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, Bi$_2$(Se$_x$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 Organizer:** D. Kurt Gaskill

**ACCGE Chair:** Joan Redwing

**OMVPE Chair:** Luke Mawst
The Second 2D Electronic Materials Symposium
August 2-7, 2015, at Big Sky, Montana, USA

List of Invited Speakers and Tentative Titles

Prof. Pulickel Ajayan, Rice U., “Materials Science with 2D Atomic Layer Building Blocks”

Dr. Harold Cai, U. Maryland, “Plasmon-enhanced Terahertz Detection via the Photothermoelectric Effect in Epitaxial Graphene”

Dr. Sarah Eichfeld, Pennsylvania State State U., “Going Big in 2D”

Prof. Josh Goldberger, Ohio State U., “Group IV Semiconductors at the Atomic Scale”

Dr. Alton Horsfall, Newcastle U.


Prof. Wataru Norimatsu, Nagoya U., “Growth of Graphene and Other Novel 2D Film on SiC”

Prof. Thomas Seyller, T. U. Chemnitz.

Prof. Mauricio Terrones, Pennsylvania State U., “Building Heterostructures and Doping with Metal Chalcogenides: Tunable Properties and Possible Applications”

Prof. Boris Yakobson, Rice U.

Prof. Rosizta Yakimova, Linköping U., “Graphene and Graphene Mediated Structures - Growth and Properties”