Imperial ENGINEER

MENTORING
CGCA DINNER
BOTTLE MATCH
SOUTH AMERICAN SAGA
CLEMTENARY PART2 – DINNER
MOUNTAINEERING IN PAKISTAN
GREAT EXHIBITION ROAD FESTIVAL

For members of City & Guilds College Association
and The Royal School of Mines Association

ISSUE 44 *Spring 2026*

ISSUE FORTY-FOUR
Spring 2026

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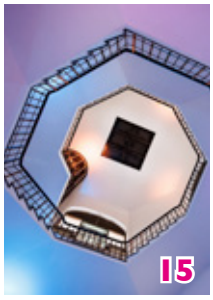

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Cover image: The motorised mascots (Bo, Clem, Derrick, Jez) lined up for Clem's Centenary Dinner at the British Motor Museum (see p18) – Photo by Max Bedford Photography

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Photo by Andrew Lunn Photography

Kelvin Higgins

We are currently reflecting on the success of our annual dinner held in Grocers' Hall in the City of London. It was a truly impressive setting as you can see in the picture above and it was great to see Bo in attendance even if a little help with the journey was needed! Our principal guest was the Rt. Hon. Greg Clark who gave us a very entertaining address based on correspondence with one of the organisers; there was a degree of embellishment, but this reflected well on the members of the Association. It was certainly an event not to be missed. I hope that everyone enjoyed it as much as I did. We have already started planning the 2027 event and I am able to confirm that the date will be 12th March 2027, with the venue to be announced in the next few weeks so watch for newsletters, together with posts on our website and LinkedIn.

Continues overleaf…

PRESIDENTS REPORT

Paul Holmes

I am fortunate to be drafting this report while overlooking rolling countryside, warmed by the strengthening spring sunshine, yet mindful of the geopolitical and economic uncertainties that shape the world we share. These challenges are, unquestionably, a concern. Nevertheless, I remain convinced that the education, curiosity, and fellowship I encountered at the Royal School of Mines – as a student and later as a young Mining Engineer entering a diverse, adaptable, and demanding profession – instilled a resilience that I continue to draw upon today.

Working closely with the current RSM Union team, I am pleased to report that these qualities endure. While the student experience has evolved, shaped by heightened financial pressures and a tightening graduate job market, the College continues to develop leaders of whom we can be justly proud.

As an association, the executive team remains committed to strengthening our engagement with members dispersed across the globe and to ensuring the RSMA remains relevant in a changing world. Our aim is twofold: to maintain the friendships forged during student days and to support current students so that, upon graduating, they feel inclined to join the Association and ultimately support future generations in turn. Relevance, however, is a demanding taskmaster.

We recognise a generational gap among graduates from approximately 2000–2020 – many of whom are now building careers and families and for whom time is understandably scarce. Even so, the RSMA continues to seek dedicated individuals to join our committee. If you can spare a few hours every couple of months, we would be delighted to hear from you. You may reach us at **rsma@imperial.ac.uk**.

We are fortunate to have a strong and committed committee, and as we adapt to remain relevant to current students, I have every confidence that the Association will remain vigorous and resilient.

This year brings with it several notable anniversaries. The Royal School of Mines marks its **175th year**; *Clem*, our beloved Morris Commercial Truck and RSMU mascot, celebrates its **centenary**; and the Department of Earth Science and Engineering reaches its **25-year milestone**. The Department and the College are organising a series of themed public-facing events to showcase the outstanding work undertaken within ESE, aimed at alumni, staff, students, and the wider public. As details become available, I will share them through my bi-monthly updates.

On Thursday, 5th February, the RSMA was pleased to support the RSMU at the annual Careers Evening. The event was exceptionally well received, with a full room of students from all year groups engaging with eight outstanding speakers representing diverse career paths – Rolls Royce, JPMorgan, a former Jaguar CEO, two innovative start ups, and SkyGeo among them. My sincere thanks to all alumni who contributed to this success.

Continues overleaf…

DIARY

RSMA Toronto, Canada
Informal RSM meeting
Last Friday of every month, noon.
Jason George Pub,
100 Front Street East, Toronto
Contact: rsma.1851@gmail.com

RSMA Perth, Australia
Monthly Sundowner
First Friday of every month.
The Celtic Club,
48 Ord St, West Perth, WA, 6005
Contact:
Alan Dickson – alan@dickson.com.au
John Sykes – johnpsykes@gmail.com

Imperial Alumni, Houston, US
Alumni social
Third Thursday of every month, 6pm
Capital Grille, 840 West Sam Houston Pkwy N, Houston, TX 77024
Contact: Matt Bell – matt@in2oilandgas.com

Imperial Engineering Alumni, Johannesburg, South Africa
Quarterly Johannesburg Lunch
(20th May, 19th Aug, 18th Nov, 17th Feb,)
Baron & Quail, Woodmead, Johannesburg, South Africa
Contact: Richard Gundersen – Gundersen@yebo.co.za

CGCA
AGM
Saturday, 6th Jun 2026, 11:00 for 11:30
Room 427 Skempton building:
Also available for attendance via Zoom.
Followed by
New President's Talk
Saturday, 6th Jun 2026, 12:30
"The Power of Mentoring to enrich, encourage and inspire"
Eastside Bar & Restaurant area, Prince's Gardens:

Great Exhibition Road Festival
Saturday 6th – Sunday 7th Jun
Exhibition Road & Kensington Gardens
Free festival of arts and science led by Imperial with Albertopolis institutions.

All Alumni & Guests
Alumni Lounge at GERF
Saturday 6th Jun, 10:00 – 17:00
Eastside Bar & Restaurant area, Prince's Gardens.
Refreshments and cash bar.

CGCA/RSMA
Traditional Reunion Luncheon
Saturday 21st Nov, 12:30 for 13:00
Rembrandt Hotel, Sth. Ken. SW7 2RS
For all Imperial engineers who graduated in a year ending in a '6' or a '1' or groups from any set of years.
See booking form enclosed with this issue, or https://www.cgca.org.uk

RSMA
141st Annual Dinner
Friday, 27th Nov, 7:00 for 7:30
Rembrandt Hotel, Sth. Ken. SW7 2RS

CGCA
113th Annual Dinner
Friday, 12th Mar 2027
Venue TBC

An up-to-date calendar of events is always available on the CGCA and RSMA websites.

Imperial College maintains a calendar of college events at bit.ly/IE-WhatsOn

The Friends of Imperial College regularly organise events of interest to alumni (see bit.ly/IE-FoI)

Please note that while many of these events are open to all and often free, they usually require registration in advance. Follow links in the entry for more information, if and how to register and if there is any cost.

For more information follow links, or see page 2 for contact details

Kelvin Higgins, continued from page 3

Photo by Andrew Lunn Photography

Our next event is the AGM which will be held in Room 427 of the Skempton Building on the 6th June at 11.30 am. This is the weekend of the Great Exhibition Road Festival which has extended beyond the bounds of Imperial to include Kensington Gardens. We have joined the RCSA to hire a room in Eastside for Alumni to visit. There will be catering and Roger Preece, our Vice-President, will give a talk on mentoring. So, if you are an Alumni wanting to mentor students or a student looking for a mentor you should attend. Roger's talk will follow the AGM, but the Eastside room will be available between 10am and 5pm.

The Reunion Lunch will be held at the Rembrandt Hotel in November. The Hotel is just opposite the V&A museum which as you know is just a short walk from Imperial. This year features the years '6' and '1' but if you can form a group of 5 or more you would also be welcome. I have always enjoyed this event; it is good to hear of past crimes and misdemeanours associated with mascots which have occasionally involved the local constabulary! Very entertaining.

In my last report I mentioned that we are making some changes to the subscriptions. We will be writing to everyone about this, but we are intending that the rate for members will become £30 per year and the rate for students will become £1 while an undergraduate and remain at that level for 3 years after graduation. We are switching from payment by standing order to payment from direct debit. However, you will be advised of the changes by email later in the year.

Finally, I would like to welcome James White to the Committee. He is taking over the Membership role and will also help Allan with the Treasurer's role. James' enthusiasm is welcome and is certainly a breath of fresh air.

We are still looking for volunteers to help run the Association and expand our offering to our members. Any suggestions that you have about events that we could offer would also be welcome we just need help organising them.

Kelvin Higgins
President, City and Guilds College Association

Paul Holmes, continued from page 3

Though spring has only just begun, plans are already firmly in place for the **RSMA Annual Dinner** on Friday, 27th November 2026, at the Rembrandt Hotel, Knightsbridge. I encourage you to save the date. This year, we are honoured to welcome **Professor Sir Robin Grimes**, Steele Chair of Energy Materials at Imperial College and a non executive director of UKAEA, as our guest speaker.

In this edition, you will find several reports that I trust will be of interest. Over the weekend of 21st February 2026, RSM students made their bi-annual pilgrimage to Cornwall, where the Camborne School of Mines hosted the Bottle Match Weekend. Despite the customary Cornish rain and a wonderfully muddy pitch, RSM Rugby secured their **third consecutive victory**, which proved decisive in clinching the **overall weekend win for the second year running**.

As previously noted, the committee continues to maintain strong engagement with the RSMU and with key societies such as Geology, MatSoc and GeoPhysicsSoc. These clubs and societies are the lifeblood of the RSM, and the wider student body is feeling the strain of increasing financial pressure. The RSMA plays an important role in ensuring these groups continue to thrive. Thanks to your annual membership fees and generous donations – either directly to the Association or through the 100 Club – we have already awarded **£4,900** this year to support RSMU activities.

We are also receiving a diverse range of applications for funding: from educational initiatives and global expeditions to artistic pursuits. It is a privilege to support such breadth of endeavour.

I hope you find this issue both informative and engaging. I look forward to welcoming many of you back to the Royal School of Mines and to our forthcoming RSMA events. Your continued support is deeply valued and sincerely appreciated. Please do share your news with us – we will ensure it reaches the wider RSM community.

Warm regards,
Paul Holmes
President, Royal School of Mines Association

CGCA AGM Saturday 6th June 2026

The CGCA AGM will start at 11:30 am (UK time) on Saturday, 6th June, in room 427, Skempton Building (aka Civ Eng) on the Imperial South Kensington Campus. (Note: the room will be open from 11:00 am.)

This year's AGM will see **The Venerable Roger Preece**, our current Senior Vice President take over as President from **Professor Kelvin Higgins**. Kelvin is stepping down after two years at the helm of City & Guilds College Association.

Roger is an alumnus of Imperial College and Oxford University and was one of the founders of Capco, where he led strategic projects for financial services internationally. His banking operations and technology experience included product development, IT Director roles and COO roles at a number of financial services companies including Sumitomo Bank, Bank of America and NatWest/RBS.

In recent years, he has been working in the not-for-profit sector as a Church of England priest, Archdeacon, Chair of St Rocco's Hospice and a Director of a Multi Academy Schools Trust. In 2019 he was appointed by Her Majesty, Queen Elizabeth II to be the 68th Master of the Royal Foundation of St Katharine, one of the oldest charities in the world (est. 1147), which runs a retreat centre and meeting space in central London. Roger conducts retreats here and also oversees significant community work in East London. He is also a partner in Energising Leaders a coaching mentoring practice.

The agenda for the AGM will include:

- A review of the last year by Kelvin
- Presentation of the Accounts for 2025
- The hand-over of Presidency to Roger
- Election of Honorary Secretary and Honorary Treasurer for 2026–27
- Election of CGCA Officers for 2026–27

If you wish to stand for any of the election roles and join the team that runs CGCA, please contact the Hon Sec, Nigel Cresswell, with your name, contact details and role(s) you wish to stand for. (email guildsHS2018@outlook.com)

A ZOOM session will be available for those unable to attend in person. Details will be posted on our website and social media closer to the day.

The AGM should conclude by 12:00. This will be followed by the New President's Talk at 12:30.

New President's Talk

Starting at 12:30, in the Eastside Bar & Restaurant area, your new President, Roger Preece will deliver an informal talk on "*The Power of Mentoring to enrich, encourage and inspire*". How to be a good mentor and how to be a good mentee and attract good mentors into your life.

One of the joys of being an alumni of Imperial is having the chance to share your knowledge, wisdom and experience with current students and recent graduates. As a Mentor, it is fascinating to be alongside a younger person and to see the world through their eyes. To learn from them the latest trends and technologies and to allow them to share some of their latest, up to date learning. Mentoring is incredibly rewarding, because a small amount of effort can really make a difference to someone's development and opportunities.

As a student or recent graduate, the world after university can be very uncertain and challenging. Identifying a chosen job path and being able to find the right opportunities is not easy. In the world of AI powered job applications and AI recruitment process, the need for personal connections is even more precious. As a younger person how do you find people who can help? How do you approach them and how do you make it easy to be supported. There are some basic principles that will help you build a network of great relationships that will support you in your career journey.

This lecture will explore the tips and techniques of being a great mentor and also ideas around how to be the perfect mentee.

After the talk, there will be an opportunity to have lunch and to mingle with students and alumni sharing their experience and ideas. There is no obligation to offer or receive mentoring, but some alumni might like to offer some one-off meetings to start the process.

Roger Preece is an executive coach/mentor with Energising Leaders, an international partnership of ex Boardroom execs who are passionate about leadership and inspiring energy at all levels in an organisation. He graduated in 1983 from Imperial Elect Eng and was mentored by Rod Rhys Jones – a CGCA alumnus. Rod encouraged him in his search for a role in the City of London and introduced him to a friend who helped him get his first interview with an investment bank. See energisingleaders.com

If you as an alumni are interested in perhaps being able to come and spend time on the day with students or maybe on another occasion offer a one-off meeting or maybe a few mentoring sessions – please could you drop an email to roger.preece@energisingleaders.com – with your areas of interest, degree subject and particular topics you are happy to share knowledge around.

New Senior Vice President

We are very pleased to announce that Barney Rhys Jones (Civ Eng 1994) will become Senior Vice President of City and Guilds College Association at the AGM.

In his career, Barney has led large-scale transformations focusing on turning complexity into clarity, and data into decisions. At Octopus Energy Generation, Barney is driving the build of a next-generation decision intelligence platform: integrating AI, data, and automation to unlock faster deal-making, sharper asset performance, and investor outcomes at global scale. Over 25 years, he has delivered growth and turnaround across renewables, energy, and utilities. Barney has been MD, COO, and Asset Director, managing £1.3bn in assets and £450m in transactions, and cut his teeth as a Bain consultant before moving into operational leadership.

Barney is known for:

- Transformation with teeth – not just big concept thinking, but rebuilding operating models from the ground up while the bus is moving at 70mph.
- Data & AI integration – creating decision-intelligence platforms, embedding AI agents, and standardising fund/asset reporting.
- High-performance culture – reshaping team interfaces, delegating ownership, and building confidence in change.

Barney is recognised for thriving on complexity and the challenge of getting people aligned around bold ideas.

Barney Rhys Jones

The Alumni Lounge

CGCA's AGM and Roger's Talk, are on Saturday 6th June, the first day of the Great Exhibition Road Festival, so why not make a day of it, come to the AGM and Roger's talk and join in the fun of the Festival.

In support of alumni attending the Festival, RCSA and CGCA are jointly sponsoring an Alumni Lounge in the Eastside Bar and Restaurant on the ground floor of Linstead Hall, in Prince's Gardens off Exhibition Road. This is open to current students, staff, alumni and their guests across Imperial. **You will need your College ID, Name, email, Department and start year to register on arrival.**

The Lounge will be open from 10:00 to 17:00 on Saturday and will have tea/coffee, breakfast pastries and sandwiches available. There will also be a cash bar.

