

## Biographies of PPXRD Organizing Committee

### **Dr. Thomas Blanton - PPXRD Chair**

*International Centre for Diffraction Data, Newtown Square, PA, USA*

Tom is the Executive Director and Principal Scientist at ICDD. Before joining ICDD he was a Senior Principal Scientist at Eastman Kodak Company where he worked in industrial applications of X-ray diffraction and X-ray fluorescence for 31 years. He was responsible for the operation of the X-ray Spectroscopy Laboratory, utilizing diffractometers for powder, pole figure, nonambient, high-resolution, reflectivity, and two-dimensional XRD. Materials analyzed included inorganics, organics, solid state devices, thin films, corrosion products, ceramics, pharmaceuticals, polymers, and nanomaterials. Tom was also the Technical Leader in the Specialty Materials Development Laboratory. His area of focus was utilization of XRD for microstructure characterization resulting in new materials development for intellectual property and product development. Tom has 180+ publications including 4 book chapters, 46 U.S. Patents and 57 international patents.

Tom has served as a member of the ICDD Board of Directors for the terms 1992-1998 and 2004-2013, serving as Chairman 2008-2012. He has also received the honor of being named an ICDD Distinguished Fellow. Tom has been an instructor at the SUNY Albany and ICDD XRD Clinics for more than 30 years, and has served as a lecturer at the University of Rochester.

### **Dr. Simon Bates**

*Rigaku Americas, Houston, TX, USA*

Dr. Simon Bates is currently V.P. of Science and Technology at Rigaku Americas Corp., where he nurtures collaborative relationships between industry partners and academia in the discovery of new technologies and methodologies for the next generation analytical systems. His fascination with materials science and analytics has led Dr. Bates on an interesting career path. Having received his Ph.D. from the University of Hull for his neutron diffraction studies on the magnetic properties of rare earth materials, Dr. Bates completed his postdoctoral work at the University of Edinburgh where he first started to design and build specialized high resolution X-ray diffraction system for materials characterization. He continued working on X-ray analytical systems and software design throughout his career at Philips, Shimadzu (Kratos), Bede Scientific, and Rigaku. However, before joining Rigaku, Dr. Bates explored a different career direction and spent 17 years working in pharmaceutical contract research at SSCI and then Triclinic Labs., where he expanded his toolkit for materials analysis to embrace thermal methods and IR/Raman spectroscopy while experimenting in organic chemistry and molecular modeling. Dr. Bates has continued his relationship with academia, volunteering as an Adjunct Professor at Purdue University, University of Hawaii Hilo and more recently at the University of Long Island.

### **Dr. Natalia Dadivanyan**

*Malvern Panalytical, Germany*

Natalia Dadivanyan has obtained her M.Sc. degree in Chemistry from Moscow State University, Russia and her Ph.D. degree from Albert-Ludwigs-University of Freiburg, Germany. These were followed by a Post-Doctoral fellowship at the Department of Chemical Engineering and Chemistry at Eindhoven University of Technology, The Netherlands. In 2012, Natalia joined PANalytical, now Malvern Panalytical, The Netherlands as an Application Scientist for X-ray Diffraction. Her interests include X-ray diffraction and scattering techniques, in particular Small-Angle X-ray Scattering (SAXS) and Computed Tomography (CT) as well as small molecule pharmaceuticals, polymers, liquid crystalline materials and their pharmaceutical and medical applications. Currently, Natalia is Segment Marketing Manager, focusing on developing analytical solutions for small molecule pharmaceuticals field.

## **Dr. Graciela C.D. de Delgado**

*University de Los Andes, Merida, Venezuela*

Born in Maracaibo, Venezuela, she studied Chemistry at Universidad de Los Andes (ULA) in Mérida, Venezuela, and obtained her Ph.D. in Chemistry at Brandeis University, USA, in 1988. In 1989 she joined the Crystallography Laboratory at ULA where she is Full Professor of Chemistry. She is a member of the Executive Committee of the IUCr, the Board of Directors of ICDD, and is Section Editor of Acta Crystallographica E. Her research interests include the structure determination of Active Pharmaceutical Ingredients (APIs) by single crystal and powder diffraction.

## **Dr. Julien Giovannini**

*AstraZeneca R&D, Sweden*

Coming soon.

