

# Spring 2022 Newsletter

Cumbria Members Group

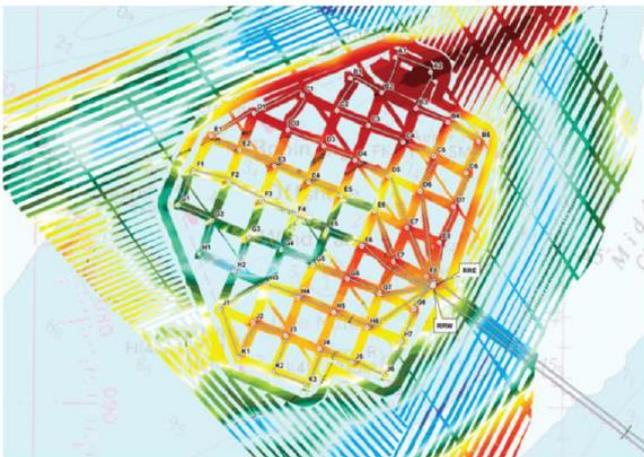
**IChemE** ADVANCING  
CHEMICAL  
ENGINEERING  
WORLDWIDE

*Welcome to the spring 2022 edition of the Cumbria Members Group newsletter. Our aim is to support the professional development of Chemical Engineers in our area, for all ages and levels of experience. In this issue we review our AGM, most recent webinar, and meet our new chair.*

## Robin Rigg Wind Farm Webinar

In March we organised a technical webinar on the Robin Rigg Wind Farm that's located in the Solway Firth between Galloway and Workington. Mike Edwards, the Wind Farm General Manager from RWE Renewables described how it is the first commercial-scale wind farm to be built in Scottish waters and contains 58 3MW Vestas V90 turbines, giving a total power output of 174MW. To make the best use of the prevailing wind, the turbines can rotate using a yaw gear and the turbine blade pitch is altered depending on the wind speed.

Mike explained how the wind farm is built on a sand flat which comes with its unique challenges. The average water depth varies between 4.5-13m and due to the constant changing nature of the sand, regular bathymetric surveys have to be undertaken so the water depth across the wind farm can be monitored; occasionally built-up sand has to be cleared from the base of the turbines.



*Robin Rigg bathymetric survey*

## AGM - Engineering Net Zero & COP26



Back in November our AGM keynote speech was delivered by Dr David Cole, Market Director for Net Zero Energy at Atkins. David presented a holistic engineering assessment of the UK's energy market with the aim of decarbonising the economy to achieve Net Zero greenhouse gas emissions by 2050. The key conclusions were:

- Net zero is achievable but the risk of failure is high
- The setup of an Energy System Architect is critical to Net Zero's success
- Carbon capture storage is critical to Net Zero but poses the biggest risk
- The anticipated levels of offshore wind are achievable
- Nuclear presents the lowest risk as a 'firm' low-carbon generator
- Hydrogen can be both an energy vector or store, but has challenges
- Energy storage is misconstrued as a solution to system balancing

## Meet Our New Chair

I have been a member of the Cumbria Members Group since 2017 and became Chair at the Annual Meeting in 2021. I graduated with a Masters from the University of Strathclyde in 2016 and joined the nucleargraduates programme which gave me a broad range of experience within the nuclear industry. I've been fortunate enough to work in decommissioning and operational sites all across the UK from the top of Scotland to down in the south west and even abroad to Australia and Canada. Within my current role as Decommissioning and Waste Consultant at Atkins, I provide a range of support to clients in Waste Management and Strategy, from opening new waste routes for problematic waste to conducting optioneering and detailed design.

As chair, I want to improve networking and bring sense of community back to our Cumbria Members Group events – something that was difficult to achieve remotely in the past couple years. I am really passionate about delivering a range of events and socials for our local members, as well as improve our outreach in schools to encourage students of all ages to consider a future in Chemical Engineering. I think as a group, we should also strengthen our links with other institutes in the area and potentially look to collaborate more in the events we organise.



## Upcoming STEM Events

We're looking for volunteers for local STEM events in Cumbria.

Please email [harry.brook@sellafieldsites.com](mailto:harry.brook@sellafieldsites.com) if you're interested in assisting.

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|--|---|
| 05/05/22 – Mock Interviews                   | – St Josephs RC School, Workington        |
| 12/05/22 – Virtual/in-person Mock Interviews | – St Benedicts RC High School, Whitehaven |
| 25/05/22 – Mock Interviews                   | – Netherhall School, Maryport             |
| 15/07/22 – World of Work Morning             | – Workington Academy, Workington          |
| 19/07/22 – World of Work Morning             | – Cockermouth School - Cockermouth        |

### Your Committee

Claire Johnstone – Chair	Harry Brook – STEM
Jenny Sykes – Secretary/Events	John Smallman – Mentor
Paul Sutton – Treasurer	coordination
Dan Pocock – Communications	

### Upcoming Events

Get Chartered  
Date TBC