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VOICE OF THE EXPLOSIVES INDUSTRIES

EXPLOSIVES ENGINEERING



This Month's Features:

The Institute's first female fellow

RVA Group facilities complex demolition project for French energy leader

Mitigating Subterranean Blast with Shielding

Reflections from the Ex-Defence OME Safety Regulator and CIE (MOD)

A Personal Journey Through the Evolution of Defence Testing



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DISCLAIMER: The opinions expressed in Explosives Engineering are those of the authors concerned. They do not necessarily represent the views of the Institute.

Front Cover: Image of the first edition of Explosives Engineering Volume 1 Number 1 published in Spring 1985.

Given our continued growth, IExpE are now registered for VAT. There will be no increase in Membership Subscriptions as these are exempt, however other services provided by IExpE will now be subject to VAT.

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The Science Inside



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Several IExpE Past Presidents met for a lunch in London on the 31st October 2023



The Institute's first female Fellow

We spoke to Julie Softley, the Institute's first female fellow, about her career, experiences and aspirations for the future within the sector.

Career background

I started as an electronics apprentice at RARDE Fort Halstead in the late 80's, and I have had a number of roles in and around energetics within the Defence industry since. I am now lead the SQEP development for OME within Dstl, which includes the OME Apprenticeship.

What does it mean to yourself to be the first Institute female Fellow?

My first reaction was one of surprise, I hadn't realised that we didn't have any female Fellows. Then I felt proud to have pushed another boundary for women in engineering. Over the last decade the explosives industry has become much more diverse, so I am hopeful I will be joined by other women at all levels within the explosives sector.

What changes would you make to help the sector become more diverse?

We need to consider the language and our behaviour around diverse groups within the industry to retain them. As a female in a male dominated industry, I don't like my sex to be why people remember me or change their behaviour, and I am not sure many females do. I want to be treated and respected for my contribution, not for what I wear, my fragrance or how I look.

What first attracted you to the sector?

I wanted to be an engineer, and I sort of fell into explosives because I did my apprenticeship at RARDE Fort Halstead, and explosives was what they did. I enjoyed the practical element of explosives, and in my early career I did a lot of explosives trials and really enjoyed the fact that you needed to really consider what you were doing at each step of the task, and predict/pre-empt what was going to happen. I enjoy the challenge.

What are your career highlights?

Being part of the team that built the OME apprenticeships and watching it grow into a way of attracting people into the industry, and providing them with a measured and structured training pathway.

What are your future aspirations within the sector?

I am passionate about safety, and have an unhealthy natural interest in understanding what went wrong



in accidents. Many accidents are as a result of a number of small things going wrong, due to standards or knowledge dropping over time, these eventually come together to create an unplanned incident. Good training and understanding can usually prevent these occurrences, so finding ways of working together to attract, learn and retain scientists and engineers into a career within the industry is my driver and aspiration.

“Finding ways of working together to attract, learn and retain scientists and engineers into a career within the industry is my driver and aspiration.”

What do you see the industry looking like in 10 years?

I am hopeful of growth that will enable us to grow the capabilities like new manufacturing methods, and a more sustainable environment for research within energetics.

Do you have any advice for those in their early career entering the Sector?

The sector is growing, there are loads of opportunities so if where you are isn't working, don't leave the sector, find somewhere within the industry that does work for you. There are a number of places to look: the IExpE jobs page, speak to the emerging professional working group through Vincent Coombs or discuss placements across the industry with Dr Lisa Batchelor from Cranfield University.

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*With effect from the 50th Annual General Meeting on the 3rd May 2024

Mystery Item

Can any Member help identify the item pictured in the images below or provide any information on its historical value.

Please provide any comments or information you may have by email to isseykelly@iexpe.org.

**Letter to the editor**

I read with interest Roland Alford's article in the September 2023 issue of Explosives Engineering, regarding his company's successful demolition of the 2nd boiler unit at Didcot under very difficult circumstances. He and his team did an amazing job.

I would take Roland to task over one comment he made in the article though. He suggested the use of linear cutting charges "...had never been embraced ..." in the UK by demolition engineers. This is quite untrue. I, and I am sure many of my fellow explosives demolition engineers, used explosive linear cutting charges (CLC) on steel framed structures, where applicable, for decades. In fact if Roland were to look back to a past issue of Explosives Engineering he would find a paper

I presented on explosive demolition in which I described in detail how to use CLC's for dropping steel frame structures. I cannot remember how long ago that was though!

My preferred CLC from the 1980's was Dartcord made by Haley and Weller then latterly we used Blade but found it much less efficient, hence the need for higher charge rates, resulting in greater air over pressure levels.

