

Diversity and Inclusion in the North West

IChemE North West Members Group has decided to address diversity issues within the Chemical Engineering sector starting with a webinar on Diversity and Inclusion.

Diversity is any aspect that can differentiate groups or individuals from one another.

Inclusion is a state where people and groups are valued, respected, supported and socially accepted enabling them to achieve their full potential.



The key idea of the webinar is to present the understanding of Diversity and Inclusion within the IChemE North West group.

Diversity is often primarily considered in regards to race and gender only, however this definition is a bit narrow and exclusive for today's global world. The definition of diversity is larger and other aspects/dimensions of diversity are required to be highlighted. The webinar aims to present a broader definition meaning of diversity.

Aspects of diversity

- Gender
- Age
- LGBT
- Race, ethnicity, religion and belief
- Disability
- Family and relationships
- Social mobility
- Equality and diversity in higher education

Everyone in society has a role to play in ensuring that individuals are valued, treated with dignity and respect and that discrimination does not occur. Every member of society is responsible for ensuring they read and implement the relevant policies, objectives and working practices linked to equality of opportunity and diversity.

The webinar intends to present people's outlook on the topic from the different stages of their careers. The speakers are: students, teachers, professional engineers and retired engineers. This diversified group will present their understanding and experiences in their own words.

This webinar will provide a wider vision of attitudes and understanding within the North West members of the IChemE. The Webinar also aims to present simplified definitions and unified approach to promote diversity and inclusion practices based on the experiences from the people.

The **IChemE North West Members Group** intends to present more events on the topic not only limited to Chemical Engineering. Reader's comments and suggestions are encouraged, for more information on the webinar or to get involved please email

nwmgecm@ichememember.org

Keep checking for details of the upcoming Diversity and Inclusion webinar in your email inbox!

FIDDLER'S FERRY POWER STATION VISIT



The tour of Fiddler's Ferry Power Station was a huge success and was very popular. It was attended by approximately 25 people. It gave attendees an insight into how, when and why the plant operates, taking into account peak usage times and the impact of the UK moving away from conventional coal powered electricity generation. It was hugely successful and there is a potential for it to become an annual event.

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ICHEME NORTH WEST GROUP NEWSLETTER

NORTH LANCASHIRE UPDATE

The 2017-18 talks program got off to a strong start at North Lancashire, with a fascinating talk on the science of Absolute Zero.

The evening's proceedings were led by Dr Ian Bradley, a Reader in Physics at Lancaster University, who discussed the physics of absolute zero and the technology used to reach it. Dr Bradley went on to discuss the variety of interesting phenomena which are revealed as you approach 0K, and their potential uses for both academic and industrial research. He illustrated the talk with a description of the technology used, some of it developed and improved locally at Lancaster University.

The final talk of 2017 was given by Dr. Les Gornall, a leading designer of anaerobic digesters.

Dr Gornall began his talk by encouraging the audience to consider these reactors as living ecosystems rather than conventional process units. He also covered the sustainability and ethical considerations of generating biogas anaerobically from vegetable matter, addressing the key point that this process should be seen as sustainable. The suitability of various feedstock materials was considered, including that arising from household or agricultural waste, and digestible waste from industrial processes. Dr Gornall's enthusiastic conclusion was that the bio gas sector was advancing rapidly, in both technical and economic terms, and that bio-energy generation is a potentially realistic replacement for fossil fuels energy supplies.

Our next event will be a talk on the challenges of waste recycling, presented by Mr Sam Haig of Axion Recycling PLC. This will take place at Barton Grange Hotel, at 18.30 on the 28th February.

The North Lancashire group are also currently undergoing a reinvigoration process. Following a very successful appeal for volunteers in 2017, the North Lancashire group is now working to increase the number and diversity of events we can arrange. We have started to work more closely with the new Chemical Engineering faculty at Lancaster University, with a view running events tailored to their students. We believe the experience our members can bring will be beneficial to student Chemical Engineers, and look forward to arranging both social and technical events.

