

Issue 4

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Institute of
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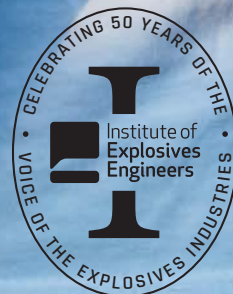
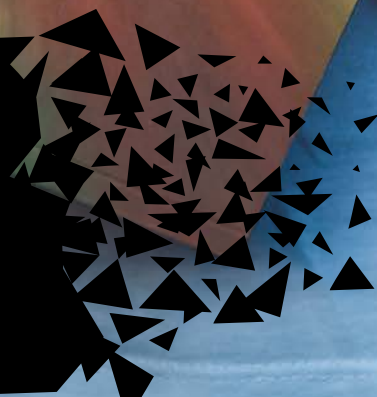
VOICE OF THE EXPLOSIVES INDUSTRIES

EXPLOSIVES ENGINEERING



This Month's Features:

Mechanical Detection of Explosive Remnants of War with Multitool
Growing the Next Generation of Explosives Experts within Dstl
Investigation of Helmet Test Methods & Structural Testing Rigidity
The Development of Modelling Software for The Pyrotechnic Industry



Board Member Vacancies

If you wish to apply for election to the **IExpE** Board for the session 2025 – 2027 commencing at the AGM on Thursday 24th April 2025, please complete and submit the nomination form together with an election statement confirming the reason you are seeking election to the **IExpE** Board.



SCAN HERE

The nomination form is available at: www.iexpe.org/board-election or by scanning the QR code here.

Applications should be submitted by email to vickihall@iexpe.org, or post to Institute of Explosives Engineers, Ground Floor, Unit 1, Greyfriars Business Park, Frank Foley Way, Stafford, ST16 2ST by the 6th January 2025.

Your IExpE Membership is due for renewal

31st December 2024

An email has been sent to all members with details on how to renew.
If you have not received anything, please contact the **IExpE** office for more information.

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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 an archived edition of Explosives Engineering published in March 2014.

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.

Our Corporate Members



End of Year Message

from the IExpE President, Martyn Sime



As we move towards 2025, I would like to welcome all our members and colleagues working elsewhere in the sector to this, our first digital, 'the President speaks'. Along with our move to the production of the journal as a principally digital publication this is part of the Institute's efforts to deliver its environmental policies as well as acting as a responsible

custodian of your membership fees.

For those of you who don't know me I am Martyn Sime and became president in May this year and I would like to take this opportunity to look back at some of the Institute's highlights of 2024 as well as looking forward to some of the events and developments planned for 2025.

I was very lucky that after I took on the role of President at May's AGM that my first official duty was to attend the Institute's 50th Anniversary event at Farnham Castle. It was great to see so many members, their spouses, partners and friends at the event, and to speak with members who have supported the Institute's development so we now confidently sit as a licensed member of the Engineering Council and are the principal body for professionals working across the range of industries that makes up the explosives sector, not only in the UK but also increasingly around the world. As always, the Institute's office planned and delivered an event of real value to members, allowing us to share memories and look to the future in a convivial atmosphere.

The professionalisation of the Institute's office showed its value in so many other ways throughout the year including by helping to organise and supporting networking events put on by several of our corporate and company members, and by providing the secretariat to the Sector Skills Strategy Group, in addition to their 'day job' of ensuring that the membership application process runs smoothly and that we continue to deliver the standards of professionalism set down by our own constitution and by the Engineering Council.

The feedback that I have heard from the networking events has been universally positive and I would like to thank the corporate and company members who hosted them, as well as the speakers and the members who attended. One of the strengths of a professional body like ours is that we can all learn from the experiences of colleagues working in different parts of the sector, from the problems they have faced, the setbacks they have overcome and the solutions to scientific and engineering problems that they have identified. The willingness of

our corporate and company members to bring members together to share and learn is one of the many things that makes me proud to be a representative of our sector and I encourage others to help existing and future colleagues by hosting networking events in 2025 and beyond.

This year's other very successful opportunities for networking included the Dynamite dinner and discussion afternoon in September and a very enjoyable members weekend in October.

The members' weekend was, as always, a huge amount of fun. For those of you who have not had chance to attend yet, as well as being an excellent networking opportunity where you can learn new things in a very informal and relaxed atmosphere, it's also a great opportunity to bring a family member, significant other or a friend to an event that gives them a taster of what we do across the sector. We also enjoy a very social dinner, make new friends and build relationships that benefit us both inside and outside work. I very much encourage you to set aside the time to come next year. You will enjoy it.

