Welcome

In this issue we highlight some of the scientists behind the single crystal diffraction in the Asia-Pacific region. Let us know what you think.

This month, we are mixing up the format a little. Instead of presenting our scientists in Europe and the US, we are focusing on our application scientists in Europe and the US. Since the application scientists are the heart of Rigaku’s research and development, we are excited to introduce them to you.

Dr. Christian Schürmann

Dr. Christian Schürmann joined Rigaku Europe SE as an application scientist for single crystal diffractometers. Since early 2020, he has been working on developing strategies for the Universal Imaging System (the divergence of the X-ray beam) when trying to collect on a crystal that is not well-defined. He has also developed a universal strategy program that can be used to analyze the overall data quality of different experimental systems. This strategy program is particularly useful for experienced crystallographers who are suspicious about older strategy programs.

Dr. Joseph Ferrara

Dr. Joseph Ferrara is a vice president of X-ray research at Rigaku Corporation. He has over 20 years of experience in the life sciences and is currently developing tools for X-ray crystallography for the research community. He is also an X-ray crystallography expert and has helped to develop Rigaku’s virtual crystallographic schools, webinars, and workshops.

Dr. Pierre Le Maguerès

Dr. Pierre Le Maguerès obtained a Ph.D. in physical chemistry and small molecule studies from early on. He did his Bachelor thesis in the group of Dr. B. M. Sturtevant at the University of Chicago and his Doctoral thesis with Prof. Dr. Y. Tobe at the University of Toronto. He then moved to the University of Illinois at Urbana-Champaign, where he worked on the synthesis and characterization of supramolecular systems using single crystal X-ray diffraction and various spectroscopic methods. He also worked on the synthesis and characterization of molecular materials combining inorganic polyoxometalates and organic cation radicals based on tetrathiofulvalene derivatives. From 1996 to 2000, he spent three months with Prof. Dr. Y. Tobe at the Graduate School of Science, University of Tokyo, Japan. He then moved to the University of Tokyo, Japan, where he worked on the synthesis and characterization of supramolecular systems using single crystal X-ray diffraction and various spectroscopic methods. He also worked on the development of hardware and applications related to X-ray crystallography.

Dr. Mark Del Campo

Dr. Mark Del Campo graduated from Case Western Reserve University in Cleveland, Ohio, in 2000. His graduate research was conducted in physical organometallic chemistry and molecular materials combining inorganic polyoxometalates and organic cation radicals based on tetrathiofulvalene derivatives. He then moved to Kettering University, where he worked on the synthesis and characterization of supramolecular systems using single crystal X-ray diffraction and various spectroscopic methods. He also worked on the development of hardware and applications related to X-ray crystallography.

Dr. Christian G. Koch

Dr. Christian G. Koch is an assistant professor at the Kettering University in the Department of Chemistry. His research focuses on the development of new strategies for the Universal Imaging System (the divergence of the X-ray beam) when trying to collect on a crystal that is not well-defined. He has also developed a universal strategy program that can be used to analyze the overall data quality of different experimental systems. This strategy program is particularly useful for experienced crystallographers who are suspicious about older strategy programs.
Jim Watson's 1968 memoir, The Double Helix, is not an accurate and straightforward account of the discovery of DNA's double helical structure. The book is more like a detailed script for a documentary, written in a style that creates an unsettling parallel with the chauvinistic climate of an earlier time and questions some actions taken. It provides a step back, making it clear this is not a Watson homage, but rather a deconstruction of the false truths presented.

Markel's book reads like a detailed, fleshed out script for a documentary mini-series on the discovery of DNA's double helical structure. He leans on the book's pages to paint a picture of Watson today, no more flattering or endearing than his historical depiction. And Watson's reaction to any mention of Franklin, Pauling, and Watson—a chapter-long biography, a character portrait of their lives up until they started working on the DNA problem in Stockholm, Sweden to gain access to the Nobel Prize nomination letter—would certainly exclude her. It is clear that Rosalind Franklin was wronged. There is, of course, the imbalance of political power in the academic circles in which all these players ran. Watson and Crick's discovery was critically dependent on an X-ray diffraction pattern collected by Franklin—which was distributed to the world of science—without her knowledge or consent. Certainly, Franklin had passed away by the time the prize was awarded—but whether or not the discovery was awarded posthumously. But what Markel hammers home is the delicate aggrandizements, unflattering and questionable portraits, and overall unprofessional, and immoral breach of academic conduct.

For the next twenty chapters, including Parts IV and V, Markel digs deeply into the ins and outs of British academia in the early 1950s. He makes it clear this is not some kind of Watson homage. Of Watson's supposedly truthful narrative about the discovery of DNA's double helix to simply write a book deconstructing the false truths of his own story. Of a step back, making it clear this is not some kind of Watson homage, but rather a deconstruction of the false truths presented. His portrait of Watson today is no more flattering or endearing than his historical depiction, and a human being. So, Markel goes back to the beginning, giving the reader the context they might need—which Watson of course excludes.

This three-word sentence really establishes Markel's thesis, if none of the other editorial choices gave a clear enough hint. He's taking about James Watson's multi-splendored flaws as a narrator, researcher, and a human being. So, Markel goes back to the beginning, giving the reader the context they might need—which Watson of course excludes.

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