THE MATERIALS SCIENCE AND ENGINEERING DEPARTMENT
FALL COLLOQUIUM SERIES PRESENTS:

Dorn Lecture

Professor Judith Driscoll

Professor of Materials Science at University of Cambridge,
Fellow at Trinity College, Visiting Faculty at Los Alamos National Laboratory

Practical functional Oxides for Memory and Neuromorphic Devices

Opportunities of functional oxides for applications in electronics are huge. However, oxides in electronics are quite scarce. The challenges stem from both intrinsic and extrinsic materials problem, e.g. composition, defect and interface control. Also, current thin film deposition routes cannot always deliver the required performance. This talk looks at some of the reasons for the aforementioned challenges and shows ways to overcome them. Recent examples from my group are given in the area of ionotronic oxide thin films for neuromorphic computing devices.

Judith MacManus-Driscoll is Professor in the Materials Science at the University of Cambridge and Fellow of Trinity College. She has been visiting faculty/staff member at Los Alamos National Lab. for 22 years. She is Royal Academy of Engineering Chair in Emerging Technologies. She is fellow of the Royal Society, the Royal Academy of Engineering, APS, AAAS, MRS, RSC, IOP, IOM3, WES. Her research covers wide ranging oxide thin film engineering for electronic applications. She has many licensed patents and consults widely with industry worldwide. She is CSO of recent spin-out from her group in Cambridge, Nanoprint Innovations. She is passionate about keeping women in science.

Tuesday, Oct. 28 • 4 pm CT • Tech L211

In person only; no Zoom

Questions? Contact allison.macknick@northwestern.edu

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