## **Dr. Fabia Gozzo**

*Excelsus Structural Solutions sprl, Brussels, Belgium*

Fabia Gozzo is CEO and Founder of Excelsus Structural Solutions, a spin-off company of the Paul Scherrer Institute that offers synchrotron radiation based analytical services and scientific consultancy to the pharmaceutical and chemical industry. She obtained a PhD degree in Physics at the Swiss Federal Institute of Technology in Lausanne (EPFL). After a postdoc at the Lawrence Berkeley National Laboratories in Berkely, California working on a project in collaboration with Intel Corporation in Silicon Valley, she joined Intel as a young researcher and contributed to the construction of a dedicated synchrotron photoemission spectromicroscope for the analyses of contamination of new generation silicon microchips. After Switzerland approved the Swiss Light Source project, she then joined the Paul Scherrer Institute and was among the first scientists working at the Swiss Light Source project. First, she led the SLS Technology Transfer AG spin-off company with the mission of promoting industrial applications of synchrotron radiation, and then in 2000 she accepted the responsibility of the construction and development of the SLS Powder Diffraction Station. In 2012, Fabia founded Excelsus Structural Solutions and since then she leads the company, which in 10 years of operation run more than 350 Research & Development and legal industrial projects using synchrotron X-Ray Powder Diffraction testing and analysis.

## **Dr. Arnt Kern**

*Bruker AXS GmbH, Karlsruhe, Germany*

Arnt obtained his PhD in mineralogy at the University of Heidelberg, Germany, in 1998. He joined Bruker AXS in 1997 and is now the product line manager for X-ray powder diffraction hardware and software. His particular scientific interests are centered on quantitative phase analysis, structure analysis (Bragg and PDF data) as well as instrumentation. Since 1997 Arnt cooperates with Alan Coelho, Brisbane, AU, in the development of the reknown TOPAS software. In the early 2000s he implemented cGMP and 21CFRPart11 requirements in Bruker AXS's quality processes. Since 2000, Arnt is a member of the EPDIC committee and e.g. initiated the EPDIC price for "distinguished powder diffractionists". Arnt has published several book chapters on profile fitting and quantitative phase analysis and recently authored the chapter "Instrumentation - laboratory X-rays" in the International Tables Volume H: Powder diffraction.

## **Anisha Patel**

*GSK, Upper Providence, PA, USA*

Anisha is a Senior Director in the Materials Science department at GSK's Drug Substance Development division, with over twenty years of experience in pharmaceutical solid-state characterization. She previously served as a Director in Merck's Materials Science department for three years and spent seventeen years in the Materials Science department at Bristol Myers Squibb. Anisha holds a Bachelor's degree in Medical Materials Science and Engineering from the University of Sheffield, U.K.

Anisha's expertise lies in providing strategic and technical leadership for the physicochemical characterization of pharmaceutical materials, with a focus on solid form and powder properties strategies from Discovery to Commercialization. She is particularly adept at navigating the critical interface between Drug Substance and Drug Product. Her passion for powder diffraction has fueled her exploration of advanced instrumentation and hyphenated techniques, aiming to leverage powder x-ray diffraction to build structure-property relationships in complex pharmaceutical materials, including excipients, polymers, and large molecules.

In addition to her professional achievements, Anisha is a dedicated advocate for diversity and inclusion in STEM. She mentors students from underrepresented groups and serves on the board of the NGO Science is Elementary, highlighting her commitment to fostering the next generation of scientific talent.

## **Dr. Raj Suryanarayanan**

*University of Minnesota, Minneapolis, MN, USA*

Coming soon.

## **Dr. Shawn (Xiaotian) Yin**

*Bristol-Myers Squibb Company, New Brunswick, NJ, USA*

Dr. Shawn (Xiaotian) Yin received his Ph. D. in Solid-State Chemistry from the University of Waterloo, Canada. He did his Post Doctoral fellowship at the Department of Materials Sciences and Engineering, Cornell University, U.S. Currently, Dr. Yin is a Principal Scientist and the group leader of the Crystal Form Chemistry and Characterization group at Bristol-Myers Squibb. His research interests include pharmaceutical polymorphic form studies, pre-formulation work, nanomaterials for drug delivery, physical characterizations of pharmaceutical substances and powder X-ray diffraction applications in pharmaceutical sciences.

Dr. Yin has (co)-authored 15 scientific publications and eight patents. He serves as a scientific organization committee member for the Pharmaceutical Powder X-ray Diffraction Symposium. Dr. Yin is also a frequent invited lecturer at international and domestic scientific conferences and workshops.