# HIGHLIGHTS

16.12.2025

News - From Nobel Laureates to Nanocrystals: the particle story behind MOFs' big moment

Insights from the RSC–IChemE International Particle Technology Forum

Newsletter 9 (PCIG N9)

Welcome to the ninth edition of our newsletter!

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RSC INTEREST GROUP
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# Newsletter 9 (PCIG N9) - 16.12.2025

## PREFACE

This newsletter aims to serve as a means of internal communication of useful information and strengthen the engagement among the group members. This quarter's newsletter, with the ninth edition (September 2025 – December 2025), focused on the following events:

**A. News - Nobel prize in Chemistry "Metal-Organic Frameworks"**

**B. RSC-IChemE "International Particle Technology Forum" 30/09/2025**

**C. Update corner - upcoming events**

Editorial team: **Anna Anandita, Mel Disher, Merel Bout, Okba Al Rahal, Stefanos Mourdikoudis, Sayantan Das, and Tien Quach.**

Graphics team: **Pantelis "Leon" Xydias and Viktoriya Ivasiv.**

We would like to express great appreciation to the PCIG Committee for encouraging and advising us to issue the ninth edition of PCIG Newsletter. Many thanks for the contribution from the people who are willing to co-operate with us. We look forward to your collaboration in the next editions!

Welcome to the PCIG Newsletter,
where we network and work together for better particle technologies.

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## A. NEWS - FROM NOBEL LAUREATES TO NANOCRYSTALS: THE PARTICLE STORY BEHIND MOFS' BIG MOMENT

Written by Pantelis "Leon" Xydias

When this year's Nobel Prize in Chemistry was awarded to Susumu Kitagawa, Richard Robson, and Omar M. Yaghi (Figure 1) for their work on Metal–Organic Frameworks (MOFs), it felt like a long-awaited recognition that had taken over twenty five years to achieve.

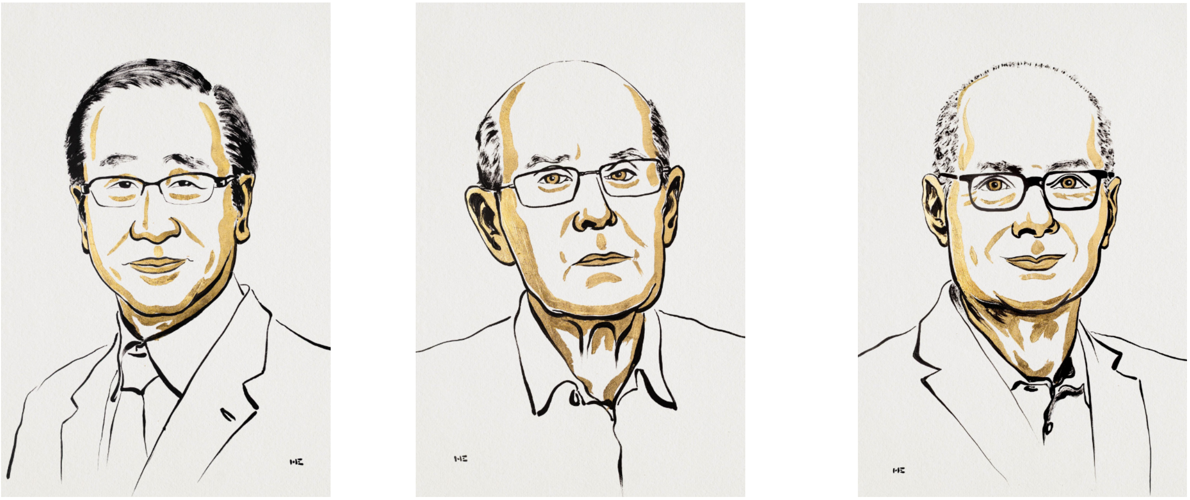

**Figure 1: From Left to Right: Susumu Kitagawa, Richard Robson and Omar M. Yaghi, recipients of the 2025 Nobel Prize in Chemistry.**

Their work introduced an innovative approach to constructing materials—creating "rooms for chemistry," as the Nobel briefing memorably describes it.

In this method, metal nodes and organic linkers come together to form crystalline frameworks filled with nanoscale pores.