Drop in and see us when you want a break from the Festival activities.

CGCA 5 & 10 Reunion Lunch

The traditional CGCA "5&10" Reunion Lunch took place on Saturday 22nd November 2025 at the Rembrandt Hotel, just down the road from College. Held in a private dining room, lunch was a three course affair with wine. The event was attended by a total of 48 alumni, partners and guests, including six students and **Nicole Kempton**, Imperial's recently appointed head of Alumni Engagement.

The oldest members present were **Barry Hatch** and **David Hattersley**, both Civil Engineering graduates of 1955. Barry had organised reunions of their cohort celebrating 40, 50 and 60 years since leaving College. Now at their 70th anniversary, they both spoke not only about their time at Imperial in the fifties, but also the enormous changes in society and the world since then. David is a Past President of CGCA, an MBE, and tireless organiser of many events over the years – something that started in his first year at College. As Peter Chase put it, "he's organised more hot dinners than I've had hot dinners!".

As is traditional at these lunches, several other alumni spoke between courses about their time at College. We were delighted to have a group of ten 1975 Chemical Engineers, brought together by **David Barnes**, which included **Dame Judith Hackitt**, CGCA Past President. David spoke after the main course and reminded us that in the early 70s there were many industrial problems in Britain – but at least a pint of beer was only 20p! He was followed after dessert by **Karen Aylward** and **Martin Watson**, who had amassed an even bigger group of sixteen 1995 Chemical Engineers. One of their number, **Helen Hougham**, even brought her son Alex along, who is in his second year of Chemical Engineering at Imperial today. Finally, **Apollo Yang** – this year's CGCU Alumni Liaison officer, gave everyone an idea of what life is like at College today, after which CGCU President **Daniel Zhuo** led us all in a *Boomalaka*!

As always, it was wonderful to see old friends brought together, enjoying each other's company at the lunch. If it's "your" year this year (i.e. you left in a year ending 6 or 1), or if you can pull together a group of 5 or more from any period of history, then why not come along on Saturday 21st November? See the enclosed booking sheet for more details, or the CGCA website.

Peter Chase

Photos courtesy of Peter Chase and Chris Lumb

David Hattersley and Barry Hatch

Martin Watson and Karen Aylward

Apollo Yang

David Barnes

A wide age-range of those who came to the lunch

THE GREAT EXHIBITION ROAD FESTIVAL

Photos courtesy of Imperial College

The Great Exhibition Road Festival returns to South Kensington on 6-7 June 2026, led by Imperial College in collaboration with iconic institutions like the Science Museum, Natural History Museum, the Royal Parks, and the Royal Commission for the Exhibition of 1851. The Public and Community Engagement team are preparing to welcome over 50,000 visitors for hundreds of talks, workshops, interactive exhibits, and hands-on demonstrations, delivered by more than 100 Imperial College research teams and nearly 1,000 academic staff members and PhD students.

As always, there's going to be something for everyone to enjoy, including an exciting programme of music and dance performances, as well as delicious street food from all over the world! Everything at the Great Exhibition Road Festival is free, but you can register on the website for the latest updates and to be the first to hear when free tickets are released for the top events.

This year marks 175 years since the Great Exhibition of 1851, the proceeds from which went towards putting South Kensington on the map as a cultural district.

Among the programmes marking the anniversary of 1851 is a massive sandcastle recreation of Joseph Paxton's Crystal Palace, which will emerge from 7 tonnes of sand across the weekend. Visitors will get the chance to step inside the Great Exhibition of 1851 in Virtual Reality to view original exhibits in their exact locations. And for when stomachs start growling, you can head over to Future Food Live to see an archivist paired with an experimental chef to recreate and discuss the dishes of 1851.

This year's Festival also includes events and talks that explore the complex history of the 1851 event, including its links to the British Empire and portrayal of world cultures. The Festival's new team of Young Producers will create a thought-provoking new art installation inspired by the hidden histories of 1851, while historians Onyeka Nubia and Jennifer Wallis will look at the enduring legacy of the Great Exhibition. Active learners can get their steps in on a new walking tour which will explore how people from different parts of Victorian society would have experienced the event.

While there will be plenty of history, this year's Festival programme is very much looking forwards to the future!

Imperial's Professor Faith Osier will discuss the plant-powered vaccines of tomorrow, and how this emerging approach could form part of a green medical revolution that could save lives across Africa. Uncover further areas where Imperial is breaking ground in the future of wellbeing too, from studying the skills of seizure-detection dogs to help humans level-up in epilepsy diagnoses to combating antimicrobial resistance. Then combine learning with mindful crafting as you work with a zine artist to create your own small, illustrated story capturing your reflections and ideas on Sickle Cell disease.

Or join us to commemorate 50 years since the first lander touched down on Mars, and learn about the breakthroughs that are on the horizon for the next century of Martian exploration in Dr Joel Davis' fascinating talk.

The Festival has always been a place where art and science collide, and this year is no exception. The giant puppet street parade from India's Serendipity Arts Festival will be unmissable, bringing a vibrant splash of colour to Exhibition Road. Keep your eyes peeled for a carnival butterfly fluttering about the Festival too, then try your hand at making your own wings at our workshop from Silwood Park, celebrating the pretty pollinators.

Visitors with a sweet tooth will be able to learn how to bake brownies while finding out about the surprising similarities between the chocolatey dessert and Martian geology, then can take that sugar rush to the Underground Disco to do the worm and explore the secret worlds pulsing beneath our feet.

The ever-popular Paint Lab returns, with ten artists producing live-painted murals over the Festival weekend, each depicting a different example of Imperial research, from making water cleaner and safer for wild swimmers, to space rockets inspired by origami.

While there's something exciting to do or see at every turn around the Festival, the content is predominantly split into themed zones. Some zones explore specific themes and topics, while others aim their programme at specific audiences, making sure visitors of all ages have exciting spaces made with them in mind.

The Family Fun Zone breaks new ground this year, as for the first time the Festival moves into Kensington Gardens. Younger visitors can expect an explosive family show, to get stuck into the ultimate paper airplane competition, or even make penguin masks with Antarctica researchers.

Looking for a more mature vibe? Head over to the Adults Only Zone where you can get hands-on in a craft workshop, then watch Bollywood and Astrophysics collide in an interactive dance class, or cool off with a drink from the bar and kick back to watch the Science Cabaret.

And we've not forgotten those in the middle. Visitors ages 13-25 are welcome in the NextGen Zone, curated by young people, for young people. There'll be robo-football, tech demos and the chance to redesign the Great Exhibition with a modern flair.

https://www.greatexhibitionroadfestival.co.uk/

Calling all IC alumni visiting South Kensington for the Great Exhibition Rd Festival on June 6th.

CGCA and the RCSA are delighted to announce that they will jointly host an 'Alumni Lounge' event in Eastside on the 6th of June from 10am to 5pm.

Any and all IC alumni, and their guests, visiting South Kensington can join us in the lounge (located in Prince's Gardens off Exhibition Rd) at any time during the day to rest up, enjoy a coffee, pastry, sandwich, meet up with friends, bump into fellow alumni, have a drink (cash bar) and generally relax.

CGCA and RCSA team members will be on hand during the day and there will also be an informal lecture on Mentoring, given by CGCA president Roger Preece (a mentoring expert), at 12:30pm in the lounge, all welcome to attend.

Hope to see you on the 6th of June.

Roger Preece President CGCA
& Mike Munroe President RCSA

112th CGCA Annual Dinner

The 112th Annual Dinner was held at Grocers' Hall on the 13th of February 2026. There were around 140 members and guests present, a significant proportion of whom were students which is very encouraging. As ever, apart from a few minor hiccups along the way the event was a great success. This was largely due to the efforts of Geoff Fowler and Martin Holloway who organised the event with assistance from Kristin Gembiak and Emily Murray of the Alumni Office. Colin Kerr took on the onerous responsibility of selecting the wines. As ever he did an excellent job. Our thanks to all concerned.

Those of you with an eye on the history will know that Grocers' was not one of the Guilds that was instrumental in the founding of Imperial. Despite that there was a time when we regularly held events in Grocers' Hall. However, this stopped following a fire. We don't know, but we hope the two events were not connected! Probably not, since we were warmly (no pun intended) invited to return.

It was unfortunate that the principal speaker we had asked to attend, Sir John Lazar CBE, President of the Royal Academy of Engineering, was unable to make it but the Rt. Hon. Greg Clark stepped into the breach and delivered a very entertaining speech using the content of an email from Geoff Fowler as the basis of his script. Geoff assures me it was somewhat embellished, but we were not too worried about accuracy at that time in the evening, thank you Colin!

One of our distinguished guests was Professor Nigel Brandon OBE FREng FRS, Dean of the Faculty of Engineering. Nigel is stepping down as Dean at the end of this academic year to take up a new post at Imperial as Vice President for Corporate Engagement. In this role he will focus on developing Imperial's relationships with executive leaders in key knowledge and technology intensive sectors to yield new educational, research, innovation and philanthropic opportunities. Over the years he has been a great supporter of the Association, and we wish him well in his new role. I am certain this will not be the last dinner he is invited to attend.

Our other principal guest was Mike Adamson, Chief Executive of the City and Guilds Institute. The Institute is undergoing some change at the moment, and we are keen to reinforce our connections and build on them into the future.

Unfortunately, illness prevented Linda Hindmarsh who is Director of Development, University Programmes at Imperial, and Professor Martyn McLachlan, Consul for the Faculty of Engineering, from attending but I am certain that we will extend an invitation to them in the very near future.

Bo eventually made it to the Dinner but some assistance was needed. I am afraid the Brighton Veteran Car Run took its toll this year. Even so it was a delight to see Bo, though it was fashionably late! You will get another chance to see Bo if you attend the AGM on Saturday 6th June. All the motorised mascots will again be on display at the Great Exhibition Road Festival.

Following the Dinner as always, we all met for the Stirrup Cup to reflect on the evening, albeit rather rushed due to the schedule overrunning, but nevertheless it was another opportunity to catch up with friends old and new.

Plans for the 113th Dinner are already in motion and we are currently considering several venues depending on availability, the date is set, so we will be holding the Dinner on 12th March next year. Put the date in your diary. Please keep your eye on the CGCA website and newsletter for more details of the venue. We look forward to seeing you there.

Kelvin Higgins

Prof Nigel Brandon

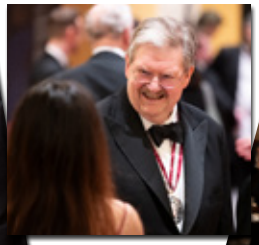
Mike Adamson

Geoff Fowler and Martin Holloway

Colin Kerr

Rt. Hon. Greg Clark

Photos by Andrew Lunn Photography



CGCA Presidents
Past, Present, Future

Welcome to the Annual Dinner at Grocers' Hall

Presentations

John Siwek (Chem Eng) presented with the OC Trust's Centenary Enterprise Award 2025 by Peter Chase

Francis Li (Aero) presented with the Holbein Memorial Award 'Sportsperson of the Year' 2025 by Peter Chase

Marc Soler (Bioengineering) presented with the John and Frances Jones Prize 2024-25 by Peter Chase

Ash Robson (Aero) presented with the Bo Driver 2025-26 prize by Peter Chase

Aidan Madge (Computing) presented with the FCGI Centenary Award 2025 by Mike Adamson

DEVELOPMENTS AROUND THE ENGINEERING FACULTY

The 2026 Bottle match

The 2026 Bottle match weekend was an even bigger success than we could have hoped for! Despite the usual Cornish downpour, and a tremendously muddy rugby pitch, RSM Rugby defined the weekend's success with their third win in a row. This being the tiebreaker event which allowed us to take home the overall weekend win for the second year in a row!

The men's hockey and lacrosse both saw amazing wins, with this being their third and second successive victories, respectively. Football and women's hockey also had weekend defining moments as football achieved their first away win in history and women's hockey gained their first win since 2023.

Although our netball, tennis, badminton and squash players saw losses this year, they showed up with enthusiasm and did not allow this to take away from their weekend. We all applaud their amazing efforts and know they will come back fighting next year.

The full list of scores from the weekend are as follows:

- Rugby: 14-3 **RSM**
- Women's Hockey: 2-1 **RSM**
- Men's Hockey: 2-1 **RSM**
- Lacrosse: 14-2 **RSM**
- Netball: 59-22 CSM
- Football: 5-0 **RSM**
- Tennis: 12-0 CSM
- Badminton: 15-10 CSM
- Squash: 4-0 CSM (CSM did bring four men instead of two men and two women, so this is a bit of a dodgy one)

Photo courtesy of Graham1785

Rugby

Photos courtesy of RSMU

Another year, another Bottle and yet another win! Three years on the trot for the mighty mines. After last year's record-breaking scoreline, tensions were high heading down to Cornwall to face a CSM team that was out for vengeance. The match was played in gruelling wet and muddy conditions; I would say the pitch look more like a random field after the game was said and done. Regardless, both sides fought hard and long. CSM drew first blood with a penalty kick, and the outlook was bleak for the RSM as our winger got binned a few minutes later. After some words of wisdom (a lot of me yelling), the lads got back in the mindset, and it was all RSM from then on. A couple of tries and some absolutely stunning conversions later, the game ended 14-3. I'd say a good few points were left on the pitch due to some very questionable refereeing (we have since found out the ref is their sponsor). Nonetheless, the Bottle was retained on its 100th Birthday and my personal goal of the 3-peat was successful. I am sad to be graduating this year but after three wins and two captaincies I am happy to go out on this high and I will be leaving the reins in some very capable hands.

Tom Martin, Bottle Match Captain 25/26

Lacrosse

RSM lacrosse secured a 14-2 victory in this year's Bottle Match, with a 17-player roster. Frequent rolling substitutions kept our legs fresh, helping us build a 3-0 first-quarter lead before playing our absolute best lacrosse for a 10-0 halftime advantage. However, torrential rain hit during the break, causing our play quality to slip. Despite constant subs trying to maintain momentum in the downpour, we conceded our first goal in the third quarter while scoring two of our own. In the final quarter, a goalie penalty gifted CSM an open-net goal, but we pushed through the bad weather to add two final goals, sealing a massive RSM victory.

Fraser McLeod
Lacrosse Captain 2026

DEVELOPMENTS AROUND THE ENGINEERING FACULTY

Football

Piran and his mighty RSM squad headed down to Cornwall this year to right the wrongs of the previous 6 years. On paper, a strong team had been assembled, however the motivation of the team was definitely questionable with many players requesting bribes to play in their own positions.

In the foggy and very wet setting of Falmouth, the Mines kicked off, choosing to go with the gale force winds for the first half. A nervy 30 minutes ensued, with 9 of the starting XI experiencing their first Bottle match, there were sure to be some misplaced passes and some overconfident dribbles. Our midfield calmed things down, winning some crucial 50/50s and progressing the ball quickly, something which CSM didn't have an answer to, and quickly resorted to chopping Lucien F and Maxime F down more times than we could count, leading to some early yellows.

The Mines broke the deadlock with a high press, leading to the CSM defence crumbling and Freddie B nicking the ball off their CB and finishing calmly. As we'd been told all season, 1 goal isn't a lead and with that in mind, coupled with President Adam L coming off injured, we kept the pressure up leading to an almost identical goal, this time scored by Luka W (more of him later on).

