### **Overview**

Despite the fact that the first MXene paper appeared in 2011, the actual discovery was made in 2010; therefore, the first MXene was born a decade ago. To celebrate this important discovery, Drexel University is hosting the "MXenes: Ten Years Later" Conference, from August 3-5, 2020 in Philadelphia, PA - the first conference on MXene in North America. When the discovery of MXene was made, we immediately realized its importances, but we never anticipated the level of interest and, more importantly, the extremely large field of applications that these 2D materials have engendered.

The field is moving extremely fast and conferences such as this one are an important and efficient method to disseminate the latest understanding and applications. This conference will bring together expertise from a broad range of disciplines and applications, facilitating a distribution of knowledge and collaboration that would not be possible outside this meeting.

Researchers from around the globe, as well as industrial professionals and representatives from government agencies are invited to explore all areas of MXenes at this international conference. This includes energy storage and generation, electromagnetic interference shielding, antennas, transparent conductors, gas and pressure sensors, water purification, gas separation membranes, photo- and electrocatalysis, medicine and plasmonics among others.

The conference will be restricted to less that 300 participants and will involve a single session where invited and submitted talks will be interspersed. There will also be poster sessions.

In short, this "MXenes: Ten Years Later" Conference celebrates a decade of scientific discoveries, research innovations, growth, collaboration with industry, and international excellence. It also looks towards the future of this new and unique 2D family of materials, that if not already, will soon be the largest such family. We are very much looking forward to seeing you in Philadelphia in the summer of 2020!

Michel W. Barsoum and Yury Gogotsi



## **Optional One-Day Courses**

#### **MXene Synthesis Course: \$650**

This one-day course will introduce researchers to MXene synthesis best practices. Course attendees will receive detailed instruction as well as hands-on tutorials on how to synthesize MXenes. Participants will also learn about common mistakes encountered during MXene synthesis and receive course materials to guide their future research. This course is a great resource for researchers new to the MXene field as well as current MXene researchers who want to further advance their skill set.

Experienced researchers, industry professionals, and students are all welcome to partake in this one-day in-depth course preceding the MXene Conference.

#### **MXene Characterization Course: \$650**

In this one-day course, we will cover characterization of MXene powders, colloidal suspensions, single flakes and films by Raman spectroscopy, electron microscopy, UV-vis, XPS and other techniques. Experienced researchers will teach you how to determine the quality, flake size, and delamination of MXenes on the example of Ti3C2. Sample preparation and elimination of measurement artifacts will be discussed in detail. Interpretation of Raman XRD, UV-vis and XPS spectra of various MXenes will be provided. Bring your spectra and images and discuss them with our experts.

Experienced researchers, industry professionals, and students are all welcome to partake in this one-day in-depth course preceding the MXene Conference.

\*Participants may register for both courses at the discounted rate of \$1,000

#### Location

Drexel University
Philadelphia, PA 19104

### Website

https://mxene2020.coe.drexel.edu

#### Scientific Committee

Michel W. Barsoum, Ph.D. Conference Chair Yury Gogotsi, Ph.D. Conference Chair Qing Huang, Ph.D. Michael Naguib, Ph.D. Miladin Radovic, Ph.D. Johanna Rosén, Ph.D.

# Registration & Abstract Submission

Please register at: https://mxene2020.coe.drexel.edu/services/

# **Registration Fee**

Students/Postdocs: \$100 Non-Student: \$500

# **Key Dates**

Abstract Submission -Priority Deadline: March 31, 2020 MXene Course Registration Deadline - May 31, 2020 Conference Dates - Aug. 3-5, 2020

### Contact

MXene2020@drexel.edu

### **Confirmed Speakers**

**Husam Alshareef** 

KAUST, Saudi Arabia

**Babak Anasori** IUPUI, USA

**Majid Beidaghi** Auburn U., USA

**Qing Huang** NIMTE, CAS

**Paul Kent** ORNL, USA

Mohammad Khazaei National Institute for Materials Science, Japan

Chong Min Koo Korea Inst. of Science and Tech., Korea

**Pooi See Lee** Nanyang Tech. U., China

**Lynnette Madsen**NSF, USA

Vadym Mochalin, Missouri University of Science & Technology, USA

Michael Naguib
Tulane University, USA

Valeria Nicolosù Trinity College Dublin, Ireland Thierry Ouisse LMGP, INP-Grenoble, France

**Miladin Radovic** Texas A&M, USA

**Johanna Rosen** Linköping U., Sweden

Susan Sandeman
U. of Brighton, UK

Susan Sinnott Penn. State, USA

**Lyubov Titova** WPI, USA

Takeshi Torita Murata Manufacturing Co., Ltd., Japan

Garritt Tucker Colorado School of Mines, USA

**Aleksandra Vojvodic** U. Penn., USA

**Guoxiu Wang** U. of Technology, Sydney, Australia

**Bin Xu** Beijing U. Chem. Tech., China

