

“**GEOSCIENCE STUDENT NUMBERS ARE DWINDLING. THIS SPECIAL ISSUE ON GEOSCIENCE EDUCATION DELVES INTO THE POTENTIAL CAUSES, AS WELL AS INITIATIVES THAT AIM TO TACKLE THIS DEPRESSING TREND**”

FROM THE EDITOR'S DESK:

Halt the decline

Globally, geoscience departments are reporting that student enrolment in degree courses is declining. The reasons for this drop off are manifold and complex. In the UK, the dearth of exposure to geoscience, and particularly geology, during early education, the lack of focus on geology as a standalone subject, a shortage of trained teachers, and the erosion of the subject's status as a science all contribute to diminishing uptake (see page 16).

Perception is a major issue. Many people don't fully comprehend the essential role the geosciences must play in addressing the grand challenges and several geoscientific professions are not viewed as noble in the way they once were. The association of geoscience with the oil-and-gas and extractive industries has (not unfairly) led to the subject being labelled as 'dirty' (page 9), and few youngsters are interested in studying a subject that they perceive as having played a central role in damaging our planet. The problem is, geoscience also has a crucial part to play in fixing these issues and creating a pathway to sustainable development—we desperately need a new generation of skilled, passionate geoscientists to take up this mantle.

For example, the successful implementation of carbon capture and storage, the effective management of water resources, as well as the adequate supply of the raw materials needed to create renewable energy technologies, the infrastructure that underpins efficient, functional cities, and the fertiliser that nourishes crops to feed our exploding population, all rely on experts with an intricate understanding of the subsurface and Earth systems.

Fortunately, several initiatives are underway to boost teaching, challenge public perceptions and revamp geoscience-training courses. Organisations such as the Earth Science

Teachers' Association (page 16) and our own Society (page 8) are working with teachers in schools and universities to raise geology's profile. Post-graduate training courses are also evolving. On page 10, John Underhill discusses the Centre for Doctoral Training model—an exemplar of how a training course can successfully evolve from its oil-and-gas remit to address the challenges faced by society in the 21st Century.

This training evolution goes well beyond a simple rebrand. The next generation of geoscientists will need an expanded skill set that incorporates economics, social science and policy, and our training provisions must reflect this. Geoscientists will also need to work closely with experts from these sectors. The Researching Social Theories, Resources, and Environment International Summer School (page 24) was setup with precisely this aim—to facilitate connections between disparate disciplines and build a global community to tackle the issues of sustainable resource extraction.

It is heartening to learn that many in our community are working to halt the subject's decline. But, geology as a discipline remains at risk and we must each take every opportunity to engage the next generation. Complacency may contribute to the demise of our science.

In other news, change is coming. From mid-October, I will head off on maternity leave and Sarah Day will take over as *Geoscientist* Editor. Sarah will be familiar to many, having worked at the Society for 11 years as Earth Science Communicator and Head of Media Relations & Outreach. Sarah studied Natural Sciences, as well as the History & Philosophy of Science & Medicine at Durham University, before completing a Masters in Science Communication at Imperial College London. She is also an award-winning author, so I look forward to spending my sleep-deprived leave reading her beautifully crafted editorials.

