## The Institution of Engineering and Technology - Lancashire and Cumbria Network Lecture Programme January 2025 - September 2025

Date/Time	Event Title:	Venue	Organised by & Contact	Speaker	Synopsis
Wednesday 8th January 19:30	Fire and Explosion Investigations	The Forum 28 Duke Street Barrow-in-Furness LA14 1HH	Organised by: IET/PESC Contact: Anne Morris (anne.morris@ietvolunteer.org)	Isobel Colclough Forensic Investigator	This presentation will provide an overview of the investigation of fires and explosions in a forensic context, including the purpose and principles of fire and explosion investigations and the many challenges facing forensic practitioners involved. Methods applied in the interpretation of fire and explosion scenes to determine the origin, nature and spread of these destructive events will be considered alongside the motivations of offenders and how they may or may not be evident in features of incident scenes.
Thursday 9th January 19:15	The Case for Carbon	Castle Green Hotel Castle Green Lane Kendal LA9 6RG	Organised by: IET/KDES Contact: Anne Morris (anne.morris@ietvolunteer.org)	John V H Sanderson CEng FIET Director of Power Engineering Consultants PLC	The Case for Carbon is about carbon capture and storage and then carbon utilisation and release of energy.  All this is presented using concepts in school science and, incredibly, it benefits those who live in parts of the world where food and water are scarce.
Thursday 23rd January 19:30	Development of Plastics and Elastomers for Sub Sea Connectors	The Forum 28 Duke Street Barrow-in-Furness LA14 1HH	Organised by: IET/BDAE Contact: Anne Morris (anne.morris@ietvolunteer.org)	<b>Michael Jesckhe</b> Siemens Energy	Mike is going to take us through 30 years of processing, the interesting world of processing plastics, rubbers and composite materials for renewable applications, packing applications and aerospace automotive and we're going to have some fun!
Thursday 6th February 18:30	TSR2 - Cock-Up or Conspiracy	The Samlesbury Hotel (Garner Hotels) The Canberra Suite Preston New Road Samlesbury Preston PR5 OUL	Organised by: <b>IET</b> Contact: <b>Mike Bell</b> (Michael.Bell@ietvolunteer.org)	Mike Flynn	The speaker, Mike Flynn, is an experienced ex RAF fighter pilot, who was probably destined to fly the TSR2. This was not to be and Mike will give his personal view on the various factors that led up to the controversial cancellation in 1965 of, arguably, the most advanced strike aircraft of its time – cost, performance, innovation, politics, in-fighting, opposing cultures, information, disinformation, missing information, speculation. Mike will discuss what is known about the unprecedented decision to order the breaking up of the prototypes, the destruction of the drawings, tooling & jigs? And why did some airframes survive?
Wednesday 12th February 19:30	Living on the Moon, Farming on the Moon	The Forum 28 Duke Street Barrow-in-Furness LA14 1HH	Organised by: IET/PESC Contact: Anne Morris (anne.morris@ietvolunteer.org)	<b>Dr Anne Visscher</b> Kew Gardens	For human space missions that extend beyond one or two years, resupply of large volumes and masses of food, water, and atmospheric gases becomes unrealistic. Therefore, long-duration future habitation of space will require bioregenerative life-support systems in which plants could play key roles, including atmosphere regeneration, wastewater recycling and food production. The use of in situ regolith as a seed germination and plant growth substrate may have several advantages over hydroponic systems, such as the immediate bioavailability of plant essential ions, low-tech mechanical support for plants, and easy access to in situ materials once on the surface. Since plants may play several key roles in long-term life support systems on the Moon or Mars, it is crucial to know how plant seeds should be stored and transported across space before being germinated and grown in such systems.
Thursday 13th February 10:30	Smart Meters	The Well Community Hall 99 St Albans Road St Annes FY8 1UZ	Organised by: IET/St Annes PROBUS Contact: Mike Bell (Michael.Bell@ietvolunteer.org)	John Cowburn BSc CEng FIET	The government has mandated that every household in Great Britain will be offered a smart meter by 2020. The talk will cover what led to this decision and what benefits the customer gain by having them fitted. It will cover the technology employed and why there are two generations of meter, why customers cannot switch energy supplier with the first generation and why the second generation is years behind schedule. It will also cover the issues of data privacy and cyber security, the risks to critical national infrastructure associated with the roll out of the first generation smart meters and how these issues have been mitigated in other countries.
Thursday 20th February 11:00	BESS Solar Farm/Battery West Moss Lane, Ballam	The Villa Wrea Green Kirkham PR4 2PE	Organised by: <b>IET Retired Members</b> Contact: <b>Suzanne Flynn</b> (suzanne:flynn@ietvolunteer.org)	Ali Gulrez Head of Technology Lower 48 Energy BESS Ltd	The speaker will be talking about the landscape of UK electricity system, and how it has evolved over time. The advent of large-scale renewables and the challenges to the electricity grid they have introduced. How grid scale Battery Energy Storage System (BESS) are crucial part of the puzzle and how they are overcoming the problems introduced by growing penetration of renewable energy. Why companies like Lower 48 Energy are needed to catalyse more investment in renewable sector to reach net zero. The outlook for the future and how a renewed grid would look like and how it would benefit the consumers.
Thursday 20th February 19:30	Robotics and Al Collaborations	The Forum 28 Duke Street Barrow-in-Furness LA14 1HH	Organised by: IET/BDAE Contact: Anne Morris (anne.morris@ietvolunteer.org)	<b>Dr Kirsty Hewitson FRSC</b> Director RAICo, UKAEA	The presentation will provide an overview of the importance and progress made with recent robotics and AI (RAI) collaborations within the nuclear sector that enable safer, faster and more cost-effective mission delivery. RAI examples will cover areas such as remote handling, size reduction and digital infrastructure. Social value and impact will also be highlighted.