These "rooms" have proven to be remarkably practical. Storing hydrogen, capturing $CO_2$, filtering pollutants, and even harvesting water from desert air have moved from theoretical ideas to real-world engineering projects now being tested.[1,2]

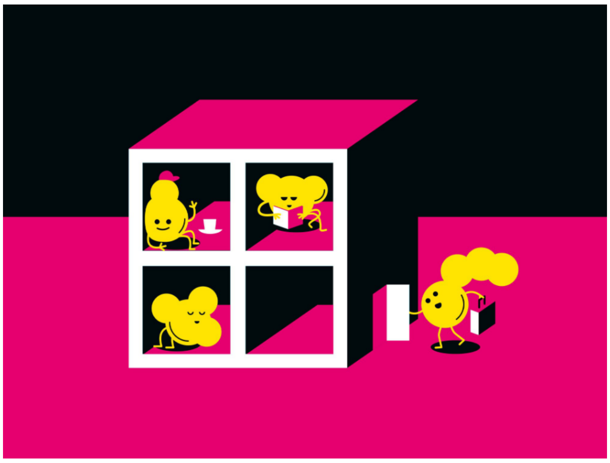

**Figure 2: Illustration from the Royal Swedish Academy of Sciences accompanying the announcement of the Nobel Prize in Chemistry 2025 illustrating the "rooms for chemistry" Concept. ©Johan Jarnestad/The Royal Swedish Academy of Sciences**

## THE CONTRIBUTION OF EACH OF THE LAURATES

**Richard Robson** was among the first to envision extended frameworks with predictable topologies. In 1989, he combined copper(I) ions with a rigid tetranitrile ligand to create a diamondoid network containing large cavities, a breakthrough at a time when such structures were considered unattainable.

His work demonstrated that coordination chemistry could be used to build spacious, periodic architectures rather than dense, interpenetrated solids. This insight laid the foundation for porous crystalline materials and inspired later developments in reticular chemistry.[3,4]

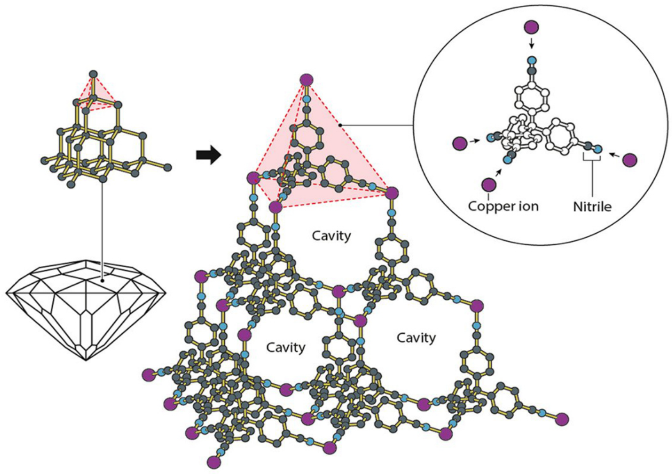


**Figure 3. 3D diamondoid framework based on Cu$^{I}$ and (4',4'',4''',4''''-tetracyanotetraphenylme-thane). ©Johan Jarnestad/The Royal Swedish Academy of Sciences**

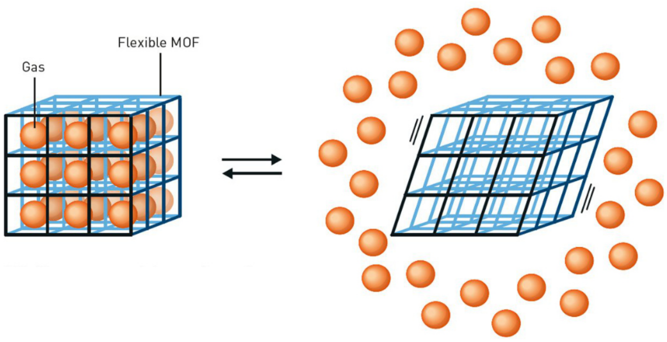


**Figure 4. Flexible, third generation framework, subjective to structural change upon addition/ removal of guests or exposure to stimuli.**

**Susumu Kitagawa** introduced the concept of dynamic porosity and demonstrated gas adsorption in flexible coordination frameworks. In 1997, he reported a cobalt-based "tongue-and-groove" structure capable of reversible gas uptake, such as methane and nitrogen, demonstrating that MOFs could act as responsive hosts.