A number of North Lancashire members have also expressed an interest in becoming involved in STEM events and representing the profession, and we're working hard to facilitate them in getting involved.

2018 will no doubt be an exciting time for the North Lancashire members group, and we look forward to welcoming you to our events.

For more information please contact Peter Macalpine at: pmacalpine@sky.com

Did you know that there are 570 ICbemE members across all levels of the North Lancashire branch?

WHYNOTCHEMENG TALK AT RHYL HIGH SCHOOL



Peter Swanson, Chair of the Chest group delivered an interactive workshop at Rhyll High School as part of the WhyNotChemEng school and career campaign for 14-19 year olds. The feedback from the school was very positive, giving a useful opportunity for the students to gain an insight into the world of Chemical Engineering. The display included the very popular LEGO cup cake production line, in addition to various products that require specialist chemical engineering input in production.

whynotchemeng is funded by university and corporate support. Why not encourage your company to support the campaign and raise its profile amongst the next generation of chemical engineers.

For more information visit www.whynotchemeng.com



CHESTER UPDATE

The Chester Group has had a successful six month period covering various events and topics. The committee continues to maintain close connections with the University of Chester in addition to North Wales. Recent events included Electronics in Horticulture- The Plant is in Control (20th February), Emerging Energy Technologies – the OxyGen process (21st November) and Application of inherent Safety (5th December 2017). All of the events were held at the University of Chester's Thornton Science Park free of charge to all attendees.

The Chester and North Wales MG continues to help with the Science Industries Process Plant Engineer (SIPPE) Degree Apprenticeship committee.

For more information please contact Peter Swanson at: peterswanson120@btinternet.com

ICHEME NORTH WEST GROUP NEWSLETTER

CUMBRIA BRANCH UPDATE

The IChemE Cumbria Member Group have enjoyed a busy recent period, with our Annual General Meeting, appointment of new committee and a Christmas social event.

We were lucky that Jon Prichard, IChemE Chief Executive, attended our AGM to deliver the keynote address. Delivered to an audience of approximately 40 Chemical Engineers at our regular venue (The Beacon Museum in Whitehaven), Jon spoke for an hour, reflecting on his career to date in the military and the Engineering Council.

Jon reflected on lessons that he has learned and drew parallels with his current role at IChemE. In the second part of his talk, Jon appraised the current health of the IChemE and set out his vision for the future.

The formal aspect of our AGM preceded Jon's talk, when we had the opportunity to look back on the successes of 2017, which included:

- Visit to Florence Mine in Egremont to learn about iron ores
- Leadership skills talk for young professional engineers
- Visit to the NNL Workington facility focussed on robot technology
- Webinar for the IChemE Water SIG on effluent technology
- The science of coffee making at the Moon and Sixpence in Cocker-mouth
- Two inter-institutional pub quizzes raising money for charity
- Innovia Films in Wigton to see plastic film manufacturing
- Supported Nuclear Vision conference and Cumbria STEM Big Bang Fair

Attendees participated in the nomination and election of a new committee:

- Chair – Toby Cushion
- Secretary – Emily Vincent
- Treasurer – Phil Murphy
- Communications – David Oakley
- STEM – Kim Williams
- Events – Jenny Sykes
- Mentor coordinator – Lee Marquis

We have held two committee meetings since the AGM and are all motivated to plan a stimulating forward programme of events for Chemical Engineers in the area. The first of which is planned for 28th February to focus on Building Resilience and Personal Effectiveness. Personal resilience enables individuals to deal with pressures, setbacks and challenges whilst maintaining performance and well-being and it is arguably the most important resource for coping well during challenging times. This interactive taster session aims to explore what resilience is and what it means to us, as well as look at ways in which we can strengthen our own personal resilience. During the session we will explore skills that will increase personal confidence to bounce back from the many of today's pressures.

