



Professor Ben Bin Xu

Jul 06, 2022 10:00 BST

Professor appointed group chair of world-leading engineering society

A major UK science and engineering institution has made a Northumbria University professor chair of its technical community group.

[Professor Ben Bin Xu](#), an expert in materials science from the University's Department of [Mechanical and Construction Engineering](#), will lead the Materials Characterisation and Property Group of the prestigious [Institute of Materials, Minerals and Mining \(IOM3\)](#) – a professional body whose members are globally recognised technical specialists in materials and manufacturing.

Appointed by the IOM3 Executive Board, Professor Xu will proactively work with academics and industrial partners to tackle technical challenges to advancements within the field of material properties research, such as the circular economy and Net Zero targets.

Through collaboration and the creation of open culture, he aims for the group to provide a variety of activities and events, covering education, policy work, publishing, outreach and international programmes. Ultimately, the aim is for this activity to contribute to the development of new products and technology that will transform the way different materials respond to aspects of their environment, and how they can be used.

Professor Xu leads Northumbria's [Smart Materials and Surfaces Lab](#), which looks at new ways of changing the properties of different surfaces, and will benefit from the work and partnerships produced as part of Dr Xu's new role.

He said: "This appointment represents a recognition of the research quality we've achieved at Northumbria University. It will steer us in both exploiting the unknown and tackling engineering challenges for tomorrow."

[Professor John Woodward](#), Pro Vice-Chancellor of the Faculty of Engineering and Environment, said: "This appointment is well deserved international recognition for Professor Xu in the field of materials science and engineering, based on his innovative and ground-breaking discoveries in novel materials properties.

"Materials science is an area of high-quality research here at Northumbria and we look forward to supporting IOM3 in its international effort to address key societal challenges."

With a PhD in mechanical engineering from Heriot-Watt University and a period spent as a post-doctoral researcher at the University of Massachusetts Amherst in the USA, Professor Xu joined Northumbria University in 2013, leading multidisciplinary research programmes to strengthen our fundamental understanding of material science.

His work on soft active matter and novel micro-devices is supported by the [Royal Society](#) and the [Engineering and Physical Sciences Research Council](#). Dr Xu's recent work on technologies in a scale-up thin-film device (*Sci. Adv.*

2022) and optical sensing (*Nat. Comm.* 2020) have been featured by [EPSRC](#) and [MIT Technology Review China](#) respectively.

Speaking of the appointment, IOM3 Chief Executive Colin Church added: "Dr Xu has shown in-depth technical knowledge with a solid multi-disciplinary research background in materials. He's also demonstrated an understanding of the evolving spirit of IOM3, which is highly desired to promote the knowledge and technique within the global community."

Northumbria University is [ranked highly for its engineering](#) research power in the [Research Excellence Framework 2021](#), with 90 per cent of its studies rated as either world-leading or internationally excellent.

Northumbria is a research-intensive modern university with a global reputation for academic excellence. Find out more about us at www.northumbria.ac.uk --- Please contact our Media and Communications team at media.communications@northumbria.ac.uk with any media enquiries or interview requests ---

Contacts



Rik Kendall

Press Contact

PR and Media Manager

Business and Law / Arts, Design & Social Sciences

rik.kendall@northumbria.ac.uk

07923 382339



Andrea Slowey

Press Contact

PR and Media Manager

Engineering and Environment / Health and Life Sciences

andrea.slowey@northumbria.ac.uk

07708 509436



Rachael Barwick

Press Contact

PR and Media Manager

rachael.barwick@northumbria.ac.uk

07377422415



James Fox

Press Contact

Student Communications Manager

james2.fox@northumbria.ac.uk



Kelly Elliott

Press Contact

PR and Media Officer

kelly2.elliott@northumbria.ac.uk



Gemma Brown

Press Contact

PR and Media Officer

gemma6.brown@northumbria.ac.uk