Kitagawa's work established the idea of "soft, porous crystals," which adapt to external stimuli, and defined the three generations of porous frameworks, bridging structural design with functional adaptability.[5]

**Omar Yaghi** transformed MOFs into a systematic design platform through the application of reticular chemistry. In 1999, he introduced MOF-5, a zinc-based framework constructed from $Zn_4O$ clusters and terephthalate linkers, which achieved permanent porosity and a record surface area. Yaghi formalized principles such as secondary building units and isoreticular expansion, enabling chemists to create families of frameworks with tailored cavities and functionalities. His work opened applications in gas storage, water harvesting, and catalysis, making MOFs a cornerstone of modern materials science.[6,7]

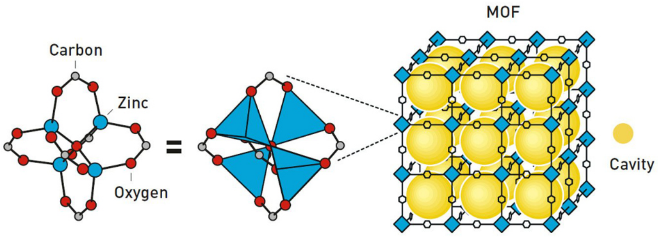


**Figure 5. In 1999 Yaghi constructed a very stable material, NOF05, which contains cubic cavities. Just a gram or two of these materials could hold an area as big as a football pitch.[6]**

The laureates' achievement was first described through the idea of reticular chemistry. This means designing materials by thoughtfully choosing and connecting different building blocks, known as nodes and linkers. As O.M. Yaghi and his colleagues explained, it's about putting together well-designed, sturdy molecular parts into planned, organized structures that are held together by strong bonds.[6,7]

Slowly, MOFs moved from the realm of elegant, intricate, and highly reticular structures on a screen to powders in a vial or granules in a reactor. From there, a quieter, equally consequential truth emerged: particle properties, such as crystal size, morphology (cube, rod, plate, flower-like superstructure), surface defects, and hierarchical porosity, often dictate the properties predicted by their topology. A cube and a rod of the same framework can show different diffusion kinetics, different facet exposure, and even different stability in water or under reactive feeds. That recognition has shifted a large slice of the field's energy toward what might be called morphology mastery: controlling nucleation and growth so that the same MOF can be delivered in the right particle form for the job.[8–17]

At its base, particle control generally and especially in MOFs, arises the tug-of-war between nucleation and growth, and the manipulation of which crystal facets are allowed to expand.[2] The means that scientists have for controlling these aspects are deceptively simple, including modulators, pH, surfactants, solvent control, and the way energy is delivered to the pot. The outcomes, on the other hand, are anything but simple, especially given the complexity of the MOF structure itself. A diagram highlighting the control of particle size through coordination modulation in MOFs can be seen in Figure 6.

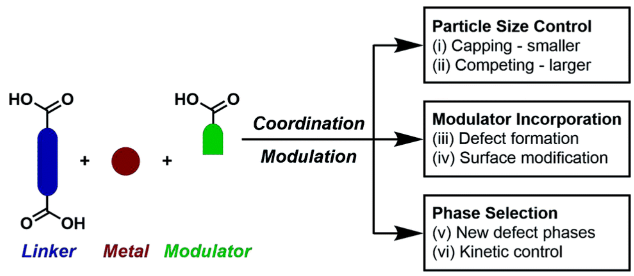


**Figure 6. Pathways for control of particle size in MOFs through coordination modulation.[18]**

One of the clearest levers is coordination modulation, where small monodentate molecules compete with linkers for access to metal sites. In HKUST-1, a MOF made up by bridging bimetallic Cu puddlewheel Secondary Building Units (SBU) with trimesate ligands, adding sodium formate or triethylamine, growth is modulated and the number of nuclei multiplied, shrinking crystals from tens of micrometres to ~100 nm while also reshaping the octahedra into spheres, rods or polycrystalline ensembles.[19] Control of size by means of modulators has assisted Forgan R.S. et al to use series of $Zr^{4+}$ MOFs for drug delivery purposes. Particle size in the case of cell drug delivery is of paramount importance as the particle drug delivery devices need to be of appropriate size to be delivered within the cell.[20,21]