The Dynamite dinner and discussion afternoon brings together the Institute's fellowship to discuss topics that are seen to have particular relevance to the Institute and the sector. This year we were able to develop our technical understanding of tunnelling and shaft sinking, an increasingly rare skill but one of continuing relevance in the civil explosives sector. We also considered the challenges that discussion highlighted in the context of the sector's wider approach to delivering competence to new entrants and existing employees by way of modern apprenticeships. What was clear was that the efforts of our corporate members and the SSSG, working in partnership with academic providers like the University of Wales Trinity Saint Davids and Cranfield University have given us some of the tools that the sector needs if it is to address the demographic challenges it faces. But there is still a long way to go to get all those businesses and organisations who would benefit from the modern apprenticeships to recognise their value and to start using them to develop their employees, not only via the apprenticeship route but also by using their structure and content to provide that sound foundation in the basic properties of explosives and energetic materials that mean that industry and government can improve their safety, efficiency and effectiveness.

One of the real highlights for me was that this year's Dynamite dinner and discussion afternoon was attended by our first female fellows. In my day job as a Principal Inspector with the Health and Safety Executive's Explosives Inspectorate I get to see how valuable diversity, in all its different forms, is to professional organisations, how it reduces the risks of group-think, improves approaches to problem

solving and how its positive promotion opens up new routes to the recruitment and development of skilled and competent people. Diversity is something that I feel strongly about and so I have also been pleased to see how the Institute's Women in Explosives Group, established by board members Emma Willes and Ruth Barber, has started to explore how we can make the sector more attractive to women, and encourage more women to apply to become members in general and Fellows in particular.

Taking a look into 2025 our office team led by Vicki Hall and directed by our Executive Officer Dave Welch, will be working hard, along with some very dedicated members to deliver member benefits like professional registration, the members weekend, the Dynamite dinner and networking events as well as building on the success of previous events by way of Fulmination 2025. Fulmination has very quickly become the flagship conference for the sector and I strongly recommend that you attend if you have availability. As always there will be a strong selection of speakers covering a wide range of topics and attendance at Fulmination is ideal for demonstrating continuing professional development and for meeting people to discuss matters of mutual interest. You should start to see more about Fulmination 2025 as we move into the new year and I encourage you to book your place early.

Other areas where you are likely to see more from the Institute in 2025 are in our offers on the accreditation of training and development, our profile in using STEM outreach as a mechanism for attracting school leavers to the sector and the revalidation of National Occupational Standards that has been undertaken by the Institute's corporate and company members. If you are interested in seeing how this work develops or finding out more generally about Institute news and events, make sure that you follow us on your social media of choice for regular updates.

Both in my day job and in my role as president, I get to see, almost every day, how the Institute can and does contribute to maintaining and improving standards in our sector. The more members we have, the louder and stronger our voice and the better we are able to provide benefits to you, our members, represent your interests and ensure that the sector, the people in it and the contribution that we make to society are recognised and understood. So my ask of you is that you speak to colleagues in the workplace or who you meet in the sector, tell them about the Institute and let them know about joining so that we can be their voice too.

Finally, I would like to wish you and yours seasons greetings and a peaceful, prosperous and enjoyable new year.

Welcome to our New Members

New Registrants

Auke van der Velde - CEng
Edward Clinton - CEng
Shane Clancy - CEng
Robrecht Schmitz - CEng
Robin Kennerley - EngTech

New Members

Associates

John Joyce
Heather Reid

Technical

Taha Nazir
Charlie Sanderson
Daniel Tan
Sean Tilmanns
James Walsh
Emma Walsh
Weng King Yuen

Retired Member

Alan Hudson

Students

Breacon Hoadley
Libby Jones
Jamie Kirkhouse
Ergul Palas

Members

Christopher Allen
Alison Beardah
Thomas Beswick
Ross Brown
Benjamin Bryant
Charlie Coates
William Dewar
Rhys Dobbs
Lynn Donnachie
Mark Elson

Robin Gillespie
Nicholas Goldsworthy
Marcus Heather
Harry Holland
Stefan Hurst
Daniel Jeyes
Alex Kennington
Graham Lawrence
Guy Moverley
Thomas Murphy
Amy-Jayne Newman
William PNG
Ah Tong Sim
Eric Tan
Liam Tobin
Inoke Veikune
Ben Wright

Christmas Closing

The IExPE office will close at 13:00 on Friday 20th December 2024
and reopen at 08:00 on Thursday 2nd January 2025.

We wish all our members a very Happy Christmas and New Year.

National Three Peaks

On September 24th, Kieran Wusthoff, Marcus Baker-Wells, Tom V., and Kris Bhudoye MIEpE embarked on the National Three Peaks Challenge in support of MacMillan Cancer.