The last play of the first half had CSM standing over a dangerous free kick on the edge of our area, tipped over the crossbar at full stretch by Piran, leading to a comfortable 2-0 lead at half-time.

The start of the second half coincided with the heavens well and truly opening, playing into storm force winds and unrelenting rain forced us to not play the ball in the air for the next 45.

Praj G crossed it in from the right, towards the box where Freddie B cleverly dummied it allowing the ball to run through to a waiting Luka who calmly finished it on the edge of the box into the bottom left corner, taking the RSM lead to 3-0.

Soon after, following a rare Mines corner, Josh C whipped in a ball to the box where who else but Luka W jumped highest to head home from the back post, wrapping up his hattrick in fine fashion, all but guaranteeing the win now 4-0 up with less than 15 minutes to play.

Freddie S topped the game off with a delightful lob to make it 5-0, leading to some raucous celebrations and the CSM crowd searching for the exits.

The hosts kept the pressure up till the end with a flurry of corners, desperately defended by both towering CBs, Harry P and Sam R who were desperate to keep the clean sheet, putting their bodies on the line till final whistle to secure an emphatic 5-0, the first ever away win and the largest ever RSM AFC WIN.

Piran Hawken
(Winning) RSM Football Captain

Men's Hockey

After an incredible win from the RSM women, the RSM lads graced the Penryn pitch once more to defend the Sharpley Cup for the third time. For what was most of the boys' final game representing RSM Hockey. With the chance for the first 3-peat in Bottle Hockey history, as well as the first chance for both the men's and women's teams to win together in 12 years, excitement levels were high. Working with a left back trap press, the boys stuck to a 4-3-3 formation securing a short corner in the first few minutes. CSM however, with a fresh new keeper, saved an incredible flick and continued into the half with the strongest team we had faced yet. Nevertheless, the RSM boys played some near perfect hockey and after some serious saves from their keeper, scored a flick of a short corner and an in-play goal. Closing out the first half the boys felt good after their most impressive performance in the last few years. After a team talk from IL Capitan FET, the boys took on CSM one last time. After numerous shots on goal, it became apparent CSM's new keeper was gunning for man of the match. CSM upped their standard scoring a goal after a beautiful short corner routine. But unfortunately, they couldn't quite keep up with RSM's heart, playing out the half with some beautiful hockey. Despite a close end, the boys never felt too threatened due to a beautiful strategy and team chemistry, putting on a show to be remembered. Once again, the Sharpley Cup was raised as RSM flooded the pitch, bringing home both trophies and the 3-peat.

Frey Elliot-King
RSM Men's Hockey Captain.

Ready to depart from RSM

IC GEOLOGY SOCIETY

Freshers Trip: *The Highlights*

Held on: Friday 16th - Sunday 18th January 2026

Where: Brockenhurst, Near New Forest National Park, Hampshire

After the pressure of January exams, 35 freshers headed to Brokenhurst for the annual Geology Society Freshers Trip. This trip is a vital tradition for the Royal School of Mines, designed to welcome new students into our community through a mix field exposure and socialising.

The Trip Breakdown

The weekend kicked off on Friday with a coach journey from the RSM down to Brockenhurst. A traditional chippy tea was devoured to settle everyone into the bunkhouse and start the socialising early.

Saturday was our main field day, featuring an introductory talk covering the local geology, geomorphology, and the unique wildlife of the area. This was followed by a two-hour hike through the New Forest National Park to see the landscape in context. After a well-earned pub stop, we returned for a committee-made dinner and our legendary Saturday night party, themed "I don't have anywhere to wear this".

We headed back to London on Sunday morning, having successfully forged new friendships and integrated the Freshers into the RSM community.

Pub stop at Foresters Arms

With Thanks to the RSMA

We truly could not have done this without the help of the RSMA. Your generous support directly funded our private coach transport and subsidized accommodation, making this essential tradition possible for every student. Thank you for investing in the next generation of RSM geologists!

DEVELOPMENTS AROUND THE ENGINEERING FACULTY

OC Trust Awards for students' leadership & community building

The Old Centralians' Trust has awarded two Department of Electrical and Electronic Engineering students with Student Activity Awards, recognising their sustained contributions to student life. Each award is worth £800 and is intended to support students' engagement in extra-curricular activity during the academic year.

Angeline Lin and Lia Kommata, are third-year Electrical and Electronic Engineering students. Their contributions span student societies, teaching support, sport, wellbeing advocacy and cultural life.

https://dub.sh/IE44-OCT-students

Photos courtesy of Imperial College

Angeline Lin: leadership, sport and wider student networks

During Angeline's time at Imperial, she has served as President of the Imperial College Singapore Society, organising regular social activity for a large student community, and as Captain of Taekwondo, where she ran twice-weekly coaching sessions focused on both technical development and inclusion.

Alongside this, she has volunteered as a teaching assistant supporting first-year students, and currently holds a wider student leadership role as London Regional Director at the United Kingdom Singapore Student Council.

Reflecting on receiving the award, Angeline said: "*Receiving the Old Centralians' Trust Student Activity Award is deeply meaningful to me, as it recognises extra-curricular contributions alongside the academic rigour of studying Electrical and Electronic Engineering at Imperial.*

"*Balancing demanding coursework with leadership roles has been challenging but deeply rewarding. This recognition affirms that building community, supporting peers, and contributing to student well-being are integral to the student experience, not separate from academic achievement.*"

Angeline also highlighted the role of Imperial's collaborative culture and strong student networks in enabling this work, supporting her development both as an engineer and as a leader committed to creating inclusive, connected spaces for students.

Lia Kommata: wellbeing, teaching and cultural life

Lia's contributions centre on student support, teaching and cultural engagement within EEE and across Imperial. She has worked as a Teaching Assistant, helped to reopen the Greek Society after it had previously closed, and served as a Wellbeing Representative, supporting students who needed someone to listen.

Lia has taken on leadership roles including Social Secretary of Dance Society and Secretary of the Greek Society, and has represented Imperial through dance competitions, recognising the role of shared social and cultural experiences in fostering a sense of belonging.

Lia said: "*I was extremely happy and honoured to receive the Old Centralians' Trust Student Activity Award. It really means a lot to me, as it recognises the time, care, and passion I invest in student life.*

"*Working as a Teaching Assistant, reopening the Greek Society, and serving as Wellbeing Representative are experiences I deeply care about, and they have shown me how important it is for students to feel connected and supported.*"

Lia also reflected on the role of social and cultural activity in building community:

"*Through my roles as Social Secretary of Dance and Secretary of Greek Society, I witnessed first-hand the importance of social and cultural events in fostering a sense of community. Representing Imperial through dance competitions also highlighted how powerful shared experiences can be in bringing people together.*"

Lia added that receiving the award has encouraged her to continue dedicating time and energy to supporting others, and thanked the people and culture within the EEE department and the university who have supported her.

OC Trust Centenary Enterprise Award 2025

Photo by Andrew Lunn Photography

The 2025 OC Trust Centenary Enterprise Award was presented by Peter Chase, Chairman of the Old Centralians' Trust, to John Siwek, Department of Chemical Engineering, at the CGCA Annual Dinner. John was recognised for research that focuses on developing and studying scaling rules for photochemical reactors, with the aim of improving reactor efficiency and unlocking the potential of photochemistry for chemical manufacturing.

Alongside research, John is passionate about engaging the public with chemical engineering through a continuous popcorn machine his team developed, helping people appreciate the field's contribution to modern life, its ability to operate at scale, and its importance in tackling the challenges ahead.

The Centenary Enterprise Award recognises outstanding postgraduate researchers whose work demonstrates exceptional enterprise, innovation and potential for real-world impact. The award celebrates individuals who embody the entrepreneurial spirit of Imperial and whose work shows promise beyond the laboratory.

"*I am delighted to receive the Centenary Enterprise Award. This recognition reflects the support and encouragement I have received from colleagues and mentors within the Department of Chemical Engineering and the wider Imperial community, and I'm especially pleased with the recognition of the tremendous team effort and creative engineering that allowed us to engage the public in a unique way, showing what chemical engineering can do.*"

https://dub.sh/IE44-OCT-CEA

New Year's Honours

Imperial researchers, staff and alumni were recognised in the 2026 New Year's Honours list.

Professor **Neil Poulter**, Professor of Preventive Cardiovascular Medicine at Imperial's School of Public Health, has been awarded an MBE for services to hypertension prevention.

Dr **Dominique Allwood**, Chief Executive Officer at Imperial College Health Partners, Director of Population Health at Imperial College Healthcare NHS Trust and Honorary Clinical Senior Lecturer at Imperial's School of Public Health, has been awarded an MBE for services to the NHS.

Alumna Dr **Catherine Mbema**, who received an MBBS/BSc in Medicine in 2007, has been awarded an MBE for services to Public Health.

Alumnus Professor **Nicholas Howden**, who completed a PhD in Hydrology, Hydrogeology and Hydrogeochemistry in 2004, has been awarded an MBE for services to Water Management and to Education.

Alumnus **Dhruv Patel**, who completed a BEng in Computing in 2004, has been awarded a CBE for services to Civic Leadership and to Charity.

https://dub.sh/IE44-Honours

DEVELOPMENTS AROUND THE ENGINEERING FACULTY

JPhys Energy Early Career Award for Dr. Ann Huang

Photo courtesy of Imperial College

Dr **Chun Ann Huang**, Associate Professor in Energy Storage Materials at Imperial's Department of Materials, is leading innovative research into next-generation solid-state lithium batteries that could improve efficiency, safety, and sustainability. At the end of last year, she was awarded the JPhys Energy Early Career Award, which recognises her outstanding contributions to energy-storage research.

Dr Huang's work spans lithium-ion batteries, sodium-ion batteries, solid-state batteries and supercapacitors, aiming to build safer, longer-lasting and more efficient energy storage technologies. She and her group use advanced electron microscopy, spectroscopy, and other characterisation tools to map the microstructure and chemistry of battery components, efforts that help link material properties to battery performance.

Dr Huang developed a method using x-ray and tomography techniques to watch lithium-ion flow and lithium-metal formation inside solid-state batteries in real time. Her studies show how irregular metal deposition and subsurface pores form during battery cycling, and how different charging and discharging rates affect these processes. These insights provide a better understanding of the limitations of current battery designs and could help improve the performance, safety, and lifespan of solid-state lithium batteries.

Dr Huang has recently been awarded a £2M EPSRC Open Fellowship for her project *Sustainable materials and manufacturing for zero-excess multivalent batteries*. Through the fellowship, her team will develop new materials and scalable manufacturing processes for next-generation multivalent batteries, which could store electrical energy generated from intermittent renewable sources to contribute to the transition to net-zero.

She said: "*I am very grateful to the EPSRC and to the support from my department and College. Many thanks to my group members, colleagues, and collaborators that I have been working with. I am very lucky to work with so many extraordinarily talented people.*"

https://dub.sh/IE44-Huang

Imperial engineers awarded multi-million pound EPSRC fellowships

Imperial engineers have been awarded £2 million each in fellowships from the EPSRC to expand their research into rechargeable batteries, quantum materials science, and how AI can be used in materials research.

Photos courtesy of Imperial College

Dr **Max Attwood**, UKRI Quantum Technology Career Development Fellow and Academic Visitor in the Department of Materials, has been awarded an EPSRC Open Fellowship for his project *Controlling molecular spins for robust quantum electronics at room temperature*. Currently a Research Associate at MIT, his research brings together materials science and chemistry to design new quantum materials with unpaired electrons that exhibit well-defined electron spin properties, a key requirement for building quantum technologies. These materials could offer a scalable platform for applications such as sensors, with the potential to provide a strong alternative to current state-of-the-art systems, including nitrogen-vacancy centres in diamond, helping to make quantum devices more adaptive and more sensitive.

During the fellowship, Dr Attwood and his team will explore how chemical design can be used to extend the lifetime and controllability of electron spins, creating materials that can be manipulated using light and microwaves, providing design principles for next-generation quantum sensors and their biomedical applications. Dr Attwood said: "*The EPSRC Open Fellowship is a very welcome opportunity to establish my own research group by hiring postgraduate and postdoctoral researchers. Together, we will be able to pursue more ambitious and high-risk, high-reward projects.*"

Dr **Chun Ann Huang** was awarded a Fellowship for her research project *Sustainable materials and manufacturing for zero-excess multivalent batteries* (see above).

Dr **Sam Cooper**, Associate Professor in the Dyson School of Design Engineering, has been awarded an EPSRC Open Fellowship for his project, *AIMS-DEEP: Transforming Materials Science with AI-Enhanced Workflows for Accelerated Innovation and Deep Reproducibility*. The project aims to transform how materials science research is carried out by using artificial intelligence (AI) to make discoveries faster, more reliable, and easier to reproduce.

In many scientific fields, including materials science, researchers struggle with complex data, slow experimental processes, and a widespread 'reproducibility crisis', where published results cannot always be repeated by other scientists. This undermines trust in research and wastes time and resources.

The fellowship proposes a new approach that integrates modern AI systems (particularly 'foundation models') directly into the scientific workflow. Instead of AI being used only to analyse data after experiments are completed, it will become an active partner in the research process. The project will develop methods that allow AI models to understand different types of scientific information, such as experimental data, simulations, images, and written reports, and combine them into a unified framework that computers can analyse effectively.

One key goal is to make AI systems more transparent and trustworthy. Many powerful AI models behave like 'black boxes', meaning scientists cannot easily understand how they reach their conclusions. This project will create tools that help researchers see how the AI is reasoning, identify when it might fail, and ensure its predictions are reliable. They've already published some exciting results in this area on how large language models conceptualise the periodic table of elements.

Another major outcome will be the creation of an 'AI co-investigator'. This tool will assist scientists in designing experiments, suggesting new research ideas, analysing results, and optimising research strategies. In the future, it could even work alongside automated laboratories to rapidly test new materials for applications such as batteries, renewable energy technologies, or advanced manufacturing. Imperial is home to DIGIBAT, a robotic battery lab, where agentic workflows can be put into practice.

Finally, the project will focus on 'deep reproducibility'. This means embedding systems that automatically document experiments, validate results, and ensure findings can be reliably reproduced by others. By building tools, standards, and a research community focused on reproducibility, the fellowship aims to improve trust in scientific results.

Overall, the project seeks to reshape scientific research by combining AI with better research practices, enabling faster discovery, more reliable science, and breakthroughs in technologies that benefit society and the environment.

Dr Cooper said: "*We're trying to rethink how science is actually done. If we combine artificial intelligence with better research practices, we can accelerate discovery while making the results far more reliable.*"

https://dub.sh/IE44-EPSRC

DEVELOPMENTS AROUND THE ENGINEERING FACULTY

SME Antoine M. Gaudin Award for Professor Jan Cilliers

Photo courtesy of Imperial College

Professor **Jan Cilliers**, of the Department of Earth Science and Engineering (ESE), has been awarded the esteemed Antoine M. Gaudin Award for 2025 by the Society for Mining, Metallurgy and Exploration (SME). The Antoine M. Gaudin Award, one of the most respected accolades in the mining and minerals engineering community, honours individuals who have made specific and significant contributions to the advancement of mineral processing and its operations.

The award recognises Professor Cilliers' exceptional scientific contributions specifically to the process of froth flotation – a critical step in recovering valuable minerals.