Another key factor is the protonation state. Many linkers are carboxylates, so carefully adjusting the pH of the reaction mixture can actually determine if a linker gets involved in building the MOF at all. For example, MOF-5, a classic zinc carboxylate, forms tidy cubic crystals when the solution is acidic, but if things get more alkaline, it turns into square-shaped nanosheets instead.[19]

Surfactants can also affect particle size as they can absorb selectively on particle facets and act as soft templates. For instance, when CTAB is used, MOF-5 transforms from cubes to truncated cubes and then to octahedra as surfactant concentration rises; the same principle pushes IRMOF-3 through a similar geometric progression as {111} faces are stabilised at the expense of {100} illustrating how subtle changes at the interface ripple outward into meso- and macroscopic form.[22]

Energy delivery has also been utilised as a design parameter. Microwave heating and ultrasound shorten synthesis from hours to minutes, generate more homogeneous thermal fields, and, crucially, favour rapid nucleation over prolonged growth. The result is often an order-of-magnitude downsizing with narrower particle size distributions. MOF-5, typically hundreds of micrometres under conventional solvothermal conditions, shrinks to 20–25 µm by microwave methods[23] and 5–25 µm under sonochemical conditions,[24] while Co-MOF-74 switches from 300 × 70 µm columns to about 50 × 8 µm.[25] This interplay between conditions can give rise to synthetic pathways of materials with different size without changing the composition. For example, by using microwaves and surfactants, and by adjusting time and temperature cobalt frameworks can shift from nanosheets to multilayered microcubes to microrods without changing composition.[26]

When DMF, one of the most used solvents in MOFs, is heated during the synthesis, dimethylamine is released that acts as a base deprotonating the linkers and formic acid. Together they affect the crystallisation kinetics significantly. Solvent polarity and hydrogen-bonding capacity similarly can influence the solubility of linkers, the stability of prenucleation clusters, and even the topology of the emergent phase.[27]

All of these examples point to a simple truth: the way particles are built directly affects how they perform. Smaller crystals shorten diffusion paths and bring more external surface into play, promoting this way fast adsorption–desorption cycles.[28]

Deliberately exposing certain facets can effectively “present” more active metal sites or defect motifs to a feed. Hierarchical porosity, whether introduced via surfactant templating or post-synthetic etching, mitigates bottlenecks when the substrates themselves are bulky, which is particularly relevant in liquid-phase oxidations, polymer separations and even drug delivery scenarios where biological macromolecules are involved.[29–31]

The Nobel Committee’s recognition highlights just how far MOFs have advanced. Winning the prize shows that MOFs are now seen as a foundation for many new technologies. Controlling their shape and structure is like adjusting the settings on an engineering dashboard, helping turn a basic scientific idea into real-world products. That translation is now central to the bench-to-market conversion.[8]

Seen through that lens, the narrative from Robson’s earliest porous networks, to Kitagawa’s flexible gas-adsorbing channels and Yaghi’s ultrastable, designable reticular materials now has a natural epilogue. Together, these discoveries have shown us the importance of assessing geometry, chemistry and properties. From a particle characterisation perspective, they have taught us how important the shape of the bricks can be for said properties. The real excitement lies ahead, as future developments could turn MOFs from a Nobel-winning idea into practical solutions for challenges like capturing carbon, securing clean water, producing green fuels, and improving healthcare products.

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# B. PEOPLE FOCUS

**WHY JOIN US?**

- We love to understand your technical and social experiences, especially your untold stories throughout the learning and working journey.
- We would like to motivate more students - researchers to follow their passion and careers in particle science.
- We believe a single effort and contribution to help make our world better should be recognised and spread out.

**HOW?**

If you are interested in participating, please contact us for more details!

## B.1 Get to know

Collected by Merel Bout

We can learn from the research interest and career pathways from our PCIG members. We will start with an overview of two of the Committee members, but please contact us to share your background and experience in future newsletters.

