

In conjunction with the Black History Month Celebration, SCALACS invites you to a free Virtual Seminar

TWISTS IN THE TALE: 2D SUPERLATTICES FOR ELECTROCHEMISTRY AND MAGNETISM

FEBRUARY 22, 2024

2:00 PM PACIFIC TIME

presented by

PROF. DANIEL KWABENA BEDIAKO Assistant Professor of Chemistry, University of California, Berkeley, CA

RSVP: www.scalacs.org

Superlattice structures are a powerful means of tailoring physical and chemical properties of materials. This talk first will describe how azimuthal misalignment of atomically thin layers produces moiré superlattices that manifest a strong twist angle dependence of heterogeneous electrochemical kinetics in the case of twisted bilayer and twisted trilayer graphene electrodes with the greatest enhancement observed near the 'magic angles'.

In addition, the talk will show how transition metal dichalcogenides intercalated with open-shell transition metals allow fine control over the chemical and electronic structure of a magnetic material to bring about exotic magnetic orders in two-dimensional materials or bulk crystals. (Visit scalacs.org for a detailed abstract, references and bio.)

Professor Bediako's research considers charge transport and interfacial charge transfer in two-dimensional materials and heterostructures. He is also a member of the Editorial Advisory Board of the Journal of the American Chemical Society (JACS).



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