Having held the Chair in Mineral Processing at Imperial since 2005, Professor Cilliers has built a career defined by innovative approaches to optimising the separation of valuable minerals from waste material. His primary research focus has been on demystifying and manipulating the complex structures of froth in flotation processes.

In its official citation, SME honoured Professor Cilliers specifically for "contributions in development and application of methods for tracking, characterizing and modeling particle motion and separation in classifiers and froth flotation processing equipment".

He received the award in a ceremony at the SME MINEXCHANGE Conference in Salt Lake City on 23 February (his birthday)!

"*The Antoine M. Gaudin Award for Minerals Engineering is one of the most prestigious recognitions in our field,*" said Professor Cilliers. "*It is an acknowledgement of the respect and esteem of your peers. I am very honoured to have received it.*

"*The award is the culmination of the hard work of many excellent students and postdocs over the years, some of which are now staff in ESE. They really deserved the award, but their chance will come!*"

His leadership in the field is further evidenced by his role as the former Director of the Rio Tinto Centre for Advanced Mineral Recovery at Imperial. During his tenure as the Rio Tinto Professor from 2005 to 2010, he secured substantial industrial research support totalling £6 million, fostering a strong link between academic inquiry and practical industrial application.

In recognition of his profound impact on engineering, Professor Cilliers was elected a Fellow of the Royal Academy of Engineering in 2010. He is a sought-after speaker, having delivered plenary addresses at major international conferences, including IFACMMM 2010 and Procemin 2009.

https://dub.sh/IE44-Cilliers

IEEE CS Lifetime Achievement Award for Professor Jeff Kramer

Photo courtesy of Imperial College

Emeritus Professor **Jeff Kramer** of the Department of Computing, has been recognised by the IEEE Computer Society with the 2026 Computer Society Technical Community on Software Engineering Lifetime Achievement Award for over forty-five years of outstanding contributions to software engineering across research, practice, service, leadership, and education.

Professor Kramer said: "*Since my entire professional career has been spent in the Department [of Computing], I believe that this also recognises the quality and strength of our Department, and I gratefully acknowledge the support of my colleagues.*"

Each year, the IEEE CS TCSE requests nominations of distinguished individuals and teams for its annual international awards. The TCSE Lifetime Achievement Award is presented annually to an individual who has contributed a lifetime of outstanding and sustained contributions to the Software Engineering community. These contributions have had a practical impact on the way Software Engineering is currently practiced or taught.

Previous recipients of the award include, in 2024, Margaret Hamilton who coined the phrase Software Engineering and led the development of the on-board flight software for NASA's Apollo guidance computer for the Apollo program.

https://dub.sh/IE44-Kramer

Suffrage Science Award for Dr Azalea Raad

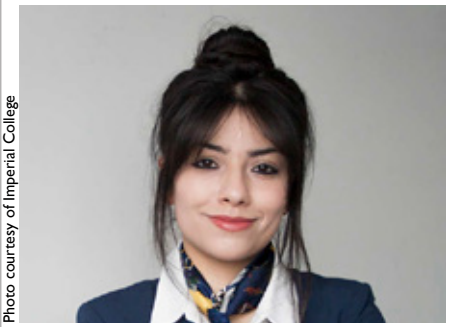


Photo courtesy of Imperial College

Dr Azalea Raad has been awarded a Suffrage Science Award in Maths and Computing, recognising her contributions to the field and her role in advancing women's visibility and leadership in science.

The Suffrage Science Awards celebrate pioneering women scientists, with the 2026 round focusing on Maths and Computing. Ten awardees were recognised at a ceremony held on Monday 26 January 2026 in the Dorothy Crowfoot Hodgkin Building, located in the University Science Area.

Dr Raad was nominated for the award by Professor Alexandra Silva in recognition of her significant research impact across academia and industry, as demonstrated by major funding including an EPSRC Future Leaders Fellowship and by the deployment of the formal verification techniques she developed in collaboration with engineers at Meta.

Commenting on the award, Dr Raad said: "*I am honoured and humbled to have received this award, and to join the formidable community of Suffrage Science awardees. Their legacy of advocacy and excellence makes this recognition especially meaningful, and I hope to contribute in turn to widening participation and opportunity in mathematics and computing.*"

Founded in 2011 by Whitley Professor of Biochemistry Dame Amanda Fisher and science communicator Vivienne Parry OBE, the Suffrage Science scheme aims to create a self-perpetuating network of exceptional women scientists who actively support and inspire others to pursue scientific careers and leadership roles. The 2026 awards ceremony was hosted by the founders alongside Professor Marta Kwiatkowska.

Each awardee receives a piece of Suffrage Science heirloom jewellery, which they pass on every two years by nominating a future recipient. This unique structure creates an evolving 'family tree' of award holders, forming an international network of rôle models across all Suffrage Science disciplines.

Since the scheme began, 172 women from institutions around the world have become holders of the Suffrage Science heirlooms.

https://dub.sh/IE44-Raad

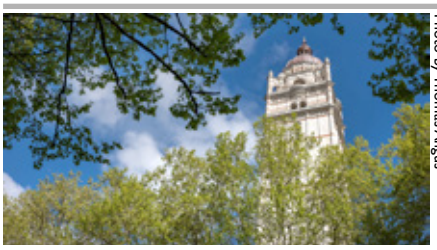


Photo by Thomas Angus

Photo by Dan Weill

Queen's Tower re-opened

On 21 April, the Queen's Tower was offcially reopened following a project started in October 2022, which saw the full restoration of the 90 metre Grade II listed Tower, including extensive stonemasonry and the complete replacement of the original copper dome.

https://dub.sh/IE44-Queens

Mentoring and Menteeing

Mentoring changed my life.
Being mentored as a young student at Imperial College changed my life in 1985. As an electrical engineering third year, I was not sure what path to take after work. For various reasons I had decided not to continue with the Army and was about to graduate with no job. Rod Rhys Jones, an alumnus and active member of CGCA had encouraged me as a student, and had taken time to get to know me and supported my Guilds student union role. He invited me to his home and to social events and when I was thinking about changing my career direction, introduced me to his friends, one of whom also took an interest and connected me to the graduate recruiting programme for a niche Investment Bank, owned by Nat West Group. That was the start I needed in the early stages of my career.

Importance of Mentoring

Human beings are made to learn from each other. We learn by observing and noticing how others work, interact and act to achieve results. We also learn by having experienced people see our work and how we work, and who are able to give us constructive feedback. We all need advice as to how things can be improved and made even better. Mentoring can also sometimes lead to endorsement and help raise a person's reputation status. When an experienced trusted person, makes an introduction on behalf of a younger person – they are giving their reputation to commend someone and enhancing that person's standing in a new connection. It is a sharing and giving of a form of imparted trust.

A lot of mentoring activity just happens naturally in the course of family, community and work activities. But for some people, the natural flow of quality learning from natural relationships just doesn't exist.

More experienced people generally get pleasure from sharing their knowledge and experience with others. They feel affirmed and respected by someone else valuing and being interested in them and what they can bring. The bonds of trust that form in mentoring can be significant and long lasting. My relationship with Rod has lasted a life time and I am still grateful to him all these decades later for helping me at the start of my career. And I am grateful for CGCA – for being the means that brought us together.

Less Natural Mentoring Opportunities are Available

Remote working has seriously reduced the natural flow of human contact. Mainly online connections do not have the potential to build the level of human chemistry that physical proximity can bring. Remote working takes away the informal snippets of conversations and banter that happens around the coffee station, the smoking corner, or even in the loo! Remote connections can, of course, be used in mentoring, but face to face is so much more powerful – especially in the beginning.

Fear of accusations of favouritism, discrimination or saying the wrong thing, has also created a culture of anxiety in some office environments, where senior people are very wary of having contacts with more junior staff outside of a formal work setting. Protecting workers from the real risks of bad behaviour, has had the unintended consequences of reducing opportunities and openness for mentoring and support in a work setting.

Even normal line management relationships can be constrained in the level of constructive feedback that might be given. If a person finds negative feedback upsetting, or even triggering anxiety, this can lead to a complaint of feeling "bullied". The risks of this will have a chilling effect on training and growth opportunities, as managers will hold back, rather than risk damaging their career through a possible grievance against them. The risks can seem too high.

All these challenges make external mentoring outside of the work place even more important and valuable.

Benefits of Receiving Mentoring

At any stage in our career or education, we can all benefit from being in a mentoring relationship with someone we trust, who knows us and perhaps has knowledge and experience that we don't have. We can have a number of mentors, perhaps speaking into different parts of our life. At different stages of our career the need can be greater, and we may find different people can flow into our life at different stages. You can think of it as an informal advisory Board for your life. Do you have people like this? And if not, what can you do to increase the opportunities?

How to be a good Mentee?

It is worth thinking about what we can do, that makes mentors happy and willing to give of their time, energy, and reputation to support us? Here are a few areas to think about

- Be interested and interesting – cultivate interests outside of work and study, seek common ground with people you meet – be curious about everyone – what they do, how they work, what they have studied. Every person is interesting in themselves. Being interested makes it easier for people to want to spend time with you.
- Be open and courageous to make connections – don't be afraid of meeting new people and in a social/ business setting introducing yourself and starting to connect.
- Don't fear to ask for introductions – some of the people you already know will know great people who can help you. Every contact you have might be a channel to an important connection that you have not yet made. Tell your contacts what you are looking for and ask if they know anyone who might be helpful. If they are willing to make an introduction, even better.
- Expressing thanks and appreciation for everything offered (however valuable) is essential. Thank you texts, emails and even a written card – shows that you value someone else's time and gift. Be specific about what you have appreciated from that person. Giving a Linked In endorsement or appreciative comment is a public way of recognising someone's help.
- Think about what you can offer – even as the mentee, you will have much to give. Your knowledge and experience and the way you reflect on what is happening in the world, can bring a lot to another person, who may not be in touch with some of the latest trends. Gen Z also think very differently to previous generations and this difference can be stimulating as well as challenging. Reverse mentoring can also bring real value and some organisations are starting to offer it to

– as a way of life

their senior leaders as a way of bringing a fresh and more youthful perspective to the leaders who may be feeling increasingly out of touch.

- Start with very small requests – to build a connection. Don't start off asking someone to be your lifetime mentor. Just ask for a coffee, or a call with a very specific question. Eg. "Dear … I was really interested to hear of your recent promotion/research/presentation. Would you have 30 minutes to have a coffee with me. I am really interested in xxx and would love to learn more."
- Don't worry about rejection – busy people may have many reasons why they can't help or can't help now. The more people you connect with the more opportunities might be possible.
- Connect to formal programs when offered – Imperial has many different schemes that connect people together that can lead to great mentor/mentee relationships. Take advantage of these schemes. They can be especially useful for people who don't already have a high level of natural social capital. This is particularly helpful for international students.
- Consider family/social networks 1st and 2nd degree connections. You will be surprised how many people you already know in your own network who may be very helpful. And don't forget that it may well be the friends of friends, the second degree connections that might be the most useful. But you don't yet know them.

How to be a good Mentor

Every mentor will come into these connections in their own way, with their own style. Some mentoring starts very causally and informally without the term even being discussed. Here are some principles that may help:

- Be open and interested in the less experienced people around you.
- Join a formal mentoring programme at Imperial that will match you to students and early stage professionals who value support.
- Use coaching principles of deep listening and reframing the questions and avoid being directive so that others can take responsibility for their ideas and actions.
- Be clear when you are giving information, sharing your experience and giving advice.
- Set the boundaries for the conversation and be clear on expectations and availability for follow on.
- Think of introductions you can make to increase others' access to different people.
- Be professional and humble and be sensitive to the power dynamics in play.
- Seek to learn from the mentoring conversation.
- Actively seek to support people who lack social capital and connections – especially those from more disadvantaged backgrounds.
- Don't have too high expectations – some mentor relationships can work well, but be willing to recognise when it is not working and to draw it to a close.

A vision for Imperial

One of the remarkable things in choosing and being accepted into Imperial is the ability to connect to alumni around the world. If all current students had one or two alumni they could connect to who would be supporters and encouragers to them as they complete their course and start off in their careers, imagine the benefit that would come. And if each alumni, was willing to give a little time each year to supporting and helping a few students and early years professionals, they would get the pleasure from helping others to succeed and grow personally. They would also learn from younger people who had a different and maybe a fresh outlook on some of the key emerging technologies and applications at this time. Through these mentor and mentee connections the positive impact of being part of the world wide Imperial network can only increase for all our benefit.

If you're interested in mentoring as part of Imperial's Alumni Mentoring Scheme you can express your interest by contacting **mentoring@imperial.ac.uk**
Or consider volunteering your time on a more light-touch ad-hoc basis via the Ask an Alum programme, contact the team at **askalum@imperial.ac.uk**

Roger Preece (Elec Eng 1983-86) is Senior Vice President of City and Guilds College Association.

He is an executive mentor/coach with www.energisingleaders.com

Roger is giving a public lecture/workshop on
Mentoring and being a Good Mentee
as part of the Great Exhibition Road Festival on
Saturday 6th June 2026 in Eastside
at 12:30 in the pop-up alumni lounge.
All staff, students and alumni and their guests welcome.

The Clemtenary (part 2)

In the last issue, Jack Swires, RSM Motor Club Captain 25-26, told us about the RSMMC's plans to celebrate the centenary of Clementine II, the RSM motorised mascot. Now he tells us about the Centenary Dinner held at the British Motor Museum in Banbury in March.

On the 21st of March 2026 over 80 members and friends of the Royal School of Mines Motor Club came together at the British Motor Museum in Banbury to celebrate the 100th anniversary of Clementine II, built in 1926. Planning for the event began around 2 years ago, when it was decided that such an important celebration should be held at a location which was not only just down the road from Clem's original working place, but also held the first Tonner to roll off the Morris production line. Having then spent much time planning the event, the day finally came to come together to celebrate, but first Clem had to get there.

It was an early start for the club, with a scheduled departure at 7am from South Kensington Campus. Despite some minor delays, the vehicles set off promptly and made their way through West London along the A40, before leaving it at Northolt to avoid the scary 60mph bit. A quick diversion around some slightly smaller roads brought the vehicles to Denham where students quickly disembarked for a much needed Greggs. We continued on through Chalfont St. Peter, Amersham, and Aylesbury which appeared to have anomalous numbers of what were best described as unfilled impact craters in the road. After a battering of Clem and Jez's suspension we made good time to Buckingham where we briefly stopped for some fuel. We continued on further north and passed through Brackley before heading onto the A422. While crawling up a hill in 2nd gear, a slightly peculiar wobble was noticed, and was assumed to be the questionable road surface. A slow down and down shift revealed the wobble was persistent, and so we immediately pulled over. It seemed Clem had got a bit nervous about the celebrations awaiting just up the road and had blown her rear nearside tyre only 18 miles from the venue.