### Tien Thuy Quach, PhD

Tien completed a Pharmacy undergraduate programme (2011-2016) at the University of Medicine and Pharmacy at Ho Chi Minh City (UMP). From 2016 to 2018, Tien did the internship at Asian Shine company before working as Lecturer and Dean-Assistant at Ho Chi Minh City University of Technology (HUTECH).

After that, Tien came to the UK for higher education starting with MSc Advanced Pharmaceutical Manufacturing (2018-2019) at the University of Strathclyde (UoS) and PhD in Pharmacy at the University of Nottingham (UoN) from 2019 to 2024.

After working as a Research Associate/Fellow and Project Manager at the University of Nottingham for a year, Tien joined the teaching team at Aston University (under Global Talent Visa) in 2024.

Tien has profound knowledge and experience in pharmaceutical and chemical sciences, as well as several transferrable skills in terms of project management, funding acquisition, and public engagement.

Along with a passion for teaching and doing research, Tien is willing to motivate the young generation, support the vulnerable groups, and widening the Equality-Diversity-Inclusion (EDI). Tien is happy to work with other colleagues to initiate and progress more inspirational lectures, productive projects, and relevant activities to support the students' learning and development (such as knowledge exchange, career orientation, industrial opportunities, etc). For example, she has contributed to the success of the FORGE conferences and became a Committee Member of the Particle Characterisation Interest Group.

She will continue participating in different healthcare and community projects.  Feel free to check her LinkedIn (https://www.linkedin.com/in/tien-thuy-quach/) for more details and connection.

## Pantelis "Leon" Xydias, PhD, MRSC

Leon earned his PhD in Chemistry from the University of Crete in 2015, specialising in nanoporous materials for gas storage and separation.

His expertise spans solid-state chemistry, nanoparticle synthesis, and surface functionalisation, with applications in adsorption, catalysis, and drug delivery.

After a postdoctoral role at the University of Glasgow developing Metal–Organic Frameworks for anticancer drug delivery, Leon transitioned to industry.

He currently works as a Senior Pharmaceutical Scientist at Resolian Analytical Sciences, focusing on solid-state characterisation of APIs and method development.

Leon is an active member of the RSC Particle Characterisation Interest Group (PCIG) committee and serves on the BSI particle characterisation committee, representing the UK in ISO working groups. He is passionate about particle characterisation and advancing cost-effective approaches to material analysis.

## B2. Inspiring story

Do not hesitate to share your stories to motivate other researchers and students. You can write about the people, the events that motivated you throughout your learning, working and research (either the good or the bad things happened). We look forward to hearing from you.

## Bridging Lab Innovation and Global Collaboration: Insights from the RSC–IChemE International Particle Technology Forum

*Written by Iswar Raja Vasugi - Student from MSc Drug Delivery 2024-25, Aston Pharmacy School, Aston University, Birmingham, UK - Contact: 240356073@aston.ac.uk or iswarrajav18@gmail.com*

On 30 September 2025, I had the privilege of attending the RSC–IChemE International Particle Technology Forum (IPTF) at the National Physical Laboratory (NPL) Centre, Teddington, London. As an international student from India, currently pursuing my Master's degree at Aston University, this experience was both professionally enriching and personally inspiring. While I have attended overseas conferences before, this event offered a unique perspective, emphasising particle characterisation, formulation science, and cross-disciplinary collaboration on a global scale.

**The Lab journey: challenges and learning**

My research focused on "Formulation and Characterisation of Hydrocortisone Mini-Tablets for Chronic Inflammatory Diseases", supervised by Dr Tien Thuy Quach. I needed to overcome several challenges such as time constraint and equipment availability (as multiple students needed to prepare formulations with specific instruments at similar timescale), particularly my analytical work involves UV-Vis and HPLC techniques, which required high accuracy of calibration and validation. Particle size analysis, conducted via laser diffraction, was completely a new area to explore. Achieving reliable correlations between particle properties and tablet performance required extensive trial and error trials, and deeper literature research.

