

Editorial

It is troubling to hear that the next wave of COVID-19 is beginning to expand as I write this Editorial in late October. The infections and death tolls have been rising for weeks and without any indication of leveling off, let alone dropping in numbers and severity. Hope abounds that multiple vaccinations against the virus will pass the safety tests and become available by winter or early spring. There has also been encouraging news of developments in medications to counter an infection as well as improvements in treatments. These advances have often used knowledge of the gene sequencing of the Corona virus as well as crystal structure knowledge and use of supercomputers to search for molecules or proteins that might negate the virus when someone is infected.

This is the second quarterly issue of *Powder Diffraction* (PDJ) to have been published since the March issue which went to press before the impact of the virus had yet been understood. The medical science community has shown great commitment to solving the medical, treatment, and vaccination issues, and this has required exceptional efforts across the science community as well as everyone adapting and trying to move forward. One form of adaptation is the widespread use of virtual meeting tools. I have gotten acquainted with a number of these, have had overall good experiences and continuing to increase my hours using these tools, and except for the fatigue of being at the computer screen for many hours at a time it has been a useful adaptation. For those organizing and conducting the many planned National and International science conferences, there had to be greater adaptation and adjustment of the meeting content and organization.

The Denver X-ray Conference (DXC) maintained the tradition of holding the conference in the first week of August.

While originally scheduled to be held in Bethesda, Maryland, as with nearly every other science conference, it was converted to a virtual format. In this issue of PDJ, you will find under International Reports a summary titled “69th Annual Denver X-ray Conference Report – A Virtual Event!” by Denise Zulli. The Report superbly summarizes both the technical content as well as the social side of the virtual DXC meeting. This Report as well as feedback from a number of my colleagues indicate that, when limiting social contact and travel is required, adapting to a virtual conference meeting concept was a well-received adjustment. Take a moment and read the DXC meeting report.

Two Technical Articles in this issue present new developments in quantitative analysis by XRD, while the other Technical Articles address challenging characterizations of high-tech materials. First, as highlighted on the cover, was “An investigation into the temperature phase transitions of synthesized lithium titanate materials doped with Al, Co, Ni and Mg using HT PXRD methods”. The other Technical Articles addressed $\text{SnS}_{1-x}\text{Se}_x$ nanobelts and ambient-pressure synthesis of nonstoichiometric Ag_3O from Ag_2O thin films. The three New Diffraction Data reports provide high-quality PXRD data for three pharmaceutical materials of wide use. The next section, as usual, provides the Calendar of Short Courses and Workshops and Calendar of Forthcoming Meetings. Given the widespread virus most of the scheduled events have gone to virtual formats – learn more in the Calendar reports. The last section is the International Report on the DXC conference discussed above.

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