

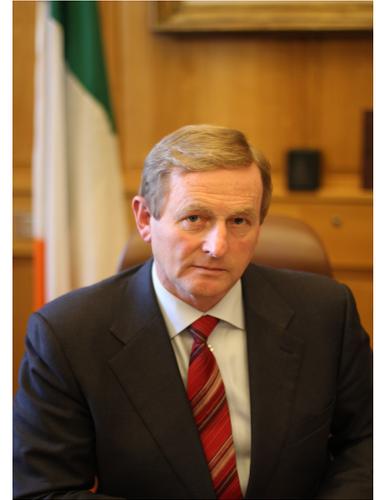
Engineer's Newsletter

from the UCD Engineering Graduates Association

Issue 2 | October 2013



An Taoiseach to open EGA Panel Discussion



The 2013 Autumn Panel Discussion on 'Engineering Manufacturing and Job Creation in Ireland' will be led by An Taoiseach Enda Kenny. The event will take place on Tuesday October 22nd, starting at 6:00 p.m. and will be chaired by EGA President PJ Rudden.

The Panel will consist of four leading Irish entrepreneurs whose firms are creating sustainable jobs in indigenous Manufacturing. Ian Quinn, Creganna-Tactx (Galway), Martin Mc Vicar, Combilift (Monaghan), Philip O'Doherty, E&I Engineering (Donegal) and Edmond Harty, Dairymaster (Kerry) area leading companies that work across the biomedical, mechanical, electrical, agricultural and transport engineering sectors. Each will tell their story and advise on how best we can grow manufacturing to increase employment in Ireland. After the discussion, Professor Gerry Byrne, UCD Dean of Engineering will briefly outline the UCD Strategy to support indigenous manufacturing.

EGA President PJ Rudden said "This is an important national event as we celebrate the growing indigenous employment manufacturing which is slightly over 50% of all manufacturing in Ireland. Two of our four panellists won the Ernst & Young Entrepreneur of the Year in the last 15 years. All are top global providers in their niche areas. All are outstanding Engineers who are creating very significant indigenous employment mostly in relatively small rural centres throughout the country and in our cities also. We therefore foresee that the employment sector represented at this event will continue to be a strong dynamic for the national economic recovery that appears to be already under way. We are confident that this Panel Discussion will make a strong contribution to that recovery in terms of highlighting what industrial policy is working, together with a reconfiguration of what needs to be tackled to create a dynamic new platform for job creation going forward."

If you would like to attend the Panel Discussion on October 22nd at 6pm, please register with ega@ucd.ie.

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EGA Gold Medal Winners Announced

This year's graduating classes in Engineering were conferred with their degrees in early September at a ceremony in O'Reilly Hall. As has become tradition, the conferring was preceded by the Annual EGA Gold Medal Ceremony.

The gold medals are each sponsored by an industry partner to UCD and are presented to the student who achieved first place in their graduating class in each of the branches of Engineering and Architecture.

This year the 7 Engineering Gold Medals were awarded to Claire Dunne, Ian Kenny, Eoghan Power, Conor O'Malley, Raymond Carley, Robert O'Donoghue and Brian Kealy in Biosystems, Chemical, Civil, Electrical, Electronic, Mechanical and Structural Engineering with Architecture respectively. These Gold Medals were sponsored by GEA, Helsinn, RPS, Airtricity, S3, CRH and ARUP respectively. ARUP also sponsored the Architecture Gold Medal which was awarded to Andras Dankhazi. All were present to accept the Medals except Brian Kealy who is currently working in the US and was represented by his parents at our event.

There were also a number of additional prizes awarded for Civil, Chemical & Bioprocess, Electrical, Electronic and Mechanical Engineering

sponsored by Roughan O'Donovan, Pat McAdam, PM Group, Mark Carthy, Cylon and Institution of Mechanical Engineers (Rep of Ireland Branch). Prize winners here were Eoghan Power, Sharon Quigley, Aisling Brazel, Sheila Courtney, Donal Finegan, Killian McKenna, Adrian Walsh, Claire Lambe, Philip Flahavan, Fionnan McNamara and Robert O'Donoghue.

The prizes were presented by representatives of each of the sponsor companies. In his Welcome Speech, EGA President PJ Rudden emphasised the importance of engineering to everyday life in terms of energy, water, transport and communications. While congratulating the award winners, he focused on the need for us to communicate that message to the wider public, given that it is engineers who are driving our national recovery in terms of the manufacture and export of biopharma, ICT, biomedical and other engineering products.