**Photo 1. The group picture of delegates, speakers and chair persons in IPTF 2025.**

### Communication and collaboration with technical staff and industrial partners

A key component in overcoming these challenges was communication and collaboration with other technical staff and industrial partners. Thanks to the support from other technical staff like Mr. Daniel Burrell, Mr. Jagminder Gill and Ms. Anushya Jeyabalan along with Dr. Radeyah Ali, the academic staff support, I could get access to advanced equipment and laboratory resources. More importantly, Ms Charlotte Cartwright from Merlin Powder Characterization Ltd offered relevant simulation data on tablet punching and particle behaviour. Their supports were invaluable in selecting formulations and optimising blends to achieve consistent and robust tablet performance. This collaboration demonstrated the great potential of applied research being verified and scaled up in the industrial context.

### Translating lab work to the conference presentation

The forum's focus on particle technologies guided my choice of content for the conference. I emphasised particle size analysis, which revealed surprising correlations with dissolution behaviour and pharmacokinetic properties. Using statistical modelling, I demonstrated how subtle variations in particle size influenced dissolution profiles and overall tablet performance. Presenting these insights allowed me to showcase not only the experimental data but also the critical thinking and problem-solving that underpinned the research process.

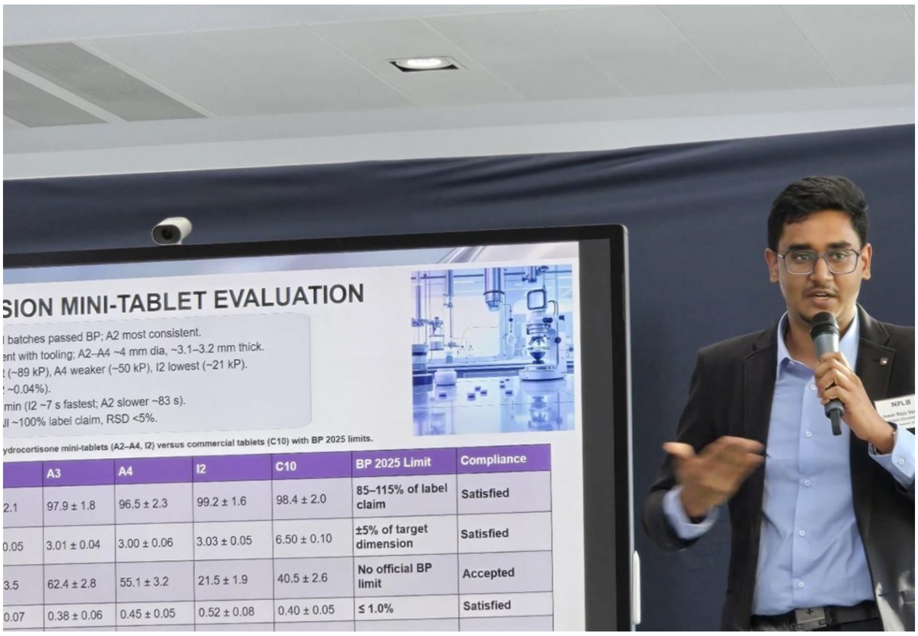


**Photo 2. MPresenting my research at the RSC–IChemE International Particle Technology Forum 2025, held at NPL Centre, Teddington.**

**Conference Highlights and Networking**

The forum brought together academics, industrial professionals, and ISO board members from around the world. Beyond the technical sessions, the barbecue dinner offered an excellent informal setting to interact with supervisors, ISO delegates, and fellow researchers. These interactions provided career guidance, deeper insights into particle technology, and inspiration for future collaborations. It was rewarding to discuss scientific challenges and solutions in such a collaborative and supportive environment.

**Photo 3. ISO board members, professionals and academics present in the forum.**

**Photo 4. Barbecue dinner party**

### Personal Growth and Reflections

This project significantly enhanced my laboratory skills and confidence. I gained hands-on experience with state-of-art techniques in formulation and analyses, allowing me to understand the science behind tablet design and powder handling. Being one of the few Master students selected for an early career presentation, and achieving third place, was both humbling and motivating. It reinforced my commitment to rigorous scientific practice, collaboration, and continuous learning. This journey from lab bench challenges to international recognition has strengthened my belief in the importance of interdisciplinary research, critical thinking, and persistence in overcoming obstacles.