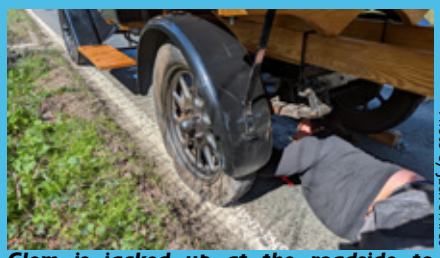


Photo by Jack Swires

Clem is jacked up at the roadside to quickly change onto the spare wheel

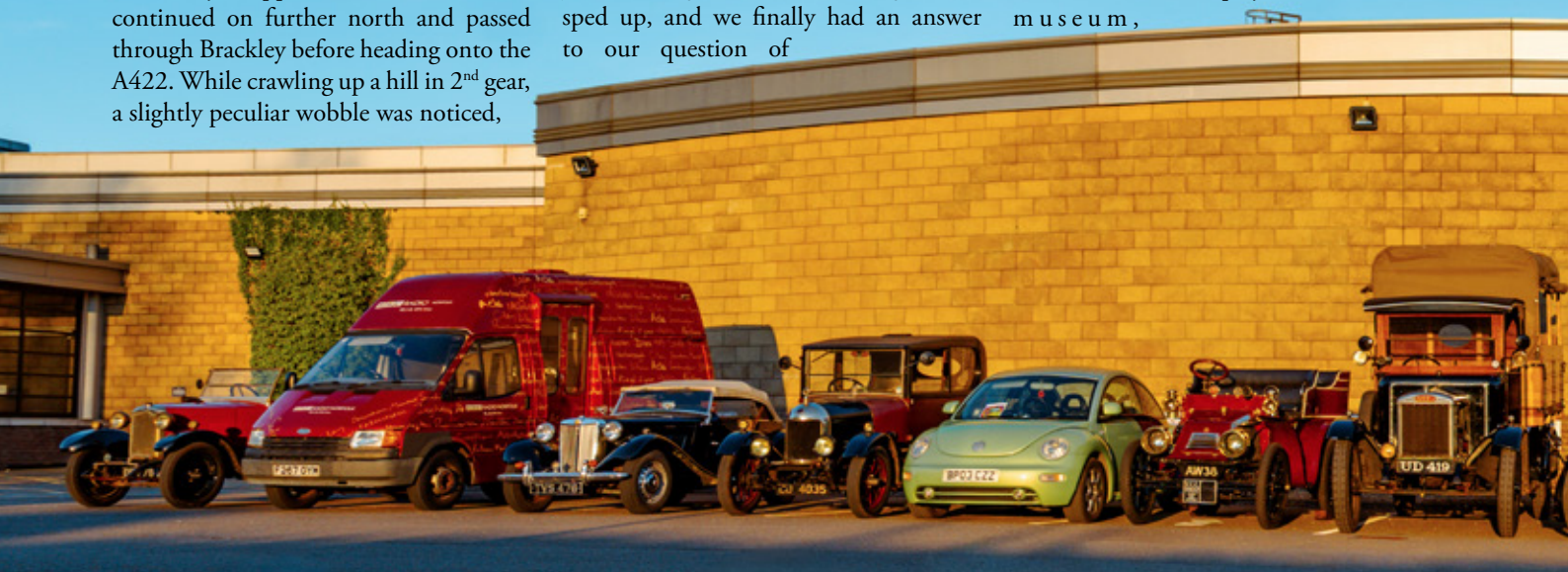
The passengers jumped into action, removing the spare (which had not knowingly been used in 40 years) and jacking Clem up on a less than desirable road surface. Police on their way to lunch noticed us and very kindly provided some excellent traffic management. We managed to get just enough travel out of the jack to get the wheel off and fitted the spare so we could limp down to the nearest layby while our rapid-response emergency minibus provided a tyre inflator and refuge for our passengers. We were very unsure of the spare, and so set off carefully along the road, keeping in a low gear at a low speed. As our journey progressed, confidence grew, we sped up, and we finally had an answer to our question of whether the spare tyre was merely decorative. Good progress was made towards the venue, and Clem finally arrived at her own birthday about 2 hours late to a pumping Jez in the car park and then proceeded to perform multiple victory laps around the car park. At the venue we met with members and friends of the club, including Dick Howard, who purchased Clem II in 1960 from Sheringham Hall.

Photo by Peter Chase

Dick Howard next to Clem after she had just arrived at the museum

Throughout the day guests were able to look around the outstanding collection at the British Motor Museum, which included Tonner No. 1, the first Morris tonner to roll off the production lines. Additionally, the day included the opportunity to join Jezebel, mascot of the Royal College of Science, pumping at one of the Museum's lakes, which many alumni had not done in some time.

Many alumni also brought their own vehicles to be displayed outside the museum,



From left to right: Rover 9/20, Jimmy the Transit, MG TD, Malcolm the Morris, Kermit the Beetle, Boanerges II, Clementine II,

Photo by Ryan Ma

Jezebel pumping at the lake

allowing each other to enjoy the ever-growing collection of vehicles, the purchase of which can inevitably be blamed on the existence of the Motor Clubs. With the daylight vanishing, we headed up to the west side of the museum, where we parked all the vehicles and took photos with all our guests.

The dinner itself was a great success, with wonderful food, drink, and company. The speaker for the evening was Stephen Laing, the Head of Collections and Engagement at the British Motor Museum, and notable Clem Captain from 1987-1989 who led the rebuild of Clem after she was rolled in the 70s. He told us of his time in the club, and how his experiences as a student led to his career looking over one of the largest collections of historic vehicles. The speech was enjoyed by all and was a highlight of the evening. This was followed by a toast from Anisa Price, RSMU President, to those absent friends of the club who could not be there for the celebrations. Finally, the speeches were drawn to a close by the RSMMC Captain, Jack Swires, before the desserts were brought out. Also, at the dinner, guests could see a display of history of the RSMMC, the violate mascots Davy II and Theta IV, and an incredible birthday cake made especially for the event.

With the dinner drawing to a close, the cake was cut, and the room was full of conversation. Guests began to leave, and the vehicles were put to bed at the museum as students retired to their hotels.

Photo by Max Bedford Photography

The morning came around soon enough, and a gaggle of semi-hungover students made their way over to the museum again to retrieve the vehicles and set off back for London. The first stop of the day was Edgcote house, where Clem first worked, for a nice photo at the gates. The RSMMC Captain informed everyone to head to Edgcote house on Google maps, and the vehicles made way. Clem was the first to arrive, at which point the Captain noticed that we had been directed to "Edgecote House" and had been caught out by a homophone. The incorrect house turned out to also have quite a picturesque driveway, so we took some photos anyway and quickly made way. Jez and the minibus were directed before they had arrived and so made some appropriate diversions, however Clem followed a different route which rather unfortunately included a 16% uphill. Despite a valiant effort to climb slowly in 1st gear the whole way, Clem inevitably boiled just before reaching the top. After a cool down, she limped the rest of the way up and continued as normal, eventually making our way to the correct house. Here we took some photos with Clem and planned out the rest of our journey home.

Photo by Jack Swires

Clem outside Edgcote house on the way back from the Centenary celebrations

The way back was much the same as the way up to the museum, including a sightseeing tour of where Clem's tyre went pop. We headed through Buckingham, slightly annoyed the Tesco Petrol Station staff who were amazed at quite how long it takes to start a 1916 fire engine with a newly (and unexpectedly) detached starting handle, and then back through Amersham and over to London. We arrived around 7pm before packing everything up and immediately making our way to a pub. And with that the Centenary celebrations had finished for the weekend.

Photo by Jack Swires

Refuelling stop for Clem, Jez and students

The event itself was the collective effort of a number of students and alumni over the space of two years, and the RSMMC would like to extend its gratitude to all those students, alumni, and friends of the club who came to the event, helped organise, brought along a vehicle, drove the minibus, or came to help fix/prep Clem at a garage session. A special thanks is also due to the CGCA and ICU for both providing special funding to subsidise student tickets, without which this event would not have been possible.

Background photo by Max Bedford Photography

Derrick, Jezebel, Morris LT, Morris Minor 1000, Morris "Empress" Oxford, Morris Tonner No.1, and Honda Prelude

A group photo of all attendees with all of the vehicles which were brought to the event

Derrick was there too

All photos on this page by Max Bedford Photography

'Family' photos with Clem, Jez, and Bo

Details of Jez and Bo

Just a month before the Centenary Dinner, Clem undertook a 350 mile round trip to Devon.

As many people are probably aware, Clem is a rather top heavy vehicle. Back in the 70s, she was rolled onto her side after a slightly optimistic turn was made into campus. This left Clem in a state of total disrepair for over a decade, her parts scattered around campus in various boxes. In 1987, a number of students decided to finally reassemble her and make her roadworthy. Clem's triumphant return was at a RAG fête on campus where she was driven with one person holding a lawnmower fuel tank, one person operating the pedals and steering, and another manually controlling the throttle using the carburettor. Soon after, she was rebuilt and taken to MOT and the students then decided to take her on a proving drive to Devon, specifically a small town near Axminster. With Clem's 100th birthday taking place this year, we decided to commemorate such an important drive by doing the same drive over a cold weekend in February.

Such plans were optimistically promised right at the start of the year, however, ongoing work to get Clem looking nice ahead of her centenary celebrations had overrun significantly once again due to the Clem captain being much too optimistic. And so the first task for this event was to reassemble Clem. Months had been spent disassembling, sanding, and then varnishing her bed to make it look lovely, but also to provide some much needed protection that the previous tired coat was not providing. Additionally, work had been done to paint and nickel plate her headlamps, as well as rebuild her tilt frame which had otherwise been sitting broken on some shelves in the garage since Clem rolled for the second time in 2016. With all that work completed, there was a frantic 3 day sprint to reassemble absolutely everything ahead of the weekend, which in typical motor club fashion was completed at 8pm the night before, after which followed a test drive to a Tesco, which was closed.

With Clem in good health, and a fancy new tilt frame fitted, it was time to make the ~350 mile round trip to Devon! It was an early start, with Clem departing from campus at 7:40am. We powered through London encountering almost no traffic so early in the morning and continued on to Guildford using our typical yearly route for the Isle of Wight. Clem ran well, making good time all the way through to Winchester, where we had to stop to refuel.

Photo by Jack Swires

Not the A30

From Winchester we continued, mostly following the A30 before some fresher-aided navigation saw us driving through increasingly narrow and windy (although admittedly quite fun) roads. After testing Clem's new tilt against a number of low hanging trees, and observing that almost every field in Somerset was flooded, we broke back onto the A30 for the final stint into Yeovil. A brief stop at a Tesco to check we had fuel was all that was needed as delays had meant we were now in a race to arrive before losing the sunlight. From Yeovil, Clem powered on through Axminster but was unfortunately thwarted at the very last hurdle on the muddy hill up to the final destination. Passengers were made to briefly disembark and push to help Clem, and with that she finished the journey.

The destination was the house of Steve Gosling, a previous RSM Motor Club member and one of those original students who repaired Clem in the 1980s. This was of course the same destination from the trip we were recreating almost 40 years ago.

Photo by Jack Swires

Arrived in Devon, everyone enjoys chatting, tours, tea and cake

Upon our arrival we were very kindly offered tea and cake, and shown around a collection of 1917/18 War Department commercial vehicles which had been or were being restored, as well as being shown a series of photos from the 1980s Devon trip. Included amongst these photos was a much needed explanation for the name of the RSMMC's water barrel, Erbit, named for one of Steve's family member's cats of the same name. Having caught up, and had a number of wonderful conversations about days past, we headed over to the hotel for the night.

The following morning was an equally early start, as we went to go and collect Clem and depart Devon. Having established roughly how long it took to do the whole run, we were able to spend the night prior in the pub planning which things we could visit. Our intention was to first head over to Haynes Motor Museum. We made good time over to the museum on the A303, and enjoyed a good couple of hours looking around their collection. Our morning drive was bitterly cold, and provided some perhaps obvious insight as to why they chose to do this drive in the peak of summer 40 years ago… On our drive to the museum, we also enjoyed driving through such comically named places as: "Queen Camel", "Camel Hill", and "Wales".

Photo by Jack Swires

Having enjoyed Haynes, the next item on our itinerary was to take the A303 until we got to the bit where you can see Stonehenge from the road. A wonderful idea in practice, made problematic by some of the rather steep hills scattered along it. At one point, Clem boiled over on a hill next to a view which could only be described best by comparison to the Windows XP rolling hills background.

Eventually, we managed to make it over the various hills and finally saw Stonehenge from the road. Upon doing that, we immediately turned off towards the much nicer A30 for the rest of the journey home. We then enjoyed a mostly uneventful trip barrelling through the countryside, over to Winchester again, then through Farnham, and towards Guildford during which the setting sun cast a warm orange glow across the farmers' fields we passed. After Guildford, some questionable choices saw us head onto the motorway-esque parts of the A3, which was fortunately handled well. The upside was that Clem made even better time on this leg of the journey, resulting in us arriving back on campus by 19:15.

Overall the weekend was a great success, and a wonderful drive out. We covered around 350 miles (accounting for various diversions) in a total driving time of around 18.5 hours. Clem averaged 18.9 mph across the weekend, and did around 22 miles to the gallon. All useful stats for some more upcoming major drives. And with that, the first of Clem's major birthday celebrations was complete!

Chalt Valley, Pakistan

In the autumn of 2025, Anna Soligo, a PhD student in Design Engineering, set off with four friends on a mountaineering expedition to the Chalt Valley in Pakistan. Here she tells us how it went.

Summary

In September-October 2025, a group of five of us travelled to the Gilgit-Baltistan region of Pakistan to go mountaineering. There we were joined by 3 local climbers and travelled by jeep and foot up the Chalt valley to a basecamp at the forks of the Baltar and Toltar glaciers.

After initial extended bad weather, where we hung out with the shepherds and ate large amounts of goat, three teams attempted routes:

- Gemma, Sinead and myself attempted the first ascent of Munocho (~5800m) via its E face and NE ridge but turned back at 5600m.
- Hassan and Adnan climbed to the col West of Sani Pakkush, aiming to cross into the next valley, but were also turned back by deep snow.
- George and James climbed a new 3000m route (M6, WI5, A2), spending 9 days on the mountain and making the possible first ascent of 'Akbar Chhok' (6673m).

Overall, the trip was defined by the incredible welcome we received from the locals. Our basecamp was a small summer shepherds' settlement, and our 'cook-tent' was a stone hut belonging to the family of Akbar, a local hunter. During the bad weather, we often played games, ate, drank and danced with the shepherds, and when we went climbing, they watched out from the valley.

Travel to Basecamp

Sinead, Gemma, James and I arrived together in Islamabad on the morning of the 23rd September. George, who had just returned to civilisation after spending Summer on an Alaskan shipping boat, flew out a few days later. We took a taxi to the bus station in Rawalpindi, then, while Sinead and Gemma watched our stacks of bags, James and I got on a bike and went on a mission to find camping gas and cash. By early afternoon we were on a bus to Aliabad, a small town in Hunza in the North. James, for whom this was his 5th or 6th trip to Pakistan, kept repeating that he couldn't believe how smoothly everything was going. The bus drove through the night, and we arrived in Aliabad the next morning, where Hassan, a friend of James, met us and drove us to Nomad hostel for breakfast.

