# Who Should Attend?

This workshop is intended for local and international participants who are interested to learn and enhance their skills in the field of metal-organic frameworks (MOFs) research. The workshop approach is tailored to provide participants with the opportunity to obtain knowledge, skills and a solid understanding of the tools and analysis relevant in the field.

## **OPPORTUNITIES**

- Meet and greet with MOFs research experts
- Learn new techniques and characterizations
- Networking opportunities with MOFs researchers within Malaysia and regionally

# **FEES**

Early Bird (Due 31<sup>st</sup> August 2018): RM 1600.00 (Local)

USD 450 (International)

Normal (Due 30<sup>th</sup> September 2018): RM1800.00 (Local)

USD 500 (International)

# **MODE OF PAYMENT**

Bank draft/cheque must be made to:

PERSATUAN SAINS ANALISIS MALAYSIA

Payment Reference: MyMOF2018 and Participant's Full Name.

Electronic Funds Transfer (EFT)

Beneficiary Name: Persatuan Sains Analisis Malaysia

Bank Name: Bank Muamalat Malaysia Berhad

Bank Address: Ground, 1st & 2nd Floor, D32 & D33, Jalan Medan, Pusat Bandar 4,

Seksyen 9, 43650 Bandar Baru Bangi, Selangor

Account No.: 1210-0000881-71-0

SWIFT Code: BMMBMYKL

Cash

Registration can be made at <a href="https://goo.gl/forms/e75xNeLqZoXLMDdn1">https://goo.gl/forms/e75xNeLqZoXLMDdn1</a> Please email the proof of payment to:

### **The Secretariat MyMOF2018**

Faculty of Science, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia.

#### Find us at:

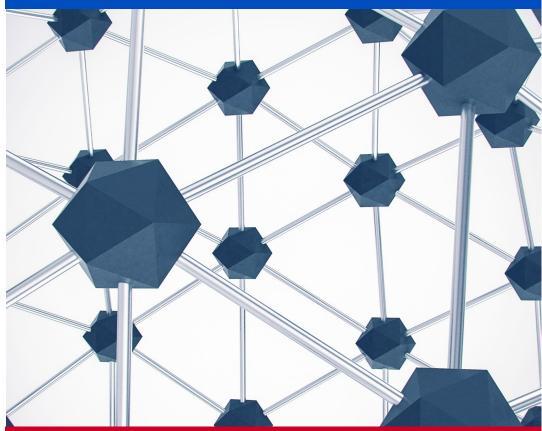
**:** +603-8946 6804/6805

: mymof.forms@gmail.com

: Dr. Thahira Begum

Dr. Shahrul Ainliah Alang Ahmad

# THE 2<sup>ND</sup> MALAYSIAN METAL-ORGANIC FRAMEWORKS WORKSHOP 2018 (MyMOF2018)



29<sup>th</sup> Oct to 2<sup>nd</sup> Nov 2018

Faculty of Science, Universiti Putra Malaysia

**CO-ORGANISED BY:** 



INSTITUT TEKNOLOGI MAJU, UPM



STRATEGIC PARTNER:

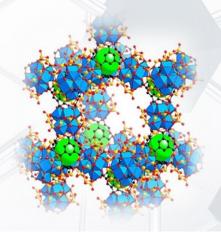




Foundry of Reticular Materials for Sustainability (FORMS) was created to spearhead translational research of metal-organic frameworks (MOFs) in Malaysia by research networking between Universiti Putra Malaysia (UPM) and University of California, Berkeley (UCB). FORMS is based at the Institut Teknologi Maju (ITMA), UPM and collaborates with other faculties and research institutes in the country. The core research activities focus on synthetic chemistry, materials science and agri-bio nanotechnology. After the success of the inaugural collaborative MOFs workshop in October 2017, the second workshop has been established to be held this year, on MOFs chemistry basics with a focus on characterization techniques. These MOFs will find their use in various strategic areas such as catalysis, drugs nanodelivery, veterinary sciences, agriculture-targeted applications, gas storage and wastewater treatment.

# What are MOFs?

MOFs are compounds consisting of metal ions or clusters coordinated to organic ligands to form one-, two-, or threedimensional structures. They are a subclass of coordination polymers, with the special feature that they are often porous.



# **MOFS ALL-STARS**



### Mr. Kyle E. Cordova

He is a research associate at Berkeley Global Science Institute (BGSI) and since 2016, Kyle has served as the Associate Director of BGSI, in which he is responsible for designing, implementing, and managing all Global Science nodes and programs in the United States and abroad. His research has focused on further developing and promoting the principles of reticular chemistry. He has co-authored 30 publications, including several in top-tiered journals like Nature and Science.



### Dr. Felipe Gándara

He is presently an associate researcher at the Materials Science Madrid, Spanish National Research Council (ICMM-CSIC). His current research interests include synthesis and advanced structural analysis of reticular materials, such as Metal- and Covalent-organic frameworks, and their use in applications related to clean energy.

Special Appearance by



### Prof. Dr. Omar M. Yaghi

He is an outstanding researcher and pioneer in MOFs chemistry with over 120,000 citations. He has received several prestigious awards for his groundbreaking research. He is the Director of BGSI who has founded several research centers in Vietnam, Korea, Japan, Jordan, Saudi Arabia and Malaysia providing opportunities for young local researchers.

TENTATIVE WORKSHOP SCHEDULE	
Day 1	<ul> <li>Introduction to Reticular Materials</li> <li>Carbon Dioxide Capture and Conversion in Reticular Chemistry</li> <li>Water Harvesting using Reticular Materials</li> </ul>
Day 2	<ul> <li>Background of Crystallography + X-Ray Diffraction</li> <li>Structure Solution</li> <li>Topological Analysis</li> </ul>
Day 3	<ul> <li>SCXRD Instrument Training Introduction</li> <li>SCXRD Data Collection Process and Strategy</li> <li>SCXRD Refinement and Structure Solution</li> </ul>
Day 4	<ul> <li>Crystallography Practical Exercise (SCXRD)</li> <li>Crystallography Practical Exercise (Materials Studio)</li> <li>Crystallography Make-Up Session</li> </ul>
Day 5	<ul> <li>Heterogeneous Catalysis in Reticular Materials</li> <li>Topological Analysis Exercise</li> </ul>