This challenge involves summiting the highest mountains in Scotland, England, and Wales — Ben Nevis, Scafell Pike and Snowdon. Their effort was dedicated to their university lecturer, Gareth Collett CBE, CEng, PhD, FIEpE, in honor of his strength and resilience following his cancer diagnosis.

The team successfully completed the challenge on September 25th, reaching the summit of Snowdon at 7:00pm. They would like to express their deepest gratitude to everyone who generously contributed, helping them surpass their fundraising goal. Special thanks are also extended to Sarah West, Assoc CIPD, and the Early Careers department at QinetiQ for their invaluable support in making the challenge possible.



On behalf of all OME students, they would also like to thank Gareth for his unwavering dedication to their education, even as he undergoes treatment.



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IExpE Dynamite Dinner

17th September 2024

We extend our sincere thanks to all the Fellow Members and Past Presidents of the Institute of Explosives Engineers who attended the Dynamite Dinner on September 17th, 2024.

The event was a resounding success, featuring engaging presentations, valuable networking opportunities, and concluded with an evening drinks reception and private dinner.

Key discussions during the event included a detailed presentation on Drill and Blast Techniques at the Woodsmith Mine Shaft Sinking Project, delivered by Neil Webster FIEpE. Additionally, Gareth Collett FIEpE and Emily Hunt led an insightful talk on Future-Proofing the Industry through the development of education and training initiatives, with a special focus on apprenticeships.

The evening continued with a formal black-tie dinner, where Fellows enjoyed a three-course meal and drinks in a refined setting. During the event, Kenneth Cross FIEpE was presented with an Honorary Fellowship in recognition of his significant contributions to the industry. Stephen Roberts FIEpE was awarded the President's Award for his continued support to IExpE as the military representative working closely with the IExpE team.

The Dynamite Dinner proved to be a successful occasion for our Fellows. We encourage those who believe they meet the criteria for Fellow within IExpE to consider upgrading their membership and joining us for Dynamite Dinner 2025.



Become Professionally Registered



IExpE Member, Ben Scarfe, an Ammunition Technical Officer with the British Army, explains the reasons and benefits of becoming a Chartered Engineer with the Engineering Council.

I am a commissioned officer within the Royal Logistics Corps having joined the Army in 2010. I have specialised in Explosive Ordnance Disposal having completed the Ammunition Technical Officer Course in 2015. I was initially Edinburgh EOD Troop Commander at 11 EOD and Search Regiment, where I was responsible for providing EOD support across Scotland in support of the Police. It has also made me more confident to challenge or provide advice when working with others, who may not have understood my credentials without me being a registrant. More recently I have worked at Defence Equipment and Support where I was responsible for Army Light Munitions. In my spare time I enjoy running as well as playing and watching football and cricket. I am a Blackburn Rovers fan, something which in general has been a source of great disappointment to me.

Why did you want to become Professionally Registered?

I was keen to professionalise my experience within the explosives industry in recognition of the hard work and dedication put into my working practice as an explosives engineer. As far as 'hands on' experience with explosives goes, I think the military gives Ammunition Technicians and Ammunition Technical Officers a great skill set and technical understanding which makes us strong candidates for Professional Registration. Having had a broad exposure to everything

from legacy munitions from the first world war through to complex modern weapon systems and Improvised Explosive Devices, this technical grounding has paid dividends to allow me to conduct myself safely. I felt that by demonstrating the path to gaining chartered engineered status, I could encourage others within the military to take their experience and apply it in a body such as the IExpE. I felt it would also allow me to assist others through this process.

How has being Professionally Registered improved your career prospects and employability?

Within the military it doesn't have a massive impact on career as the training and qualification is recognised and understood. However, I am currently in the process of leaving the military, and the CEng status is something I will be looking to leverage as I seek new employment opportunities.

Does having Professionally Registered Postnominals lead to higher levels of self-esteem and improved confidence and why?

I think it does. For me, leaving school with limited success in academia, it gave me a real boost to be able to achieve something tangible based on the experience I have gained in the military. This is especially true with regards to completing the academic engineering, science and mathematical elements of the Ammunition Technical Officers Course. It has also made me more confident to challenge or provide advice when working with others, who may not have understood my credentials without me being a registrant. For example, when working at Defence Equipment and Support, I was often the only military representative in a civilian team. By being able to show my professional registration, it allowed me to demonstrate my knowledge and add robustness to the arguments I was making when speaking with civilian staff and industry partners, and I knew that I would be listened to and respected because of my CEng status.

In your opinion does being Professionally Registered give you a greater influence within the industry?

In my current role I don't feel this is applicable, but as I look to move into the commercial sector post military, I will definitely look for roles where I can leverage my professional accreditation to improve working practices and make meaningful changes for the better.

CONTINUE READING...

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OUR LATEST JOURNALS**

BECOME A MEMBER

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