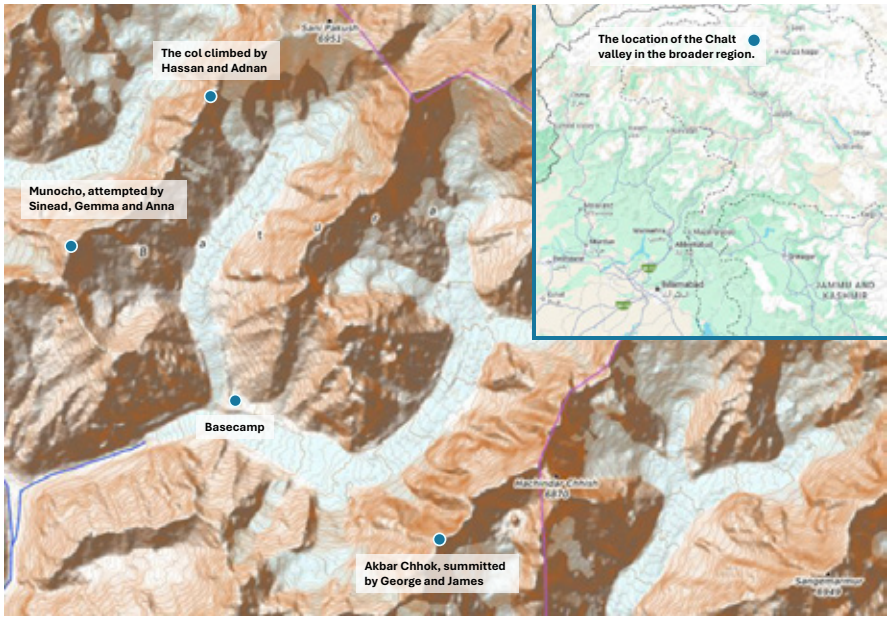
We soon found out that James was well known in Aliabad, and local friends of his, many of whom he had introduced to climbing, came and went all morning. There was some discussion about who would stay and watch the hostel, and who could join us as a third climbing team. There was some debate about porters too, and we had conflicting advice here. Tom had given us a bunch of advice beforehand and told us he had taken 30 porters on his last trip, and we should make sure we had things like camping chairs to make basecamp comfortable. James had never used a porter before and spoke positively of his experiences with 35kg bags and 6 people sharing a 2-man tent on the mountain. Eventually, our gear bags were slimmed down, and we settled on taking ~5 porters between the 8 of us, partly because it was also decided that we needed to take 20kg of flour and a chapatti pan to basecamp. Hassan, Adnan, and Najeeb would join us for some of our time at basecamp, and Hassan sent a friend to the last village in the Chalt valley to speak with the locals and arrange porters and for a local to accompany us.

Photos courtesy of Anna Soligo

Gemma telling Hassan it was all going to fit (it did).

Towards the end of the week, with all food and logistics finally arranged, Gemma, Sinead, Hassan and I walked into our basecamp with Akbar, a local hunter and shepherd. We each carried a 25kg bag, and I spent a lot of the walk regretting not training cardio and struggling in the heat, while the porters, with equivalently heavy bags, ran ahead in their rubber shoes and jeans. George, Adnan and Hassan waited for James to arrive and joined us 3 days later.

Our basecamp was at around 3400m at the fork of the Toltar and Baltar glaciers (which translates, in local dialect, to left-pastures and right-pastures). This was a large, sandy pasture inhabited by a small group of shepherds, a very large number of goats, and a few cows. Some of the shepherds spoke a few words of English, but largely we communicated via the Aliabad guys or by exchanging food.



Acclimatisation

We spent the first day setting up camp and walking a little way up the glaciers to get a better view of some mountains. It had been a very dry summer, and things looked quite different to what we expected. After some debate, we decided

Munocho before it was covered in snow.

Gemma looking much more comfortable than Sinead and I on the walk up.

Sinead, Hassan and Gemma walking up pastures with Sani Pakkush in the background.

that the peak called Munocho, an unclimbed mountain between 5700 and 6000m, depending on the map, looked the most plausible for us. With weather looking good for the next couple of days only, we planned to walk up to below its east face, and maybe gain the ridge, for acclimatisation.

We walked up to below the glacier under the E face the next day. Gemma ran up ahead, while Sinead and I struggled with heavy bags and loose boulders, at one point debating whether to get our axes out for the steep mud. By the time we reached 4600, we were exhausted. We bivied here, unwilling to put up the single skin tent on sharp rocks, and woke up slightly snowy and with splitting headaches the next day. We stashed our climbing gear, boots and tent and headed back to camp.

Bad weather days

We had expected 2 or 3 days of bad weather, but the next 8 days it snowed on and off, and the mountains stayed largely in the clouds. We mostly rested at basecamp and watched with some concern as snow built up on the mountain where our gear was stashed. These day somewhat blurred together, but some entertaining things happened:

- When the others joined us at basecamp, we found out that the road to the last village had collapsed in the time between us driving in, and the jeep trying to drive out. They'd stayed stuck overnight, then had helped the locals rebuild the road. Apparently, this is common.
- We learnt how the shepherds trap and hunt animals, and one of Hassan's favourite phrases: "No legislation without representation" (Gilgit-Baltistan has no representation in the Pakistani parliament).
- Several of us started whittling cutlery, which was useful since we were low on spoons at the start of the trip.

A selection of my whittled cutlery collection (and a testament to how long the bad weather lasted).

- I found a waterfall to shower under. Unfortunately, it was two hours walk from camp and helmets were recommended because of the occasional chunk of ice.
- Sinead, Gemma and I attempted some rock climbing in what turned out to be a non-existent weather window.
- We gradually got better at making phitti – local bread cooked directly on coals. We started with loaves which were burnt and raw but eventually managed to make ones which were only burnt.
- Two poles were broken in the moraines, and my trainers fell apart. Firstly, because their soles tore off in the moraines, and then because I left one to dry too close to the fire.

An attempt at some rock climbing: a fantastic looking unclimbed wall, which Sinead did a great job of down-climbing when the snow started.

Route Attempts

The weather finally turned around the 11th October, and we set off in three teams. Gemma, Sinead and I would return to our gear, and aim to climb Munocho. Najeeb had returned to the valley, but Hassan and Adnan aimed to climb to a col to the West of Sani Pakush, and cross into the next valley to explore this. George and James had their eyes on a huge ridge that towered above basecamp, leading to the summit of a potentially unclimbed peak North of Hachindar Chhish.

With much lighter bags, we headed back up to our gear stash. We'd made the pretty regrettable decision of leaving our climbing boots up there, and the hill below our gear was now largely covered in snow, but we made good progress with trainers. We found our gear with some relief, and continued up the glacier, this time digging out a nice platform to actually pitch the tent.

The following morning, we left at first light, having massively underestimated how long it would take to melt snow for the three of us. It was soon apparent that the fresh snow was going to be an issue. The ground hadn't frozen overnight, and we took turns breaking trail but moved painfully slowly: it took us 5 hours to gain the 300m to the base of a plausible looking gully on the East Face.

We debated whether to stop here: it was past midday, and we would not be making it to another possible camp before dark if we continued, but moving on seemed essential if we wanted a shot at the summit. The gully ended up being ~300m of climbing, starting with ice, then some vertical snow swimming, and finally some mixed climbing that was possibly around M4 (but it's quite hard to judge in the dark, with a tent in the bag, at over 5000m). We got into the tent on the ridge at 1am.

Wading up knee deep snow in trainers to retrieve our gear.

Sinead starting up ice at the bottom of the East face.

Sinead and Gemma switching between snow and ice at ~5500m on the NE ridge of Munocho.

The next morning, we considered two options: leave our tent and some other gear and try and climb as far as we could that day before turning back, or take everything and expect to camp higher on the ridge again. After very little sleep and knowing that we would run out of food the following day, we chose the first option, and continued up the ridge with much lighter bags. The ridge switched between steep snow swimming and glacial ice, and progress was slow but steady. We climbed a sub-peak on the ridge at 5600m then dropped down to the top of a wide snow gulley - much wider than our rope length.

Here, we realised how far away the true summit still looked and decided to turn back: a combination of avalanche risk in the gully, exhaustion and a lack of food made this the most appealing option. That evening, we rappelled our climbing line back to the glacier, and we walked back to camp the following day. This was painless and uneventful until the last boulder field, where Sinead slipped and hit her front teeth. After a few messages exchanged with Dave via our InReach, it was decided that she would walk out with Akbar and I the following day.

On our walk down, Akbar told us that Najeeb, Hassan and Adnan had spoken to him about exploring a different side valley the following year and that this time the plan was that Akbar would join them climbing too.

At the last settlement, we met Akbar's wife, and this time, without the jeep, we walked through to the next village, where we drank tea, and ate chappatis with his

The snow gully where we turned around. the summit is probably the furthest point on the ridge we could see at this point, or just behind this.

Our rough climbing line and camps on the ascent.

children. By evening, we were on a bus back to Aliabad. The dental care in Gilgit-Baltistan was very good (and free!), and the next day Sinead had her teeth fixed back in place. The public bus proved less reliable, and after a 22 hour journey, with several unexplained, multi-hour road maintenance stops, I made it to Islamabad at 5 in the morning.

In the meantime, Hassan and Adnan climbed over 2 days to their col, also struggling in the deep snow. Reaching the col, they decided (one tent pole down) that the snow and broken terrain to descend into the next valley was more than they had the food or energy for and also turned back.

George and James were more persistent.

Their ridge had sections of snow, but also large amounts of hard aid and mixed climbing. They left with 5 days of food, and spent 9 days on the mountain, with a summit bivy at 6670m on the 7th night. Their full route was visible from basecamp, and each night the shepherds would look out for their headlamps to trace their progress. Akbar walked back up after Sinead and I had left, and the pair were welcomed back to the pastures with dancing and celebratory rifle shots.

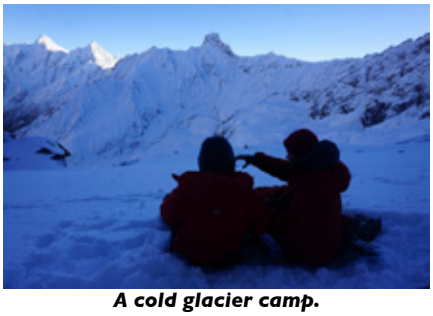
Acknowledgements

A huge thanks to the Imperial College Exploration Board, the Old Centralian's trust, the Alpine club and Mountain Equipment for the gear and financial support they provided, without which this trip would not have been possible. Many thanks also to all those who gave advice before and during the trip, including Tom Livingstone, David Hillebrandt and many others. Above all, we'd like to thank the guys from Aliabad and the Chalt valley for being so welcoming.

Dancing with the shepherds.

A watch party at the camp.

George and James' 3000m first ascent, which they graded ~M6, WI5, A2.



A cold glacier camp.

Avalanches falling between the clouds.

The pastures.

Base camp.

A tent spot en route.

Gemma on the approach to Munocho, with the ridge climbed by James and George visible behind her.

Steeper sections of glacier on the approach to Munocho.

SOUTH AMERICAN SAGA

In 2017, Bill McAuley (Chem Eng 1960-65), our Emeritus Editor, wrote this memoir of his time in South America in the 1970s. He is finally sharing it with us as both an opportunity to reflect on cross-cultural projects, and for entertainment value!

The Scene

In mid-1975 Air Products and I faced some growth decisions. Would the company content itself with a North American and Western European market presence or was it time to jump further afield? Logic dictated the latter but the psychology of the organisation was ill-suited to the task. In forming the Standard Plant Business Unit, I had demonstrated the advantages of creating a strategy suited to the market rather than the other way around. Revolutionary thoughts then, but established wisdom 40 years later!

Consequently the management and I negotiated a position (mission) to boldly go where none had gone before and see if our technology could be sold in wider spheres. My masters were motivated as much by the desire to keep this talented but iconoclastic young Englishman challenged but safely away from the corridors of corporate power.

Some Historical Background

AP had been born as a portable oxygen equipment supplier to the military in WW II. When peace came it moved into becoming a supplier of industrial gases but remained a small player until it hit on the idea of owning and operating big on-site oxygen plants to serve the growing demand from the steel industry.

This worked well but the company had never forgotten that the way into a new market was to sell the cows first. Once established, the market could be persuaded to forgo ownership of the cow and buy the milk instead. So any geographical expansion had to start by selling the plants.

There was another political imperative to get back into the cow selling business. The individual gas companies within the expanding AP group had become unconvinced that the company's engineering arm was providing competitive plant costs to the "own the cow, sell the milk" backbone of the business. If we could succeed in the very competitive international hardware business it would persuade them otherwise.

The timing was very propitious since in the years following the enormous leap in oil prices in 1973, the world's banks were awash in petrodollars in need of recycling which started a heavy industry investment boom in the developing world. Lots of opportunities.

The Role

Essentially, to win plant sale projects in North America, the Middle East, Latin America and Asia (Europe and Africa being handled by the AP British subsidiary APL).

The Resources

I had developed a good rapport with the engineering organisation in my previous positions so I was assured that, if we were successful in winning orders, the resources would be forthcoming. Developing the sales and marketing capability was my job, of course including me as peddler-in-chief.

In this capacity I acquired a most unusual resource in the person of one Ralph Maynard. He hailed from Rumford, Maine and had migrated south before the start of WW II (December '41 for the USA). He served in the conflict as a soldier in George Patton's Third Army and at the end of the conflict joined (or rejoined, I was never sure) the Baldwin Locomotive Works, selling rolling stock to Latin America and Asia. From his stories, his difficulties were not in selling but in getting paid. He related how in 1948 he turned up at the Argentine Treasury in Buenos Aires to collect the down payment on a $10 million order, then a considerable sum. He was informed by a tearful official that there was no money as Doña Evita had cleaned out the lot! He also talked about a happier tour of duty, camping back-to-back in Rio and Bangkok in pursuit of bad debts.

In spite of this he was an incurable optimist ("sell 'em when they're broke, Bill, sell 'em when they're broke!") and unfazed by any commercial or operational catastrophe. When I "acquired" him he was in his late sixties and had been wandering around AP essentially unsupervised and never listened to. Once in a while he would pick up an order (usually for spare parts) and with his missionary skills was a great generator of opportunities. He also knew the Latin American territory very well, which is where we started our co-operation.

The Capers

To avoid boring anyone who reads this narrative completely to tears, I have confined it to some vignettes of the more interesting adventures. I have tried to avoid technical jargon as much as possible and have been discreet where appropriate. Since human nature doesn't change, I have no reason to believe that things are very different 40 years later!

Brazil

In a significant departure from its usual strategy, AP decided in 1974 to dive head first into the merchant gas market in Brazil's most industrialised state, Sao Paulo. Earlier attempts to leverage a large plant sale to the steel industry into a market presence had failed and the Board was persuaded to take this high risk course by an Industrial Gas Division (IGD) lobby headed by one William Whiting Beach (Whitey) Veale. Whitey had been in the right place as San Francisco District Manager when the electronics industry began to take off and had ridden the wave to Golden Boy status on the back of it. Sent to Rio on a market research mission, Whitey had fallen in love with the place and had hired Fernando Guidão, a local businessman of great charm and questionable competence to spearhead the business development effort. Commitment to build a multi million dollar stand-alone merchant plant was the result.

AP was late into the market, being the last of the gas multinationals to jump in. White Martins, a subsidiary of US Linde (now Praxair) was the best established and long-term market leader. Air Liquide (AL) was next with its subsidiary ODB and BOC had a presence. Linde AG had yet to become a multinational gas company and confined its activities to plant and equipment sales. Leveraged equipment sales were an integral part of AP strategy – which is where of course I came in.