**Photo 5. My first time receiving the great honour by the RSC & IChemE Representatives in the UK**

**Photo 6. Standing with fellow prize winners of the Early Career Research Presentation (From left to right: first, second, and third place recipients).**

### Acknowledgements

I am deeply grateful to Aston University for their continuous support, including laboratory access and guidance throughout the project. Special thanks to Dr Tien Thuy Quach for mentorship and encouragement, Merlin Powder Characterization Limited for industrial collaboration, and SYSCOEdu for a travel grant to enable my participation in this conference. I also extend my gratitude to the Royal Society of Chemistry (RSC), IChemE, and the Particle Characterisation Interest Group (PCIG) for organising such a stimulating and inclusive forum.

Attending this international forum has inspired me to pursue further research in particle technology and pharmaceutical formulation. It reminded me that science grows stronger through collaboration, curiosity, and shared passion, and I return to the lab with renewed enthusiasm and purpose.

# C. UPDATE CORNER

## Upcoming events of interest

### UK-based events

UK and Ireland based events starting next year that may interest you include:

1) International Conference on Environmental Biotechnology and Sustainability, 12-13 January, 2026, Edinburgh https://isit.org.in/event/index.php?id=3422060

2) RSC Chemical Nanoscience and Nanotechnology (CNN) Interest Group Annual Symposium, 12-13 January, 2026, London https://www.rsc.org/events/detail/81692/rsc-chemical-nanoscience-and-nanotechnology-cnn-interest-group-annual-symposium

3) Vibrations at interfaces Faraday Discussion, 8-10 April, 2026, Manchester, https://www.rsc.org/events/detail/80614/vibrations-at-interfaces-faraday-discussion

4) Bridging the gap from surface science to heterogeneous catalysis Faraday Discussion, 20-22 April 2026, London, https://www.rsc.org/events/detail/80739/bridging-the-gap-from-surface-science-to-heterogeneous-catalysis-faraday-discussion

5) Medicinal Chemistry Summer School 2026, 7-12 June 2026, Loughborough, https://www.rsc.org/events/detail/81471/medicinal-chemistry-summer-school-2026?utm_campaign=unknown&utm_source=shortlink_various&utm_medium=social_and_print&utm_content=tgroup_all

6) Emerging materials for optoelectronics applications Faraday Discussion, 1-3 July 2026, Edinburgh, https://www.rsc.org/events/detail/80738/emerging-materials-for-optoelectronics-applications-faraday-discussion

## Non - UK and Ireland events

1) International Conference on Environmental Biotechnology and Food Security: December 30, 2025, Geneva, Switzerland

2) Frontiers in Spin Technologies 2026, January 5-6, Paris, France, https://frost2026.com/

3) School on Synchrotron Light Sources and their Applications, January 12-23, 2026 (online), https://indico.ictp.it/event/11131/overview

4) 7th International Caparica Symposium on Nanoparticles/Nanomaterials & Applications (7th ISN2A-2026), January 25-29, 2026, Caparica (Lisbon area), Portugal, https://isn2a2026.com/

5) 31st annual Doctoral Students' seminar 'Inorganic non-metallic materials 2026', February 5-6, 2026, Prague, Czech Republic, https://sil.vscht.cz/about/INM

6) RSC Poster Conference, March 3-4, 2026 (online), https://www.rsc.org/our-events/about-our-events/rsc-poster

7) PITTCON 2026 (Conference and exposition on laboratory science), March 7-11, 2026, San Antonio, Texas, USA, https://pittcon.org

8) 5th International Conference on Nanomaterials Applied to Life Sciences (NALS 2026) March 11-13, 2026, Vigo, Spain, https://nals2026.com

9) MATSUS Spring 2026 (Materials for Sustainable Development Conference, March 23-27 2026, Barcelona, Spain, https://www.nanoge.org/MATSUSSpring26/home

10) Physics of Light-Matter Coupling in Nanostructures and Nanophotonics (PLMCN-2026), April 12-15 2026, Dubai, UAE, https://events.mifp.eu/PLMCN-2026/

11) TERMIS-EU'26 'Accelerating multidisciplinary innovation to close the gap in clinical translation', April 21-25, 2026, Palma de Mallorca, Spain, https://eu2026.termis.org/

12) 9th World Conference on Research Integrity, May 3-6 2026, Vancouver, Canada, https://wcri2026.org

13) The 10th World Congress on Particle Technology, May 11-15 2026, Osaka, Japan, https://wcpt10.org/

