

Structural Methods in Chemistry, Biology and Medicine

Workshop in Memory of Yuri Struchkov

Chicago, USA, August 2007

The objective of the inaugural meeting of the Struchkov Prize Society was to focus on the fields of chemistry and chemical biology that utilize X-ray diffraction and molecular modeling to characterize novel materials and establish structure-property relationships in the worlds of small and large molecules. The meeting highlighted the scientific achievements and research of the colleagues who knew and collaborated with Prof. Struchkov and continue to use structural methods in their current work. The workshop enabled old friends and colleagues to forge new bonds and discover novel grounds for future interactions, idea exchange, and collaborations. The workshop was sponsored in part by the U. of Wisconsin-Madison and Bruker-AXS.

The program consisted of two full days of lectures, a reception dinner, and an excursion to the Bruker-AXS Madison, WI facilities on the third day. There were 12 speakers and 24 participants from Canada, Russia, Switzerland, and USA. It was a particularly memorable pleasure to see among the participants Yuri Struchkov's wife Irena Akhrem who traveled all the way from Moscow, Russia to attend and give an affectionate speech at the end of the meeting. The workshop combined saturated scientific and social programs with a very warm "family reunion" type atmosphere. The particulars of the conference are available at home.san.rr.com/struchkovprize/.

The presentations covered a wide spectrum of topics ranging from the history of the society and evolution of the single crystal diffractometry software and hardware to photonic materials, palladium cluster chemistry, compounds for photodynamic therapy, to comparative and structural genomics and studies of human lipoxygenases. The highlight of the meeting was a comprehensive presentation by Prof. Michael Antipin on the development and history of the structural studies at the X-ray Structural Center in INEOS.

The first USSR diffractometer was purchased for the INEOS X-ray Diffraction Group in 1971 and ever since the Roentgen rays emanating from INEOS have been influential in the scientific research. Since the mid-1970's the Structural Center has trained over 200 Ph.D. candidates and awarded over 20 Doctor of Science degrees to its members. The current structural investigations on several diffractometers are conducted by a team of 12-15 scientists who solve on average 1000 structures a year in addition to conducting charge density studies and theoretical computations.

After the untimely death of Prof. Struchkov in August 1995, a group of his former colleagues established the Struchkov Prize, an annual award for the young

crystallographers from the Former Soviet Union countries. The first Struchkov Prize was awarded in the fall of 1997 and since then, 13 young scientists have received this honorable distinction, which includes a cash prize of about \$1,000. In addition to the main prize, which may be awarded to one or two individuals, a number of supplementary awards are given annually to a broader range of young FSU competition participants. In the first years of the Struchkov Prize, all awards were funded from a rather meager budget of the X-ray Structural Center in INEOS. In order to provide an independent source for the prize funding, in early 2000 the Struchkov Prize Society was established. The members of the international Struchkov Prize Society include former co-workers of Prof Struchkov now working in eight countries and other crystallographers who used to know Prof. Struchkov and collaborate with his lab. 100% of the members' annual contributions to the society subsidize the main prize and the supplementary awards. The latest information about the winners of the most recent Struchkov Prize 2006 can be found in *IUCr Newsletter*, 2007, Vol. 15, Issue 2, page 21. If you wish to support young crystallographers in Russia we invite you to become a member of the Struchkov Prize Society; please send your requests to StruchkovPrize@gmail.com.

During the closing remarks of the meeting Irena Akhrem reminded one of the maxims Yuri Struchkov used to repeat: "While the equipment you use is important, it is the people you work with, collaborate with, and compete against who take you to the next level." The success of the Struchkov Prize Society workshop in its own way confirms the great wisdom of this statement.

The next meeting is tentatively scheduled to take place in Santa Fe, USA, in August 2009.

Ilia A. Guzei, Alex I. Yanovsky



Yuri Struchkov



Left to right: Tatiana Timofeeva, Ilia Guzei, Alex Zolotoy, Sue Byram, Galina Belitskaya, Arkady Ellern, Inna Dubchak, Segrei Lindeman, Olga Lindeman, Tamara Kaftaeva, Mikhail Antipin, Irena Akhrem, Ewa Skrzypczak-Jankun, Lev Zakharov, Galina Mednikova, Evgeni Mednikov, Chuck Campana, Jerzy Jankun, Alex Yanovsky, Victor Khrustalev.