geoff French and guest presenter Michael Portillo
2. Awards secretary David Hayward rallies the audience
3. Portillo championed the civil engineer's role in building the world's railways
4. Guests enjoy the awards lunch
5. French challenged the graduates to "engineer the world of the future"
6. The winners celebrate

The 2013 NCE Graduate Awards are sponsored by:

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Now 26, Brauders is the youngest member of the British Hydrological Society's national committee – an achievement bettered only by being asked, a few months ago, to join the ICE's Water Expert panel.

Since his judges' interview he has spent several weeks in Egypt advising the country's water resources department. And early next year he hopes to be relocated to Pakistan as a resident engineer on a £100M irrigation project.

- Graduate civil engineer, Mott MacDonald
- 2:1 MEng University College, Dublin
- MSc Imperial College

"Confident, articulate and an excellent communicator He grasps every opportunity"

Judges' comments



Highly commended
Amy Wright

Amy Wright is the only female engineer to make the final six and the only contractor. "The thought of sitting at a desk all day fills me with fear," says the 23 year old Sir Robert McAlpine graduate. "For me it is vital to physically see things being built."

The basic living conditions of villagers in the African kingdom of Lesotho, which she saw when a school trip took her to visit an

orphanage, left the 17 year old questioning her future. And a quote from TV botanist David Bellamy did the rest.

He had claimed the world can only support 1bn people, Wright told the judges. The fact that it is now supporting 7bn is due, in part, to the resilience of nature and, in part, to the work of civil engineers, Bellamy had concluded.

Swapping a biology course at Nottingham University for civil engineering was, she says, her most sensible decision yet. Funded at university by Sir Robert McAlpine, through an ICE Quest scholarship, Wright immediately started checking out what she could do for such needy people.

"I had difficulty finding an existing project that matched my interests and skillset, so I set one up myself," she says. "A trip to Malawi, and over 50 interviews with locals, identified a very remote village where electricity could transform the lives of its 1,000 inhabitants. A year later, Wright had found 30 like-minded undergraduates, coordinated the design of a hydropower and solar