

### Metal Organic Framework papers are a select set of papers in this issue

Two Metal Organic Framework (MOF) related papers are included in this issue of *Powder Diffraction*. They are the first group of papers for a focus theme Special Section of PDJ. These papers demonstrate the importance of not only powder diffraction but also combining powder diffraction with other characterization methods in characterizing complex materials such as MOFs. The development of new MOFs is very dependent on understanding the crystallographic structure and particularly the channels or tunnels that gas molecules such as CO<sub>2</sub> can move through.

The MOF paper “XRD-DSC: a screening tool for identifying effective MOFs for selective gas sorption from humid gas streams” by John Parise, Xianyin Chen, Anna Plonka, William Woerner, Debasis Banerjee, David Connors, and Nancy Goroff shows how combined XRD and DSC coupled with a humid atmosphere swing chamber between the humidity generator and the XRD-DSC stage provides a powerful system for research and screening of prospective MOFs. The other MOF paper included in this PDJ issue is focused on powder diffraction and structure analysis. Several additional papers on MOFs are expected to appear in subsequent issues throughout 2019. Both Drs. Craig Brown and Winnie Wong-Ng of the National Institutes for Standards and Technology, Gaithersburg,

Maryland deserve considerable credit for proposing the MOF special emphasis in PDJ as well as recruiting authors and serving as Editors for the MOF papers.

The International Report section of this issue of PDJ has two reports you may find valuable. The first covers the 2018 Denver X-ray Conference. I highlighted this conference in the Editorial printed in the December 2018 issue of PDJ. The second International Report summarizes the Sixth User Workshop on High-Power Lasers at the Linac Coherent Light Source, Menlo Park California. The workshop presented the recent experiments and developments at the LCLS-Matter in Extreme Conditions (MEC) end station and the scientific frontiers that are likely to be studied using the combination of high-power lasers and the LCLS hard X-ray free electron laser (XFEL).

I hope the New Year will lead each of our readers to many exciting discoveries by diffraction methods and to deeper understanding of the many interesting and complex materials in our world. I look forward to your next contribution to *Powder Diffraction*. Submit your manuscripts for consideration of publication in PDJ via ScholarOne (<https://mc.manuscriptcentral.com/pdj>).

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