WARRINGTON AND WIDNES UPDATE

The Warrington & Widnes Group is half-way through its events calendar. The talks and events organised thus far have been very well attended. The calendar was kicked off with a tour of the Fiddler's Ferry Power Station, which was hugely popular. The remaining events have included talks on Graphene – Challenges and Applications, History and Future of the Water Industry and the annual joint Get Chartered event with the Chester group. Upcoming events include technical talks on Biological Treatment for Odour Control, Selection & Sizing of Safety Valves and The Roll of Rolls Royce in Nuclear New Builds to take place in February, March and April respectively.

Do continue to keep an eye out for our quarterly email update regarding events which may be of interest by other institutions, such as a Climate Change: Challenges, Consequences, Actions by Manchester University or Empowering Women in the North West by the ICE. The Warrington & Widnes committee is very much an active group always looking to keep members and local Chemical Engineers informed on interesting topics.

For more information please contact Phil Egan at:

philegan2000@hotmail.com

For more information please contact Toby Cushion at: cumbria-chair@ichememember.org

If you are interested in joining any of the regional groups (Manchester, Chester, North Lancashire and Warrington & Widnes) or to join the North West Committee please email:

nwmgecm@ichememember.org

MANCHESTER BRANCH UPDATE

The Manchester group has around 1500 local members of all grades of membership. There are a great deal of local schools and industry, together with Manchester University and media contacts at the BBC in Media City. This is a great mix and should provide ample opportunity to advance Chemical Engineering and STEM in the Manchester/Cheshire area. The group's core activities include organisation of technical events supporting CPD, providing networking opportunities (social events), promote membership of the IChemE and progression through the grades, and liaison with local schools. Additionally, supplementary activities include liaison with local Universities, local industry, media, and promotion of science technology and diversity in engineering. Organized events include Biogas to Grid: Going Beyond Energy Neutrality (27th Feb - Cheadle), Robinson Brewery Tour (9th December- Stockport) and Tarmac Tunstead Works Tour (8th Nov- Buxton).

For more information please contact Martin Hyde at: martin.hyde@ghd.com

NORTH WEST GROUPS

Group	Name
North West	Alex Allen
Manchester	Martin Hyde
Warrington and Widnes	Phil Egan
North Lancashire	Peter McAlpine
Chester	Peter Swanson
Cumbria	Toby Cushion

ICHEME NORTH WEST GROUP NEWSLETTER

STUDENT UPDATE — BY NICOLAE SOLTAN

Background

I am a final year student at the University of Manchester studying Chemical Engineering with Industrial Experience (MEng). I completed a one-year industrial placement (2016-2017) with BP at Saltend Chemicals Park in Hull.

the information learned in lectures, early on the course, I started to develop my practical engineering skills by working in teams on lab-projects, which were completed in a pilot plant. The picture below was taken during one of these projects and shows our team of students next to the enrichment section of a distillation column.

*University experience*

With only a few months left until graduation, I am reflecting back on the almost four years of university experience, which have passed so quickly.

“Engineers need to find the best practical solution in a limited amount of time.

Sometimes they only have hours or even minutes to make a decision.”

Throughout these years, the University of Manchester equipped me with the right knowledge and experience to become a chemical engineer, and provided opportunities for personal development through leadership courses and study abroad programmes in China and Switzerland.

The University has all the resources and facilities required to develop the future leaders in the chemical industry and beyond. In addition to

Year in industry

I have learned many things during my industrial placement at BP. I worked as a process engineer supporting the operations team of a relatively large manufacturing facility. The work pace in industry is very fast. As a junior process engineer you have a lot to learn and simultaneously complete important work. Engineers need to find the best practical solution in a limited amount of time. Sometimes they only have hours or even minutes to make a decision. Their judgement might affect the entire supply chain of the company.

Despite having busy schedules, senior engineers spend a significant amount of time sharing their experiences with the younger generations. Even though it is not necessarily included in their job description, one of their responsibilities is to contribute to the development of the new generation of engineers. I was encouraged to do the same in the future, and I certainly will.