At the presentation of the EGA Gold medals were (L-R) UCD Dean of Engineering Prof. Gerry Byrne, Ian Kenny (Chem), Robert O'Donoghue (Mech), Andras Dankhazi (Arch), Claire Dunne (Biosystems), Raymond Carley (Electronic), Eoghan Power (Civil), Conor O'Malley (Electrical) and EGA President PJ Rudden.

UCD Energy Institute Launched



Dr Hugh Brady, President of UCD; An Taoiseach, Enda Kenny TD; and David O'Reilly, UCD Engineer and CEO of Chevron

The new UCD Energy Institute was recently launched by an Taoiseach Enda Kenny. The Institute has attracted donor funding of €5m as well as substantial additional funding from industry.

It will host over 200 world class energy researchers working in partnership with industry and the energy policy community and builds on prior research investments by SFI, EI, EU and importantly, industry in this area. The Energy Institute will concentrate its research on Energy Systems Integration; this will provide the basis for enhanced energy performance, reduced cost and minimised environmental impact – a challenge across the world. The Institute will partner in a major national initiative designed to produce a fully operational Smart Grid Network Test Bed in close collaboration with Ireland's electricity transmission and distribution system operators EirGrid and ESB Networks. The Test Bed will also provide opportunities for further collaboration with national and international companies in the energy sector and in the ICT sector. The integration of renewable energy to electricity grids is a

strategically important research area for Ireland given its wealth of renewable energy resources and Ireland's electricity grid is uniquely positioned to be utilised as an international location for testing new technologies.

An Taoiseach, Enda Kenny, T.D. said "We are at an exciting juncture in energy research. With the right ideas, talent and support, the next decade has the potential to be transformative in how Ireland produces, uses and transmits energy. UCD's new Energy Institute will prove an invaluable resource in solving our energy challenges and realising new opportunities. This initiative clearly demonstrates the ability of our public institutions to work together and with other stakeholders in pursuit of common goals and scientific excellence."

Dr Hugh Brady, President, UCD said, "Energy research is a strategic priority for UCD and establishing the UCD Energy Institute reflects of our on-going commitment to this important area. This is a highly competitive field internationally and we are proud of our research leaders who have built a strong reputation for research excellence on the world stage that can now realise benefits for Ireland." The UCD Energy Institute will be led by Professor Mark O'Malley as Scientific Director and Paddy Teahon as Executive Director.

The Strategy for the Institute was developed by the UCD Energy Advisory Board led by David O'Reilly, UCD Engineering graduate and former CEO of Chevron. It builds on the reputation of UCD as a leading centre for energy research, in particular UCD's Electricity Research Centre supported by leading energy companies and its Petroleum Geosciences research supported by Tullow Oil and other oil industry companies and groups.

David O'Reilly, Chair, Energy Advisory Board, UCD added, "I am delighted that the Institute is now up and running. I am confident that it will attract high calibre researchers who will help propel Ireland to a leadership position in energy research."

Engineers Picnic 2013

The EGA together with UCD Engineering hosted the UCD Engineers' Picnic on Saturday August 24th in Belfield's beautiful Rose Garden. An initiative undertaken by the EGA as part of The Gathering, the Picnic created the perfect opportunity for former students of UCD Engineering to reconnect with their past classmates and lecturers.

With the hope of attracting graduates and their families from near and far, invitations were sent out across the nation and overseas, while the event was promoted in all forms of social media and in the press. Generous sponsorship was granted by Eircom, the ESB and Eirgrid leading to the slightly controversial suggestion that the affair could be now considered a picnic of the 'electric' variety.

As the 24th of August dawned, the fine warm weather that Ireland had enjoyed for much of the summer, and that had been promised in the forecast only days before, didn't look like it was going to materialise. But at least it was dry.... Or it was until the first guests began to arrive at the Rose Garden at four o'clock, when the drizzle started to fall and continued to sprinkle sporadically as the evening went on. However this did little to dampen the spirits of close to a hundred and fifty guests, as they tucked into a delicious spread of barbequed beef, chicken & fish, fresh salads and decadent Eton mess. Overall there was a brilliant cross section of generations and sectors in attendance, and it was wonderful to see so many children enjoying the visit to UCD.

Among those in attendance were a group

of classmates from the graduating BE class of 1988 who were delighted to use the Picnic as a chance for a reunion.

