Department of
Materials Science and Chemical Engineering (MSCE)

Departmental Colloquium

Friday, November 2, 2018, 1:00 – 2:00 PM
Room 301 Engineering Bldg.

Dr. Anibal Boscoboinik
Associate Materials Scientist
of Center for Functional Nanomaterials
Brookhaven National Laboratory
Adjunct Professor, MSCE, Stony Brook University

Title: Exciting Research Opportunities using Two-Dimensional Silicates

The recent development of well-defined, nanoporous, two-dimensional silicates and aluminosilicates suitable for surface science studies has led to various exciting new areas of research and several potential applications. In this talk, I will describe these new materials from the structural and chemical point of view. I will also describe exciting preliminary results in relation to catalysis, the trapping and separation of gases, their use as protective coatings, and as a platform for studying chemistry in confined spaces.

About the Speaker:

Dr. Anibal Boscoboinik received his Ph.D. at the University of Wisconsin-Milwaukee in 2010 under the supervision of Prof. W.T. Tysoe. In 2011 he received an Alexander von Humboldt Postdoctoral Fellowship to work at the Fritz-Haber Institute of the Max-Planck Society under the supervision of H.-J. Freund. There he led the work to synthesize the first experimental 2D-zeolite model that showed the same chemical behavior as zeolites in terms of Brensted acidity. In 2013 he moved to the Center for Functional Nanomaterials at Brookhaven National Laboratory (BNL) as an Assistant Materials Scientist, promoted to Associate Materials Scientist in 2015, and Materials Scientist in 2018. His research focuses on scientific and technical aspects of surface science studies. On the science side, his research focuses on 2D-experimental models for zeolites and related materials, as catalysts, membranes and sorbents. On the technical side, his work focuses on the use and development of in-situ surface science methods. Since 2015, Boscoboinik is also an adjunct professor at Stony Brook University and since 2016 a visiting professor at Universidad Nacional de San Luis, Argentina. Boscoboinik has authored 60 publications and given more than 30 invited talks.

Refreshment will be served 12:15 – 1 pm outside of the colloquium room.