



The Third 2D Electronic Materials Symposium

Held in conjunction with

The 21th American Conference on Crystal Growth and Epitaxy (ACCGE-21)

together with

The 18th U.S. Biennial Workshop on Organometallic Vapor Phase Epitaxy (OMVPE-18)

to be held jointly on

July 30 – August 4, 2017, at Santa Fe, New Mexico, USA

Research on the synthesis of two-dimensional layered materials is the theme of this symposium. Ultra-thin 2D layered materials offer the potential for materials properties that far exceed those of their bulk-like crystal counterparts. Materials of central importance to this symposium include the range of self-supporting two-dimensional materials that are of potential scientific and technological importance; some recent examples are carbon-based graphene, boron nitride, the metal dichalcogenides, $\text{Bi}_2(\text{Se}_x\text{Te}_{1-x})_3$, etc. as well as heterostructural combinations. Of particular interest are contributions pertaining to the synthesis, properties, and end applications for these intriguing materials. The goal of this symposium is to bring together leading researchers actively investigating these materials to identify breakthroughs as well as issues that may inhibit further development.

Abstracts may be submitted through the website at <http://www.crystalgrowth.org>

Symposium Organizers: D. Kurt Gaskill and Joan Redwing



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Invited Speakers and Tentative Titles

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Zakaria Al Balushi, Pennsylvania State University, *"Two-dimensional growth of GaN realized via graphene encapsulation"*

Mark Edmonds, Monash University, *"The growth and electronic properties of ultra-thin epitaxial topological Dirac semimetal Na₃Bi films"*

Michael Fuhrer, Monash University, *"Templated chemical vapor deposition of large-area WS₂ with Ohmic graphene edge contacts"*

Chris Hinkle, University of Texas at Dallas *"Nucleation and Growth of WSe₂: Enabling Large Grain Transition Metal Dichalcogenides"*

Olga Kazakova, National Physical Laboratory, UK, *"Studies of local electronic properties of graphene"*

Jeehwan Kim, Massachusetts Institute of Technology, *"Graphene-based layer transfer"*

Mattias Kruskopf, Physikalisch-Technische Bundesanstalt, *"Bilayer-free epitaxial graphene on SiC for quantum resistance metrology"*

Srinivasan Raghavan, Center for Nano Science and Engineering, Indian Institute of Science, *"Growth-Microstructure-(Electronic) Property correlations in 2D Materials"*

Lourdes Salamanca-Riba, U. of Maryland College Park, *"Formation of Graphene-like Nanoribbons in the Lattice of Metals by the Electrocharging Assisted Process"*

Alexander Tzalanchuk, National Physical Laboratory, UK, *"Graphene metrology"*