



Benefits of GASG Membership for the Academic Sector - A Personal View

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Early Career Researchers and Development Staff

When I first joined the gas industry, my boss (Dr Russ Pride) was a founding member of the GASG Organising Committee and so of course he took me along to every meeting by default. I know how much I got out of these events as an early career researcher, even if the meeting topic wasn't strictly relevant to my job at the time. As my career has progressed, I have drawn again and again on topics where 'I think I remember seeing something about that at a GASG meeting'. Since then, I have noticed how valuable these meetings are to our Early Career Researchers (ECRs) and PhD students, not just in what they get out of the material but also in how they see professional communication in action.



Regular attendance at GASG meetings can be especially helpful for the development scientists and engineers who are new to the field:

- Learning about specific technologies relevant to their work
- Learning about 'the competition' – alternative solutions to the same problem
- Exposure to real-world problems across a wide variety of sensor deployment niches
- Observing professional approaches to scientific communication and presentation of data
- Gaining both explicit and tacit knowledge about the industry
- Joining an open and friendly network

Our biannual Early Career Researchers Forum is a great opportunity for the next generation to present their work in a welcoming setting. With shorter talks and a much broader subject remit than our other meetings, this event has a faster pace and wider coverage that have made it a firm favourite with our members.

I am keen to pass on these opportunities to the next generation so that our community and the gas sensing industry continues to thrive.



5th Early Career Researcher Forum, 2025

Academics

Find out what the real issues are!

GASG talks often cover the 'why' as well as the 'how', go into detail about what works or fails in real applications, and where the big gaps are. Got a great idea? Sound it out in our networking sessions over lunch. You might get a realistic appraisal that your idea has a major flaw, what potential weaknesses you need to work on, or you might find somebody willing to test it out or support a grant application. Any of these outcomes will progress your research in the most impactful direction.

Support the next generation

Regular attendance at the GASG promotes development of ECRs, including PhD students. Articulating this support on applications for PhD funding can help get a grant over the line. By the time students are ready to give their first presentation on their work, they can have become familiar with the environment of a scientific meeting and already feel like a member of the community.

Students in particular have become grounded by attending the GASG. They might be working on some new, sophisticated laboratory technology, but these meetings repeatedly emphasise the effort and engineering that has to go in to make things work in the field.

Present at the Early Career Researchers Forum

Our Early Career meeting was developed as a welcoming environment where ECRs can present their work without feeling overwhelmed by the experience and seniority of other speakers at our standard meetings. It's easy to forget how nervous ECRs can be at their first conference. So we designed this meeting to be welcoming and accessible, with shorter talks and an open scope of topics. We give prizes for the best presentations and have previously invited selected prize-winners onto the organising committee, to see and contribute to the effort that goes in to making these events happen.

Network with industry

Our membership covers a wide range of organisations –

- Manufacturers of sensors, instruments and components
- Sensing & detection industry consultants
- Major users and government laboratories
- Universities and institutes



This gives us a unique reach into industry that is rarely a feature of traditional academic conferences. Our meetings are at a manageable size (typically 40-50 people) and virtually every attendee is active in in some aspect of the sensing and analysis of gases, VOCs and airborne particles. This means that you get great benefit from conversations during the generous periods we always include in the programme for networking. We have civilised start and finish times plus lunch breaks that are long enough to enable proper discussions. I often find that the entire day's travel is justified by the 5-minute conversation I had with a contact over lunch!

How to pay for it (if you can)

The GASG's membership model supports its operations, but differs from conventional scientific societies in one key respect. Membership is granted to the institution (legal company or university) not the individual. Therefore, both membership and attendance fees are eligible costs on research grants, and they are not 'in-kind' benefits to the individual if paid from those grants.

I list 'Attendance at meetings of the UK Gas Analysis and Sensing Group' under travel costs on my research grants, which helps tick the 'impact' box and shows engagement with the wider community.

I would wholeheartedly recommend membership to those from academia who have an interest in the sensing and analysis of gases, vapours, VOCs and particles, including:

- New and interesting technologies for detection and measurement
- Sensor materials and design
- Sampling, calibration and data analysis methods
- Applications of measurement technologies
- Use of the resulting data for quantification of leaks, modelling
- Integrating human factors
- Standards and methodologies
- Business and commercial aspects of gas/VOC/particle detection.



Jane Hodgkinson gained a BA in Natural Sciences from the University of Cambridge in 1989 (studying physics in the final year). In 1998 she gained her PhD from the Optoelectronics Research Centre, University of Southampton, via a collaboration with United Utilities to develop optical sensors for water quality. She then moved to the gas industry (Advantica, formerly British Gas Research), developing and testing new technologies for detecting gas leaks and other interesting measurands. In 2004 she moved to Cranfield University via an EPSRC Advanced Research Fellowship, where she established gas detection laboratories within the Centre for Engineering Photonics and now leads optical gas detection activity with funding from EPSRC, NERC, Innovate UK, the Royal Society, Horizon 2020 and industrial collaborators.

Jane first attended meetings of the GASG in 1998 when she joined the gas industry and has been a regular ever since, finding it invaluable especially when she was starting out. She later joined the committee and in 2015 was elected to Chair. She chaired the MNT Gas Sensor Forum, and was lead author of the resulting MNT Gas Sensor Roadmap and an Invited Review Article for the journal Measurement Science and Technology.

Jane is a Member of the Institute of Physics, a Chartered Physicist, Chartered Engineer and a Member of SPIE, the International Society for Optics and Photonics as well as Fellow of the Higher Education Academy (FHEA).