14) E-MRS Spring Meeting (European Materials Research Society), May 25-29, 2026, Strasbourg, France, https://www.european-mrs.com/

15) 15th International Conference on the Scientific and Clinical Applications of Magnetic Carriers (15th MagMeet), May 26-29, 2026, Sorbonne University, Paris, France
https://magneticmicrosphere.com/meeting-fifteenth

16) FBNL-MR 2026 (French-Benelux Magnetic Resonance Conference), June 2-5, 2026, Lille, France
https://fbnl-mr-2026.sciencesconf.org/

17) 15th International Colloids Conference, June 7-10, 2026, Sitges, Spain
https://www.elsevier.com/events/conferences/all/international-colloids-conference?utm_campaign=STMJ_1757785360_CONF_NEWS_AB&utm_medium=WEB&utm_source=WEB&dgcid=STMJ_1757785360_CONF_NEWS_AB

18) IEEE Magnetics Society Summer School 2026, June 14-19, 2026, Cairo, Egypt
https://ieeemagnetics.org/membership/educational-outreach/summer-school

19) The European Conference on Physics of Magnetism 2026 (PM'26), June 22-26, 2026, Poznan, Poland
https://www.ifmpan.poznan.pl/pm26

20) Grenoble Workshop on Nanomagnetism (GWN 2026), June 23-26, 2026, Grenoble, France
https://gwn2026.sciencesconf.org

21) Graphene 2026, June 30-July 03, 2026, Barcelona, Spain
https://www.grapheneconf.com/2026/index.php

22) Nanotexnology 2026 - International Conference & Exhibition on Nanotechnologies, Organic Electronics & Nanomedicine, 4-11 July 2026, Thessaloniki, Greece
https://www.nanotexnology.com

23) ECOMATES Final Conference 2026, 'Power-to-X' for a Sustainable Future', 6-10 July 2026, Reykjavik, Iceland.
https://www.msca-dn-ecomates.eu/?page_id=2146

24) Liplii2026: Light Interaction with Particles / Laser Induced Incandescence, July 6th-10th, 2026, Rouen, France.
https://liplii2026.sciencesconf.org/

25) 8th International Conference on Nanomaterials Science and Mechanical Engineering, University of Aveiro, Portugal, July 7-10, 2026 (ICNMSME-2026)
https://icnmsme.web.ua.pt/

26) 21st International Conference on Defects Recognition, Imaging and Physics in Semiconductors, 30/08 - 03/09, 2026, Warsaw, Poland
https://drip21.pl/

27) E-MRS Fall Meeting and Exhibit (European Materials Research Society), September 14-17, 2026, Warsaw, Poland
https://www.european-mrs.com/meetings/2026-fall-meeting-exhibit

28) 7th International Energy Storage Materials Conference, September 20-23, 2026, Dresden, Germany
https://www.elsevier.com/events/conferences/all/energy-storage-materials-conference

29) MMM'2026 - 71st Annual Conference on Magnetism and Magnetic Materials, November 2-6, 2026, Honolulu, Hawaii, USA
https://ieeemagnetics.org/event/conference/71st-annual-conference-magnetism-and-magnetic-materials

30) RESCON Europe 2026 in Porto, Portugal, on November 10–11, 2026
https://rescon-europe.com/about/

31) JEMS 2027 - Joint European Magnetic Symposia, 29/08 - 03/09, 2027, Prague, Czech Republic
https://www.jems2027.eu

32) FEMS EUROMAT'27 - 19th European Congress and Exhibition on Advanced Materials and Processes, September 12-16, 2027, Graz, Austria
https://euromat2027.com/

**The PCIG is always happy to hear about up-and-coming events that our members are interested in. If you have any suggestions for events to be included in our newsletters, please contact us and we will include these in our next edition.**

# CONTACT US

Visit our own website for further information: https://pcig.co.uk/ or go to our official RSC-website:

https://www.rsc.org/membership-and-community/connect-with-others/through-interests/interest-groups/particle-characterisation/

Do you have any questions, feedback or are you willing to contribute as a collaborative writer? Please email the RSC-PCIG Particle Newsletter Team via: **Particlenewsletter@gmail.com** and we will get back to you.