

Greek TID Center for BIOXHIT

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The Greek TID-Center for BIOXHIT is a joint effort of the protein crystallographers at Institute of Molecular Biology and Biotechnology (IMBB) of the Foundation for Research and Technology-Hellas (FORTH) in Heraklion, Crete and the Institute of Organic and Pharmaceutical Chemistry (IOPC) of the National Hellenic Research Foundation (NHRF) in Athens. Its activities started in late 2006.

The center is equipped with several powerful computers running up-to-date programs for crystal structure determination and analysis of biological macromolecules. Moreover, it has recently acquired cryo-crystallography infrastructure for shipping frozen crystals to synchrotrons for remote data collections. This equipment includes the EMBL/ESRF Sample Changer Starter Kit with Caps and Vials, etc. purchased from Molecular Dimensions Ltd., U.K.

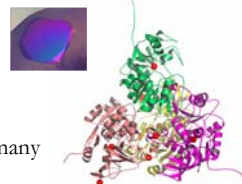
The achievements of the Center include the production of a DNA program manual and 4 videos (<http://www.dna.ac.uk/>) in collaboration with the Finish TID Center at Oulu. Members of the group visited several BIOXHIT related workshops and pipeline experiments for data collections at ESRF. Lectures were held following the visits for the members of the respective groups.

On 15th November 2007, a teleconference was scheduled and carried-out successfully between the Crystallography laboratories of IMBB and ESRF (Dr. Olof Svensson). During the session a tour of beam-line ID14H3 was shown to the participating scientists and students of the "Protein Biotechnology" graduate program of the Univ. of Crete. Moreover, a crystal screening experiment was demonstrated using the DNA program as well as a data collection strategy run with manual adjustment of the parameters. Finally, an actual data collection from a single crystal was carried out and the results of the spot integration shown. During this teleconference the real hutch environment and its remote control was successfully described to the attendees. The following day (16th November) a local demonstration of DNA program took place in the computer room of the crystallography groups using the TID-center infrastructure. The students went through the manual and the well prepared videos of the program asking questions regarding to basic crystallographic as well as practical aspects of crystal screening and data collection and processing.

Finally, the **BIOXHIT course** "From Crystals to Structures" is to be held on **23-25 June 2008** at the FORTH premises in Heraklion. The workshop is addressed primarily to pre-doctoral students and young post-doctoral fellows in the field of bio-crystallography residing in Greece and the wider Balkan region.

Invited speakers

Jochen Müller-Dieckmann, EMBL-Hamburg
Rikkert Wierenga, University of Oulu, Finland
Xavier Thibault, ESRF-Grenoble, France
Andrew Leslie, Medical Research Council, Cambridge, U.K
Wolfgang Kabsch, Max Planck Institute for Medical Research, Heidelberg, Germany
Alexander Popov, ESRF, Grenoble, France
Paul Tucker, EMBL-Hamburg, Germany
Santosh Panjikar, EMBL-Hamburg, Germany
Nikolaos Glykos, Dept. of Molecular Biology and Genetics, Univ. of Thrace, Alexandroupolis
Yannis Papanikolaou, Institute of Radioisotopes & Radiodiagnostic Products, Demokritos, Athens



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