Light entertainment was kindly provided by very talented home-grown musicians from the UCD Jazz Society and the UCD Trad Society. Just across from the Rose Garden, the Institute for Global Irish Studies housed a fantastic poster display detailing some current UCD Engineering projects and also provided some much needed shelter from the showers. In addition, several team members from UCD's Electricity Research Centre's innovative ENI programme were on hand to talk guests through their research, initiatives and their overall aim to educate the Irish people on our country's energy needs, usage and potential. Three of UCD's student ambassadors were enlisted to give campus tours to any guests who wished to see for themselves the expansions and developments that have changed the face of Belfield over the last few decades. As the evening drew in the guests dispersed, some moving on into town to continue the reunion celebrations.

Robyn Kelly is an EGA Board Member and a Scheduling And Dispatch Planner on the Domestic Water Metering Services & Works with Murphy Group.



Engineers Picnic: Photo Gallery



Maria Blair, Gerry Byrne, Anne Morrissey, Seamus McCague, Anne-Marie McCague, PJ Rudden & Domhnall Blair



A future engineer?



Liam Connellan & Friends



EGA President PJ Rudden, Mark O'Malley and ENI Students



UCD Engineering Graduates



Guests enjoying the picnic

To see more photos [click here](#)

International: Australia

by Meadhbh Bolger



I graduated from UCD in 2011 with a BE in Civil Engineering. For the past 2 years I have been working and travelling in Australia. The idea of doing further studies or staying in Ireland after graduating did not appeal to me. After sitting in a lecture theatre for the majority of the previous 4 years I wanted to get out there, see the world, and learn and develop in a practical way.

It has been a time of contrasts here. From working with the giant fossil fuel industry on a port expansion project, to assisting in developing a Zero Carbon Australia project with a climate change research organisation, I have got an insight into both sides of the divide in Australia. On one side, there is the largely single-minded view of Government and industry on continuing to mine fossil fuels. On the other, the frustration of many that the advice by Lord Stern in the Carbon Tracker Report that we need to leave 80% of the world's fossil fuels in the ground to avoid catastrophic climate change is being overlooked.

Five months after arriving in Australia, I was offered my first engineering job on a large dredging project in Gladstone Harbour, Queensland. As a site environmental engineer, I was managing the placement of dredge material in the disposal area, using mapping, sampling and analysing. Aside from learning a huge

amount, some of the practices and occurrences that I witnessed during my time there gave me serious cause for concern about the risk of damage to the marine wildlife in the harbour. This concern, in addition to knowing the immense impact for climate change that the project at large would have (the expansion was to allow more coal and gas exports to occur), led me to say goodbye to the project after seven months without regret.

With more certainty than ever that we need to transition to 100% renewable energy as soon as possible, I moved to Melbourne (a "hub for greenies") in December 2012 and joined two organisations – Quit Coal (part of Friends of the Earth) where I have been working on community organising, raising awareness and campaigning to stop the expansion of coal and unconventional gas mining in Victoria, and Beyond Zero Emissions, a climate-change research organisation. I worked there as an engineer in a voluntary capacity on the Zero Carbon Australia Transport Plan, a blueprint on how the country can transition its transport systems to near-zero carbon emissions within 10 years. The transport plan is part of a range of blueprints across all sectors, intended to show that a zero-carbon society is possible within a short time frame.

What I have learnt and experienced to date will certainly shape my future career path and wider life decisions. In my opinion, awareness of the importance of climate change issues and how they should influence decisions we make in everyday life and work needs to be emphasised more in universities, companies and the broader community.

If you're a UCD Engineer and would like to give your opinion on what you see as important developments in the world of engineering then please email ega@ucd.ie.

"With more certainty than ever that we need to transition to 100% renewable energy as soon as possible"

Review: Panel Discussion 2012

The 2013 EGA Panel discussion will take place on October 22nd and will be led by an Taoiseach Enda Kenny.

It would seem timely then to look back at last year's event which addressed the theme "Can We Shape Ireland's Recovery on the German Model" and was chaired by UCD Engineer and broadcaster Pat Kenny. The Panel of distinguished speakers included Dr Eckhard Lubkemeier (German Ambassador to Ireland), Stephen Donnelly (UCD Engineer & TD for Wicklow), Prof Brigid Laffan (UCD Jean Monnet Professor of European Studies), Dr Brian Sweeney (former Chairman of Siemens) and Prof Gerry Byrne (UCD Dean of Engineering).