We decided our best chance of an early win would be to choose a small(ish) project below the notice of the majors, and we

selected a nitrogen plant being procured by Copene, a chemical company building a complex in Bahia in the northeast of the country. Putting a bid strategy together required a local partner, which presented itself in the form of Nordon SA. This was a process equipment company and AL licensee with experience in cryogenic tanks and piping. It was run as a personal fiefdom by Vicente Martorano, a chain-smoking Paulista who had more angles than an octahedron. This was just as well since operations in Latin America in the 70s required a certain, er, flexibility. They still do. Furthermore AP was paranoid about taking turnkey responsibility for anything outside the US and Western Europe so some contractual creativity was required.

Thanks to Vicente's magic we got the order, an event made much of by our embryonic sales force in Sao Paulo. The turnkey contract was signed by Nordon. AP sold the equipment to Nordon FOB Port of New York. The offshore portion wasn't too big – about $1 million or $8 million in today's money. Nonetheless, I seem to recall that we arranged financing for the client – fairly easy to do at the time since all the banks were awash with petrodollars from the newly rich OPEC states.

My team and I moved on to other challenges and left the project team to get on with building the plant. Therein lies a sting in the tail – a minor process change caused major headaches during the plant startup. I learned an important lesson. If you plan to innovate, do it close to home, not in the middle of the Brazilian jungle! But we got through it. More permanent damage was the unfortunate tendency for the sheltered sons of the Lehigh Valley to go native in a big way once they tasted the fleshpots of Salvador. The collateral marital damage once they returned is too distressing to contemplate. I recall Vicente telling me that he had to extract one start-up engineer, Wally Miller, from the local hoosegow after he was arrested wandering drunkenly down the main drag yelling "Take me to the Casa de Putas!"

But, dear Reader, we will leave Brazil for the moment and pass on to the Andean republics – to my taste, far more interesting!

Venezuela

Like other Latin American countries, heavy industries in Venezuela were on an investment spree, with steel at the forefront. Siderurgica del Orinoco (Sidor) was planning a major expansion and required a 600TPD oxygen plant as part of the complex. AL had supplied plants to them before so were the guys to beat. Sidor had retained Dastur Engineering of Calcutta as the owner's engineer – primarily because Indian engineers were cheap! They had also hired Frank Kerry – a retired AL executive from New York who was as old as Ralph in 1976. Probably long gone by now but since AP's first employee Frank Pavlis just turned 100 in Oct 2016 you never know!

We felt we had a winning process design but were up against the same problem encountered in Brazil – the customer insisted on a turnkey contract but my AP bosses were dead against it. Enter Ferrostahl – a German steel trading company that had expanded into project services and who was willing to act as the general contractor with AP providing the engineering services and equipment.

Negotiating the package with Ferrostahl gave me my first opportunity to spend time in the Fatherland – just West Germany at the time of course.

At the time the infrastructure was brand new courtesy of the Allies' urban renewal programme. These days it is showing its age since all of the spare cash goes to brand new stuff in the former East Germany. It also exposed me to a number of creative business techniques then unknown in the Lehigh Valley!

Alas, in spite of a better economic proposition, the client decided to take the AL offer (no doubt being required to match ours, together with any sweeteners needed!) on the grounds that we were unwilling to shoulder the turnkey responsibility. This gave me some leverage when presented with the next (and from a personal point of view, the most interesting) case.

Peru

In 1956, the World Bank sponsored a project to build a hydroelectric plant on the Urubamba River in the high Andes and close to the archaeological site of Machu Picchu. Part of the power was used (and, as far as I know, still is) for a plant to produce the fertiliser (and, incidentally, explosive) ammonium nitrate. You are going to have to bear with me here, because this case is an example of how lateral thinking can provide unconventional solutions to problems.

The conventional process for NH_4NO_3 is via the partial oxidation of a hydrocarbon i.e. fossil fuels. However, the astute amongst you will note that the chemical does not contain any carbon,

Bill and Bob Schurter outside Cusco cathedral in Peru, built in 1539 on the foundations of an Inca palace.

which provides a clue that there may be, under certain circumstances, alternative production methods. The key here is the important equation:

$$NH_3 + HNO_3 = NH_4NO_3$$

So, in order to make ammonium nitrate, you need ammonia and nitric acid.

And to make ammonia, you need nitrogen and hydrogen, and to make nitric acid you need ammonia and oxygen. The reactions aren't simple addition reactions but the general principle is the same – to make ammonium nitrate you need the two atmospheric gases, oxygen and nitrogen, plus hydrogen which as we all know is a major constituent of water. The nitrogen and oxygen are obtained by air separation – AP's core business – but obtaining the hydrogen by non-combustion requires water electrolysis. This process consumes large amounts of electricity and is normally not cost-efficient. Except of course when you are in a remote location with incrementally cheap hydroelectric power, which is also used to drive the air separation plant.

I was reminded about this a few years ago when I attended a lecture by a prominent civil engineer. He reviewed unexploited hydro resources and concluded that many of them could be profitably used to produce – hydrogen! He envisaged pipelines running hundreds of miles to coastal liquefaction terminals where the gas could be liquefied to bring carbon-free fuel to the developed world. He had apparently never given any

thought to using the power in situ to make products that could be transported for an infinitesimal cost compared to his proposal.

But I digress. Back to the project. The original plant was built by a state company, EP Inca, and used nothing but air, power and water as inputs.

By 1975 the plant was operating flat out and needed "debottlenecking" as we say in the trade. In this case the bottleneck was the capacity of the air separation unit (ASU) to produce nitrogen. It was also showing its age.

Inca came out with a request for tender for a new, larger plant. Thanks to our agent in Peru, Jose Dibos, we had a good position with the client for the order, but once again we had to take full turnkey responsibility or lose it.

This time I persuaded my AP masters to take a punt. We would stand as general contractor but split the contract into two pieces; a $ portion to cover the engineering and imported equipment and a Peruvian soles portion to cover construction and installation. The latter piece, I assured the bosses, would be covered by a back-to-back agreement that would be a pass through to the client. With some reluctance, I was given the green light to go ahead with the negotiation, subject to oversight and final approval.

In the Lost Valley of the Incas, Peru. L to R - Bill, Rene Guevara (President of E.P. Inca) and Edgar Gaviria (Chairman of the E.P. Inca Board).

The AP lawyer assigned to the case, Dick Gray, found a Lima lawyer to support me. His name was Miguel Grau, which those linguists amongst you will recognise as the word for Gray in German. The other coincidence was that Miguel was related to the EP Inca Board President, Rene Guevara. "Not unusual, Peru is a small place" Jose assured me. As I was to discover. The "offshore" contract negotiation was a fairly straightforward process, facilitated by a financing package supplied by Barclays Bank (New York), not AP's preferred CitiBank.

More challenging was the onshore contract. First, a partner had to be found and the ever-resourceful Jose identified a family construction concern, Martinez y Linares. I never got to meet Martinez but was introduced to the boss, Carlos Linares. An inscrutable chap then in middle age, his heritage owed much more to his pre-Columbian forebears than to the conquistadores – he would not have looked out of place in those 19th century sepia photographs of Indigenous chiefs. His son, Carlos junior was my working partner (then mid-20s, a few years younger than I) but dad kept a careful eye on the process. By the end of 1976 we had completed the architecture of the agreement and, together with the offshore and other ancillary contracts, we were ready to put the deal together in early 1977.

By this time I had learned enough about Latin America in general and Peru in particular to know that to set deadlines was to shackle your position. Accordingly, when my new wife, Anne, and I left for Lima with my loyal project engineer Bob Schurter in early February we did so with no set date to return. I sold it as a delayed working honeymoon – which was a great success! I will cover the social history of the trip elsewhere and confine myself to the business narrative.

Completing the onshore (i.e. Peruvian) portion of the contract was the biggest challenge. The AP agreement with EP Inca had to stand back-to-back with the AP/Martinez y Linares contract. Whilst I had enjoyed considerable autonomy on the deal so far, the AP procurement department in far-away Allentown had decided I needed "help" from their newly hired construction contracts manager.

Another small digression is in order here. AP had decided it had become large enough to require imports of people from other major corporations and had the year before acquired one Marty Carhart from Exxon to head up procurement. He in turn began to recruit some of his young talent to join him, amongst whom was said construction "specialist", Don Tieken, an assertive chap about my age. Whatever his other skills, he had no clue as to how business worked in Peru. When told by his boss to get down to Lima and make sure I didn't give the store away, he bounced into the M&L offices one morning (it must have been a Tuesday since the Exxon imports didn't travel on weekends) and announced to Carloses senior and junior that "we had to wrap all the details by Thursday evening" as he had to be back in the US by the weekend. Old man Linares began a slow, inscrutable smile that gradually bisected his face from ear to ear. An innocent gringo walking right in! I discretely took junior aside that evening and explained that we would have to send Señor Tieken back feeling that he had got some concessions that I had failed to obtain. I seem to recall that Miguel Grau was also very helpful in this yankee massage and Tieken left on schedule feeling very pleased with himself. I was secretly relieved that his time with us was so brief (for reasons I need hardly explain).

Things began to get wrapped up fairly quickly and after a quick return trip in March the project was good to go. Ironically AP trusted me personally to translate the contract documents from Spanish into English! Project execution was fairly smooth but I was by mid-year no longer directly involved. I had been assigned to run AP's LNG business which began to take me to other exotic parts of the world, as well as Chile. The story of that merits a separate memoir.The marital curse of the South American projects continued however – our site project manager Hal Totten succumbed to the charms of an Inca princess and as far as I know may have moved to the high Andes permanently. Other projects followed – one in Bolivia where the cold box came loose from its moorings on the Ferrocarril del Sur and fell down a ravine!

Moving On

I left AP a couple of years later so lost touch with further activities in South America. Things became more orderly over time but probably less fun. Of the experiences I had probably Peru has left the most indelible impression. It was a magical time in a magical place.

Bill McAuley, June 2017

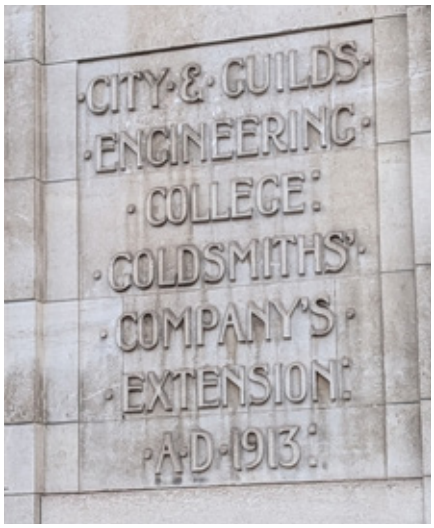
Names Matter… Tradition Matters… Stories Matter
In a world of constant and rapid change

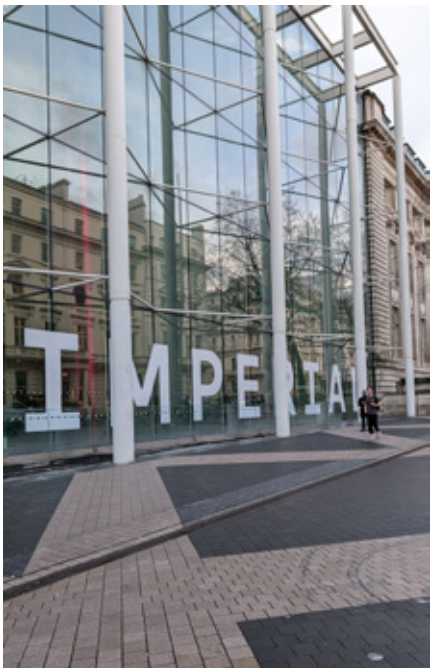
Photos courtesy of Roger Preece

Coats of Arms of the 16 founding Livery Companies and the Corporation of London

The City and Guilds of London Institute for the Advancement of Technical Education was founded in 1878 by the Corporation of the City of London and 16 of the City Livery Companies.

One of the Institute's leading objectives was to establish a "Central Institution to provide education in science for industry". In 1880 the Institute was granted a 999 year lease by the Commissioners of the Great Exhibition of 1851 of 3 acres of land in Exhibition Road and on 25 June 1884 the then Prince of Wales opened the Central Institution as part of the Institute. The building was designed by Alfred Waterhouse and its funding came from the City Corporation and the Livery Companies. The Central Institution changed its name to the City and Guilds Central Technical College in 1893 and became in 1900 the first School of the Faculty of Engineering of London University. In 1907 Imperial College was founded to unite the work of the Central Technical College, the Royal College of Science and the Royal School of Mines. In that year the name was again changed to the City and Guilds College as part of Imperial College. Throughout its history, its initial founders – the Institute, the Corporation and the City Livery Companies – have continued to support the City and Guilds College. The display of Coats of Arms of the College's founding-fathers has been given by them as a reminder to all of the origins of the City and Guilds College.





Civil Engineering Dept holds Alumni Connections event

The day opened with a warm welcome to the Skempton building from the Head of Department, Professor Washington Yotto Ochieng CBE, who shared updates on current research and reminded everyone of the department's ambitious plans for the future. Professor Chris Johnson CBE, Chief Scientific Adviser at the UK Department for Science, Innovation and Technology, followed with a keynote that had everyone leaning in. His talk explored the idea of a "digital embrace" between the built and natural environment, urging civil engineers to lead the way in integrating technology with infrastructure. He spoke candidly about lessons from Grenfell, showing how resilience and safety depend on bridging the gap between engineering and digital systems. It was a powerful call to action for the next era of the profession.

The alumni panel (which is available to listen online at https://dub.sh/IE44-CivEngPanel) brought the day to life with fresh ideas, showing the incredible impact the Department's graduates are making around the world. Chaired by Professor **Jean Venables** CBE (Class of 1969), the panel featured **Roger Bailey** (Class of 1981), **Caroline Field** (Class of 1999), **Mireille El Hajj** (Classes of 2010, and 2017), **Peri Smith** (Classes of 2007 and 2017), and **Benson Tam** (Class of 1984).

The discussion ranged from sustainability and resilience, to AI and the human side of engineering. Caroline reminded us that "*we need to think in systems, not silos. Resilience is not just about structures, it is about people, processes, and the interconnected risks that shape our world.*" Benson looked ahead with optimism, saying "*civil engineering will become the coolest science in the next five years. We are adding digital to the physical world, creating a layer of data and intelligence on top of everything we build.*" Peri added a human perspective: "*technology and human factors cannot be separated. Every system needs to consider how people interact with it, because that is where safety and efficiency succeed or fail.*" It was a conversation that felt both visionary and practical, with plenty of questions from fellow alumni in the audience as it left the room buzzing with ideas.

From there the event shifted into full celebration mode. Alumni explored current research, met students, and toured three of the state-of-the-art labs, all while catching up with old friends over drinks and canapés. One of the most exciting announcements of the day was the launch of the Alumni Board, a volunteer-led group that will help shape the department's future and strengthen ties between alumni, students, and staff.

Later into the evening, a black-tie dinner with live music set the stage for heartfelt moments as alumni stood up to share their stories, where life had taken them since graduation, the projects they have led, and the lessons learned along the way. The room was filled with achievements that made everyone proud and hopeful for what is next. It was a night of laughter, nostalgia, and the perfect way to close a day that reminded all attendees why this community matters.

https://dub.sh/IE44-CivEngAlumni

Photograph courtesy of Imperial College/John Cairns

Professor Jean Venables CBE moderates the alumni panel

A consummate professional

MWAMBU WILLIAM WANENDEYA (Mech Eng 1986-89)

Mwambu was born in 1967, in Uganda. After graduating from Imperial, he worked briefly as a business analyst for Coopers & Lybrand, an accountancy firm based in London, before joining the BBC World Service, as a producer and presenter of 'Focus on Africa'.