However I did not have to prepare the structures and place charges remotely, as Roland did, and I applaud him for his success.

Mark Hatt FIEPE, MIDE (Rtd)

Renowned demolition expert Richard Vann honoured with prestigious IDE fellowship

In a momentous recognition of his dedication and contribution to the demolition industry, Richard Vann, founder and managing director of RVA Group, has been granted the esteemed title of Honorary Fellow of the Institution of Demolition Engineers (IDE).

The announcement, made on behalf of the IDE Membership Committee, is a testament to Vann's four decades of unwavering commitment to both safety and excellence in the field.

Effective from 10 November 2023, Vann will be entitled to a lifetime membership with the Institute, and can proudly append the initials Hon.FIDE after his name.

Upon receiving the news, Vann elaborated on the significance of the award: "To be acknowledged by one of my peers is deeply humbling. This fellowship is not just a recognition of my work, but a testament to the dedicated team at RVA Group – reflecting our collective commitment to elevating safety and quality standards in the demolition industry. After 40 years in the space, this award will rank among my career highlights. I feel immensely proud."

Recognising a void in decommissioning project management, Richard Vann's brainchild, RVA Group, sought to place greater emphasis on end-of-life processes. He saw that, while construction projects were meticulously planned and executed, decommissioning works were often relegated to the background, marked

by inadequate resources, insufficient training, and dangerously tight schedules and budgets.

Assembling a team of engineers and project managers – each a leader in their respective disciplines – he has since led the charge to help redefine standards for complex project handling. At the core of RVA's operations lies an unwavering principle: the safety and wellbeing of every individual involved. Vann's dedication to ensuring that every colleague returns home safely every day has become the guiding light of RVA Group.

Under Vann's leadership, the global consultancy has successfully completed over 900 assignments worldwide, including front-end engineering and decommissioning projects in the Kingdom of Saudi Arabia more recently. Collaborations with major brands include BASF, INEOS, Engie, ConocoPhillips and GSK.

Vann's visionary approach has not only reshaped industry standards but has also garnered international acclaim. His hat trick appointment to the British Demolition Awards' judging panel this year further demonstrates his influential role in shaping the future of the sector.

The Institute of Demolition Engineers hosted a presentation ceremony at this year's Annual Luncheon on 10 November, where Vann was presented with his certificate as an Honorary Fellow.



The Ammunition Technician Phase 2 Graduation Ceremony

December 2023

The Defence Weapons Ordnance Munitions Explosives (WOME) Engineering School (DWES) celebrated the graduation of the Class 103 Ammunition Technician Class 2 Course with a lunch on Wednesday 6 Dec 23 where the 'Top Student' prize, sponsored by the Worshipful Company of Gold and Silver Wyre Drawers was awarded to Private Conall Hammond.

This is the first time that a 'Top Student' prize has been awarded for this course. The aim of this award is to celebrate the academic excellence achieved by an individual who is a Non Commissioned Officer in the first years of their service and who are in the process of studying for their Modern Apprenticeship Level 4 qualification in Ordnance Munitions and Explosives; Ammunition Technicians are the only soldiers of this rank in the British Army to study at this level.

The Worshipful Company of Gold and Silver Wyre Drawers have supported the commissioned Ammunition Technician Officers for many years and they thought that it was appropriate to recognise the hard work of the non-commissioned cohort as well, which is how the top student prize has come about.

The affiliation between the Worshipful Company of Gold and Silver Wyre Drawers and the British Army can be traced back to the Royal Army Ordnance Corps which was merged in the Royal Logistic Corps in 1993. Thus, whilst the affiliation is with



Official photograph of the presentation: Chris Ratcliffe; Lt Col Steve Roberts; Mike Gunston; Private Conall Hammond; Mike West; Phil Egerton.

the whole Corps the focus is on Explosive Ordnance Disposal, hence, their interest in the ammunition technical education.

After completing Phase One Basic Military training where individuals learn to be a soldier, they then move to Phase Two training to learn their trade as an Ammunition Technician. The education delivered at DWES sets the Technicians on a journey to earn a Modern Apprenticeship Level 4 in Ordnance Munitions and Explosives, and subsequently gain the 'Engineering Technician' competence from the UK Engineering Council. It is from the formal recognition of their training that the Worshipful Company of Gold and Silver Wyre Drawers wish to celebrate the achievements of these impressive soldiers.

Contact Details

To ensure you never miss out on essential updates, news, & membership renewals it's crucial to keep your contact details up to date. We regularly communicate via email, & if you're not receiving our messages, it may be time to reach out & update your contact info.



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An abstract geometric pattern composed of numerous black and white triangles of various sizes, creating a complex, crystalline structure that occupies the bottom left portion of the page.