Dr Lubkemeier led with a speech which was both frank and informed on the German approach to the Euro Crisis. He started with a given - "Germany is the economic powerhouse of Europe as well as the anchor of the Euro zone". However, he went on to say that the German economic model may not suit every country, as each country has its own cultural and political history. "Our exports are worth 40% of GDP and manufacturing alone accounts for 26% of GDP - whereas, in France, it is 13% and 17% in the UK", he stated. Dr Lubkemeier summarised the strengths of the German system in terms of high tech quality products, comprehensive workforce training, innovation through R&D, a diversified economy and social partnership.

He defended the German approach to the crisis, stating "when Germany is being accused of imposing austerity on others, a German Ambassador cannot afford to let pass the opportunity to comment", before continuing "This crisis offers the opportunity to put the

Euro and our economies to order. Germany needs Europe and Europe needs Germany".

On the Euro, he concluded that "better to have a common currency that provides protection against erratic capital flows and enhances the efficiency of the internal market".

A lively debate ensued where the panellists discussed the key issues such as the need for institutional reform in Ireland; the role of social partnership; the need to recover competitiveness; the importance of investment in engineering research and long-term economic planning. There were also numerous questions from the large audience and the discussion continued at a wine reception that took place after Pat Kenny closed the debate. The debate was resumed at a later date by Pat Kenny with Dr Lubkemeier who brought the discussion to a national level on Radios 1's Today with Pat Kenny. Further details on the event are available [here](#).



Dr Eckhard Lubkemeier and Stephen Donnelly TD



Pat Kenny, Chairman of the UCD EGA Panel



Speakers; Brigid Laffan, Dr. Eckhard Lubkemeier, Prof. Gerry Byrne, Dr. Brian Sweeney, Stephen Donnelly TD and Pat Kenny



EGA President PJ Rudden with graduates who attended the Panel Discussion

AGM Details Announced

This year's AGM of the Engineering Graduates Association will take place on November 18th in the UCD Engineering & Materials Science Centre. The agenda is currently being finalised and one of the key issues to be discussed will be the adoption of the EGA Strategy 2013.

This year the EGA Board have been developing the strategy under 4 broad headings: Education, Membership, Finance and Marketing. Board Subcommittees were set up for the 4 areas under the Chairs of Peter Brabazon, Michael Loughnane, Tony O'Brien and Karina O'Neill respectively. A number of iterations of the strategy document have since been developed and the final draft version is now available on the EGA website [here](#).

The most radical change to the EGA approach is the focus on the quality of Education in the broadest sense. This will be our primary future role to assist the UCD College of Engineering to

realise its place as one of the leading Engineering Schools in Europe. Driving this ambition is the new 5 year Masters of Engineering (ME) in Biosystems, Chemical, Civil, Electrical, Electronic and Mechanical Engineering in accordance with the Bologna European Agreement which will confirm our graduates as among the best in Europe.

To support this ambitious role a new Membership and Funding Plan is introduced on a phased basis over the next year. This is intended to give us many new members and will be backed up by a new Marketing Plan to help realise the new approach.

To facilitate all of these changes, some amendments to the EGA Constitution will be required. This is currently being prepared and will be posted shortly on the new EGA website [here](#).

All paid-up members of the EGA are entitled to attend the AGM; make sure to come along and have your say. The AGM will take place at 6:00 p.m. on November 18th and in the UCD Engineering & Materials Science Centre.

Join the EGA [Click here](#)

Once you've graduated, you don't have to say goodbye to UCD Engineering for good - with UCD's EGA (Engineering Graduates Association) you can still benefit from many of UCD's facilities and maintain a connection with UCD Engineering, its staff and your classmates while you venture into further study or the working world.

To qualify as an Engineering alumnus and apply for EGA membership, you need to be a UCD Engineering graduate or have studied Engineering at University College Dublin for at least one year at either undergrad or postgrad level. Current and former members of staff are also eligible to apply.

Membership of the EGA entitles members be informed of and attend Engineering-specific events (Annual Lecture, Distinguished Graduate Award, EGA Gold Medal Ceremony, Autumn Panel Discussion), receive the quarterly EGA newsletter in addition to receiving a copy of UCD's unique alumni magazine, UCD Connections. The magazine is published annually and is a great way to keep in touch with UCD, find out news and stay informed.

As well as this, EGA members can avail of discounted rates on adult education courses and discounted access to UCD's indoor and outdoor courts - tennis, squash, handball amongst other activities. You are also entitled to reduced membership of the new 50 metre pool - we can arrange a free day pass if you would like to try it out before joining.

Membership rates are as follows: €25 - member; €20 - overseas member, €250/€500 - corporate members.

We look forward to welcoming you at an EGA event very soon!

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