Returning to Uganda, over the next few years, Mwambu reported for BBC radio, Reuters and the Sunday Times concurrently.

Of his move from mechanical engineering to communications, Mwambu said:

"I studied engineering but I had a keen interest in current affairs. That's why I ended up in communications. Engineering is just a tool to understand mathematics and it plays out for me."

During this time, Mwambu covered some of the largest international stories, such as the genocide in Rwanda, civil war in South Sudan and the failure of the United Nations mission in Somalia, among others.

From 1995 to 2006, he was back in London, working as Public Affairs Officer in the Communications Division of the Commonwealth Secretariat (Comsec).

Mwambu was chiefly responsible for radio, film and broadcasting matters, as well as for the dissemination of Commonwealth news and the co-ordination of publicity opportunities with external media for the Secretary-General and other senior management.

He acted as spokesperson for the highest profile missions that the Commonwealth undertook during that time, including the controversial elections in Zimbabwe in 2000 and 2002.

A colleague, Stuart Mole, said of him:

"He was a consummate professional: hardworking, creative, bright, but soft-spoken and engaging."

Another colleague, Michele Law, said of him:

"He was a smiling light of happiness and can-do-ness."

Making a name for himself helping companies build successful and recognisable brands, and manage their reputations, Mwambu joined Celtel in 2006. As Group Marketing and Communications manager, he was based at the firm's headquaters in Amsterdam.

In 2008, following a merger, Mwambu was the 'main brain' behind the new company's re-brand as Zain. The successful rebranding won Mwambu several international awards.

Consequently, Zain scooped the Best Corporate Image Award at the 2009 Sabre Awards – the most highly accredited prize ceremony in the International PR calendar.

Mwambu went on to join Ericsson sub-Saharan Africa, in 2010, as Vice President and Head of Communication.

While working his way up to the position of Chief Accountant of the Coffee Marketing Board, Mwambu's father had been involved in the setting up of one of the first coffee co-operatives in Bugisu.

Fifty years on, in 2016, his son Mwambu founded CARICO, with the aim of trying to improve the future prospects of coffee farmers in the region. In 2019, Reuters reported on CARICO's use of blockchain technology to certify shipments of coffee. Enabling verification of origin and traceability in this way allows famers to command better prices for their coffee.

CARICO set up processing plants in Uganda and, in 2024, their Peaberry coffee received a Gold Star from the Great Taste Awards in the United Kingdom – a remarkable achievement for coffee grown and roasted in Uganda.

Sadly, after a long illness, Mwambu died in 2025.

An unwavering belief in the power of collaborative endeavour

Prof ALICE PETRY GAST, FREng, former President of Imperial College and Emeritus Professor of Chemical Engineering

Alice Gast was born in Houston, Texas on 25 May, 1958. Her father was a biochemist and she later credited his influence, along with their many hikes as part of a mountain-climbing club composed mainly of engineers, with inspiring her to pursue engineering.

In 1980, she took a BSc in Chemical Engineering, graduating as valedictorian, from the University of Southern California. She went on to earn her PhD in Chemical Engineering at Princeton in 1984.

An expert in surface and interfacial phenomena, in particular the behaviour of complex fluids, colloidal aggregation and ordering, protein-lipid interactions and enzyme reactions at surfaces, Gast made many pioneering discoveries, co-authoring numerous scientific publications and a classic textbook on colloid and surface phenomena.

From 1981 to 2001, Gast was at Stanford, as a professor of Chemical Engineering and as affiliated faculty at Stanford Synchrotron Radiation Laboratory. During this time, she received the National Science Foundation Presidential Young Investigator Award, a Camille and Henry Dreyfus Teacher Scholar Award, the Allan P. Colburn Award of the American Institute of Chemical Engineers, the National Academy of Science Award for Initiative in Research, a Guggenheim Fellowship, and the Alexander von Humboldt Award.

In 2001, she moved to MIT, serving as vice president for research, Associate Provost and Robert T. Haslam Chair in Chemical Engineering, and responsible for many important interdisciplinary research laboratories and centres.

Susan Hockfield, President of MIT described Professor Gast as, "An exceptionally talented academic leader and a wonderful colleague. Her leadership... is more than impressive, as is her ability to bring people with different interests together around a common agenda."

On August 1, 2006, Gast became the 13th (and first female) president of Lehigh University. During her eight years at Lehigh, Gast led the creation of the university's strategic plan and the renewal of Lehigh's focus on research; championing interdisciplinary collaboration and sustainability; and strengthening the university's global ties, launching partnerships and exchanges.

This bringing together of different groups and fostering of collaborative endeavour was a cornerstone of Professor Gast's approach.

On 1 September, 2014, Professor Gast was appointed President of Imperial College – the first woman in that rôle.

She continued to champion innovation, interdisciplinary co-operation and international collaboration, at a time of huge societal changes, not least those wrought by Brexit. Imperial formed new international partnerships with the Centre National de la Recherche Scientifique, the Technical University of Munich, the African Institute of Mathematical Sciences, and MIT. Under her leadership, and faced with the Covid pandemic, Imperial rose to the challenge of delivering award-winning student education through national lockdowns, while operating on the frontlines of the world's scientific response to the virus. She led the development of Imperial's thriving innovation district at White City, strengthening British science, fuelling global business, and benefiting the local community.

During her career, Gast was awarded honorary degrees and an honorary professorship from several international universities.

She served as a member of a number of UK and international advisory committees and boards including the National Academy of Engineering, the American Association for the Advancement of Science, the League of European Research Universities, and the Technical University of Munich's Institute for Advanced Study.

She was a fellow of the American Academy of Arts and Sciences, the American Institute of Chemical Engineers, the Royal Academy of Engineering, the City and Guilds of London Institute, and the Académie des Technologies, France.

In addition, Gast was made a US Science Envoy and was a member of the World Economic Forum Global University Leaders' Forum and Co-Vice-Chair of the Advisory Board for the Centre for the Fourth Industrial Revolution.

In 2021, Professor Gast was diagnosed with pancreatic cancer and, in 2022, Hugh Brady succeeded her as President of Imperial. He has said of her, "Alice possessed a towering intellect and a rare ability to see beyond the barriers that so often confine us."

In the years following her diagnosis, Professor Gast worked with the charity, Pancreatic Cancer UK, becoming a valued advisor, giving her time, expertise and guidance.

Her contributions helped inform legislation aimed at bringing about a transformational shift in focus and investment for pancreatic cancer in the UK. Alice helped to drive momentum on this issue, connecting the charity with decision-makers, and writing opinion pieces on pancreatic cancer. The Rare Cancers Bill became law on 5 March 2026.

Professor Gast died on 27 October, 2025 at the age of 67. She is survived by her husband, Bradley Askins, and their two children, Rebecca and David.

With the support of Alice's family, Pancreatic Cancer UK has established the Professor Alice Gast Fund to honour her legacy and her life-long belief that the most significant research breakthroughs occur when innovation and international collaboration come together.

The fund will support early-career scientists with vital funding, such as travel grants and attendance at international conferences, creating opportunities for cross-border collaboration and accelerating the development of promising ideas into breakthroughs in pancreatic cancer.

For more information and to donate, go to:

https://togetherinmemory.pancreaticcancer.org.uk/In-Memory/AliceGast

Technical expertise, business acumen, and a genuine care for relationships

WARWICK SCOTT FAVILLE (Mech Eng 1962-65, '65-66)

Warwick started his career as an apprentice with Rolls Royce, in Derby and was still there when he completed his degree at Imperial.

Soon after this, he joined Atkins, before finally becoming a freelance consultant at the age of forty.

Warwick worked on many and varied projects, often at the boundaries of civil and mechanical engineering, including advising the UK government on its policy for nuclear power stations and making a telling contribution to the construction of the movable roof over Centre Court at Wimbledon.

Peter Bygrave, MD of Gantrail writes: "Warwick was a remarkable engineer and industry pioneer whose contributions to the crane rail engineering sector continue to influence the industry today. As someone who had the privilege of working closely with Warwick for over a decade, I wanted to share some reflections on his extraordinary career and lasting impact.

"When I joined Gantry Railing Limited in 2001, Warwick had already been an integral part of the company for many years. Over the next thirteen years, until around 2014, we developed a close working relationship that extended far beyond the typical business partnership.

"Warwick's professional legacy extends far beyond our shared experiences. His name appears on numerous patents for the original clips that became the foundation of our organisation's success. These weren't merely products of their time – the fundamental concepts of those original designs remain relevant today, forming the bedrock not only for the Gantrail portfolio, but for competitors throughout the industry who have adopted their own versions of these pioneering designs. In an industry where innovation drives progress, Warwick's contributions laid the groundwork for everything that followed. The designs he and Ian Marchant created, laid the foundation upon which entire companies built their livelihoods.

"In 2006, my first international trip with Warwick was to visit a Gantrail client in the USA. The warm reception we received – complete with welcome signage at the client's offices demonstrated the high regard in which Warwick was held throughout the industry.

"True to form, when we nearly missed our connecting flight home due to a booking mix-up, Warwick's charm and persuasive skills helped save the day, convincing check-in staff to let us board despite our 'no show' status.

"In 2012, we visited suppliers in China, the visit showcasing Warwick's commitment to understanding every aspect of the business.

"Even as mobility became more challenging for him, his enthusiasm for experiencing new cultures and building relationships never wavered. The respect and regard shown to him by suppliers and customers alike was a testament to his reputation in the industry.

"In 2013, our final overseas trip together took us to Salzburg, Austria, to visit a potential supplier. We stayed in a charming riverside hotel with a rooftop bar overlooking Salzburg, though we joked that our tiny rooms resembled cleaning cupboards. A mix-up at checkout led to our client inadvertently paying for our rooms, and we departed with unexpected gifts of rucksacks, towels, and umbrellas.

"Years later, when I lost my umbrella, Warwick sent me his – a small gesture that perfectly captured his thoughtful nature.

"Warwick was more than a colleague; he was a mentor, a travel companion, and a dear friend. I can say with absolute certainty that I would not have achieved the same success in my own career without his support and mentorship.

"His combination of technical expertise, business acumen, and genuine care for relationships made him a respected figure throughout our industry. Whether navigating international airports, exploring new cultures, or developing groundbreaking designs, Warwick approached every challenge with professionalism, humour, and grace.

"His passing is not just a personal loss, but the end of an era. The respect he commanded from customers and suppliers worldwide, the innovations he helped create, and the relationships he built will continue to influence the sector for years to come.

"Warwick's legacy lives on in every rail system that benefits from his contribution to those early pioneering designs, in every professional relationship built on his model of integrity and excellence, and in the memories of those fortunate enough to have worked alongside him."

Sadly predeceased by his wife, Lindy, Warwick died on 21 June 2025, aged 82, a much loved and greatly missed father to Chrissie, Caroline, and Cece, and the loving grandfather of seven.

With thanks to Peter Bygrave.

Warwick speaking with students at an Alumni Insights Event, in the City & Guilds building in February, 2015

An erudite and campaigning journalist

SYDNEY LENSSEN (Aero Eng 1956-60)

Sydney was born in 1938, the child of German émigrés. He attended Manchester Grammar School, leaving in 1956 for Imperial College, where he obtained a degree in aeronautical engineering.

Soon, he turned to civils, working for Balfour, JD&DM Watson and W&C French, before discovering his métier, engineering journalism.

With writing, Lenssen was particularly at ease, honing a talent he could put to good use, not least once he had joined Construction News (CN) in 1965.

His mission there – eventually as editor – was to turn the broadsheet "Jacker's Journal" into an edgy technical newspaper focused on making construction sites safer places to work.

Lenssen said: "Site conditions in the 60s were generally poor, little different to those at the turn of the twentieth century. I saw CN as an engine of change."

His determination was masked to an extent by an encouraging and kindly manner. He was an attractive person.

He built very effective editorial and advertising teams of dedicated young people, prepared to work all hours to make their magazine the best it could be.

That said, his campaigning, investigative style of engineering journalism was not to everyone's taste – some less scrupulous contractors did not approve of Lenssen. Crucially, however, his qualities were recognised by the then Institution of Civil Engineers (ICE) secretary, Garth Watson.

This was a time when ICE was seeking a new channel through which to communicate with members, preferably in a way that generated revenue. Long story short, initial discussions between Watson and Lenssen led to a proposal for a new magazine that was approved by the ICE Council in June 1971.

As New Civil Engineer (NCE)'s founder and first ever editor, Sydney was in Australia during the summer of 1973, when the UK Government called him home to help keep the public calm.

Lenssen was already known as an erudite campaigning journalist when the Department of the Environment (DoE) enhanced his standing still further.

It was the DoE's opinion that Lenssen was the writer best suited to dissect and discuss in popular terms the long-awaited report by atomic physicist Alec Merrison into a series of box girder bridge failures.

Box girder technology and use had developed rapidly in the 1960s but unforeseen difficulties during girder erection had led to three catastrophic collapses in which 52 men died in 18 months.

The Merrison Report highlighted – inter alia – over 50 box girder bridges either in use or being built that needed strengthening.

Reflecting on the report's impact, Lenssen later wrote (NCE, June 2022): "The Government was concerned that the public would be panicked by bridge closures.

"The department did not wish to see a repeat of the public's shocked reaction following the Ronan Point disaster in May 1968."

The upshot was that Lenssen was sought, found in Australia and commissioned to explain everything Merrison related, in a comprehensible full-page article for The Times. There was no subsequent panic.

The first issue of NCE was published in May 1972. On the cover, and inside with plenty of Lenssen-inspired analysis of his report, was Alec Merrison.

The magazine subsequently went from strength to strength, both editorially and commercially.

Sydney left NCE in 1976 to become general manager of ICE; later joining his old friend, William Frischmann, at consultancy Pell Frischmann in a marketing role.

He stopped working in 2001 to concentrate on flying radio control gliders. He travelled all over the world for competitions, writing regular columns for the RC community as 'Uncle Sydney'.

Sydney died on 4 December, 2025 aged 87. He is survived by his beloved wife of 65 years, Brenda, whom he met at Imperial; also by his children Lesley and Lewis; and four grandchildren.

With thanks to T Y Byrd of NCE

A wide-ranging career

MIKE MELLISH (Mining Engineering 1958-61)

Mike was born 22 October 1936.

His wide-ranging operational career took him to Rand Mines and other operations in RSA (1958-61), where he also met and married Pamela.

He later moved to Kilembe, Uganda (1961-63), to Rhokana Mines, Zambia (1965-78) and to Navan Mines, Ireland (1978-79), after which he joined RTZ (later Rio Tinto), becoming their Chief Mine Planner and later Technical Director as part of their in-house consultancy.

Mike retired from corporate life in 1996, but continued to consult privately until 2003.

Along the way, he also managed to find time to edit "Mines and Quarry Engineering" for a year and, more famously, to drive overland from Uganda to England in the early 1960s, with Pamela and two tiny children in a 1955 Land Rover, which he owned and kept roadworthy to the end of his busy life.

Mike died on 16 November, 2025, leaving Pam, his wife of 65 years, and three children, Claire, Greg and Carol.

A passionate lover of railways, wildlife and the environment, Mike was fittingly laid to rest in woodland near a railway line in the heart of Kent.

Mike (far right) with friends in Zambia in 1956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JAMES
AND
BROWNE