



(photo M. Mlekicki)

Dr. Zbigniew Dauter receives the highest science award from the Polish Academy of Sciences

On March 9, 2010, Dr. Zbigniew Dauter, a Principal Investigator working at the most powerful synchrotron source in the United States (Advanced Photon Source, APS), received from Prof. Michał Kleiber, the President of the Polish Academy of Sciences, the Nicolaus Copernicus Medal, which is the highest distinction awarded by the Polish Academy of Sciences. The ceremony took place in the Staszic Palace in Warsaw. The award recognizes Dr. Dauter's contribution to the development of protein crystallographic methodology involving synchrotron radiation, in particular in the areas of phasing methods and macromolecular structure at ultimate resolution [1]. The name of Dr. Dauter is already permanently associated with the technique of quick halide soaks [2] ("dauterization" of protein crystals), with the exploitation of weak anomalous signal [3] (for example, of phosphorus in nucleic acid structures), and with the use of SAD (Single-wavelength Anomalous Diffraction) [4] and RIP (Radiation-damage-Induced Phasing) [5] for macromolecular phasing. Dr. Dauter is an expert experimenter, widely known for his skills in getting the best possible diffraction data from macromolecular crystals. A graduate of the Gdańsk University of Technology, he obtained his PhD degree for crystallographic work on small-molecule drugs (with Prof. Zofia Kosturkiewicz) and later his habilitation (DSc) for work in macromolecular crystallography (A. Mickiewicz University, Poznań). He spent a number of years at several synchrotron centers (EMBL c/o DESY, Hamburg; NSLS, Brookhaven; APS, Argonne) conducting structural biological research and helping external users of macromolecular crystallography beamlines. The stations that he has supervised are among the most successful protein crystallography beamlines. Dr. Dauter is a Principal Investigator in the Macromolecular Crystallography Laboratory of the National Cancer Institute at Frederick, and facilitator for

the National Institutes of Health beamline operating at the APS synchrotron in Argonne (Argonne National Laboratory). Dr. Zbigniew Dauter, or just Zbyszek to very many of us, has numerous collaborations with colleagues in Poland, mostly in the area of synchrotron macromolecular crystallography. He is famous for his commitment to teaching and for his didactic talents. He has taught at a number of schools, workshops and courses in Poland, including those organized by our Society. Currently, Dr. Dauter serves as the Editor of *Acta Crystallographica Section D* (Biological Crystallography). As a community, we are very proud of his achievements and distinction, and express our sincere congratulations.

References

- [1] J. Wang, M. Dauter, R. Alkire, A. Joachimiak, Z. Dauter, "Triclinic lysozyme at 0.65 Å resolution", *Acta Crystallogr. D63* (2007) 1254–1268.
- [2] Z. Dauter, M. Dauter, K.R. Rajashankar, "Novel approach to phasing proteins: derivatization by short cryo-soaking with halides", *Acta Crystallogr. D56* (2000) 232–237.
- [3] J. Wang, M. Dauter, Z. Dauter, "What can be done with a good crystal and an accurate beamline?", *Acta Crystallogr. D62* (2006) 1475–1483.
- [4] Z. Dauter, M. Dauter, E.J. Dodson, "Jolly SAD", *Acta Crystallogr. D58* (2002) 494–506.
- [5] S. Banumathi, P.H. Zwart, U.A. Ramagopal, M. Dauter, Z. Dauter, "Structural effects of radiation damage and its potential for phasing", *Acta Crystallogr. D60* (2004) 1085–1093.

Mariusz Jaskolski
Department of Crystallography, Faculty of Chemistry,
A. Mickiewicz University
Poznań
mariuszj@amu.edu.pl