*Engineering Your Future 2017*

Four events were held in Manchester, Warrington, Preston and Liverpool with attendance of over 400 students.

Anyone interested in taking part in 2018 or have any questions please email adil.farooq@costain.com

UPCOMING EVENTS

Event	Date
Engineering Excellence Dinners, Manchester	20th April
APM Joint Event, Manchester	May
Waste Recycling Visit to Axion plant, Manchester	Spring
Pub Quiz, Manchester	June
Annual General Meeting, Manchester	13th June

North West 5 a-side Football in Central Manchester

Anyone interested in taking part or have any questions please email:

nwmgecm@ichememember.org



NORTH WEST COMMITTEE

Name	Position
Alex Allen	Chair
Wadoud Hazineh	Vice Chair
Dariya Nurtazayeva	Secretary
Adil Farooq	School's Liaison
Milton Avila	Webmaster
Sam Haig	Treasurer
Vacant	Mentor Co-ordinator
James Winterburn	University Representative
Kirsty Donovan	Social Secretary
Anthony Greenough	Committee Member
Ajay Saxena	Diversity and Inclusion
Kavita Mohan	Diversity and Inclusion
Nicolae Soltan	Student Representative
Chris Horne	Student Representative

Institution of
**MECHANICAL
ENGINEERS**

hosted by

The Institution Of Mechanical Engineers

&

The Institution Of Chemical Engineers

IChemE ADVANCING
CHEMICAL
ENGINEERING
WORLDWIDE

The 2018 awards dinner will be a celebration of engineering excellence in the North Western Region of the UK, jointly hosted by the IMechE and IChemE.

The evening commences at 18.30 with a drinks reception followed by a 4 course dinner (inc. wine/soft drinks) at 19.30, awards ceremony, guest speaker, music and entertainment until late with 'Sweet Rhythm' Big Band, late bar until 1am and preferential Hilton hotel room rates. Dress Code – Formal Dress



We are delighted to welcome John Moutrie, Regional Chairman for Remap UK. John will inspire the audience describing the work that Remap carries out through its volunteer network helping disabled people to achieve greater independence.

Remap is a national charity that works through local groups of skilled volunteers – mostly retired professional engineers and occupational therapists. They help disabled people achieve independence and a better quality of life by designing and making equipment for their individual needs. This tailor made equipment helps people to carry out essential daily tasks without having to ask for help, or helps them take part in leisure occupations or sports that would otherwise be impossible. For more information visit www.remap.org.uk

Corporate Dinner Sponsorship Package

£1000 per table

- Table for 10 (4 course meal including wine/soft drinks)
- Pre-Dinner Drinks reception
- Premium table location
- Pop-up style company banner in the foyer
- Company logo on the table menus and other Dinner publicity
- Sponsors slide in multi-screen rolling presentation
- Sponsorship acknowledgement in post dinner publicity

As a corporate sponsor your sponsorship is enough to help purchase additional educational learning resources or support one of our many regional educational activities.

TICKET PRICES

IMechE/IChemE Members Table for 10 - £550

(At least one member per table booking)

IMechE/IChemE Members Ticket - £55

(Multiple tickets not guaranteed to be seated together)

Non-Members Ticket - £65

(Multiple tickets not guaranteed to be seated together)

Couples Ticket - £100

**Closing Date For All Bookings
Friday 30th March 2018**

Contact Details:

If your organisation would like to participate in the 2018 dinner event as a sponsor, or you would like to buy tickets please enquire by e-mail to IChemE NW Region Chair, Alex Allen email: alexander.allen@sellafieldsites.com

Note: Entries for the "IChemE NW Region Young Chemical Engineer of the Year" and "IChemE NW Student Design Project of the Year" open on 1st January 2018. For further information contact Alex Allen email: alexander.allen@sellafieldsites.com

Thank you for your support and I look forward to welcoming you to the Dinner.
Sincerely, Alex Allen CEng FIChemE