4th Frolic Goats Workshop on High-Pressure Diffraction 17-19 April, 2011 Faculty of Chemistry, room 101 Adam Mickiewicz University, Poznań



HIGH-PRESSURE DIFFRACTION IN POZNAŃ

Local Organizing Committee

Andrzej Katrusiak (chairman), Małgorzata Ratajczak-Sitarz, Armand Budzianowski, Maciej Bujak, Kamil Dziubek, Marcin Podsiadło, Anna Olejniczak, Hanna Piotrowicz

The Frolic Goats Workshop on High-Pressure Single-Crystal X-Ray Diffraction using laboratory equipment will consist of a series of general lectures and hands-on laboratory exercises. Its primary goal is to disseminate practical skills allowing one to perform high-pressure experiments in an x-ray lab, and to outline possibilities to continue one's studies at dedicated high-pressure beamlines in synchrotrons, nuclear reactors, and spallation sources.

Modern x-ray diffraction equipment installed in most laboratories can be used for high-pressure experiments straightforwardly, or after few minor modifications – these modifications can be as simple as mounting a shorter collimator and re-positioning the beam-stop to provide space for the diamond-anvil cell (DAC). The DAC is a simple and relatively cheap device, so crystal structures in high pressure can be studied in most x-ray labs.

Registration

Because of the available laboratory space and equipment, the number of participants will have to be limited. The application should be e-mailed to <u>hannap@amu.edu.pl</u>. The candidates will be accepted on the basis of geographical distribution and dates of application. The registration costs will be covered by Organizers and provision will be made for convenient accommodation.

Venue

The workshop will be held at the Faculty of Chemistry, Collegium Chemicum, Adam Mickiewicz University, ul. Grunwaldzka 6, 60-780 Poznań.

The historical building of Collegium Chemicum (PEWUKA, Governmental Palace) is located close to the accommodation, Main Railway Station (1.0 km) and to the Old Market (medieval center of the city, 2.0 km).

Accomodation

Accommodation of various standards is conveniently located close to the Collegium Chemicum:

- •Sheraton Hotel ul. Bukowska 3/9 (200 m from Collegium Chemicum) *ca.* 170 Euro/600 złotych (<u>online</u> <u>reservation</u>)
- •Jowita ul. Zwierzyniecka 7 (200 m from Collegium Chemicum)
 - bed & breakfast *ca*. 17 Euro/60 złotych
 - apartament ca. 33 Euro/120 złotych
- •Frolic Goats Hostel ul. Wroclawska 16/6 bed & breakfast; *ca*. 50 Euro/200 złotych (<u>online</u> reservations)

Organizers can assist in booking rooms in Jowita, whereas Sheraton Hotel and Frolic Goats Hostel booking and payments should be arranged by participants themselves.

Travel

Poznań can be easily reached through its <u>airport</u>, <u>railways</u>, and <u>roads</u>. Consult your travel agent or contact us for advice.

Weather

In Poznań we enjoy moderate climate, usually warm and sunny in early Spring, although a jacket and umbrella can prove useful.

Programme of the 4th Frolic Goats Workshop on High-Pressure Diffraction Venue: Faculty of Chemistry, room 101 Adam Mickiewicz University (AMU) Poznań



Sunday 17th:

Arrivals and get-together: *Hand-rail-car trip B*ieżyń-Kunowo-Bieżyń (bus departs at 15:00 from the parking lot before the entrance to Jowita, return planned at 20:00) Monday 18th:

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8:30 Registration (Collegium Chemicum, first floor, room 24)

9:00 Opening ceremony! and Introduction

Andrzej Katrusiak (UAM Poznań): Progress in high-pressure diffraction in Poznań.

10:00 Marcin Podsiadło (UAM): Pressure-induced collapse of H-bonded structures.

Coffee break 10:30 - 11:00

11:00 David Allan (Diamond Light Source, UK): Synchrotron experiments in high pressures.

12:15 Anna Olejniczak (UAM): Never-ending story of high-pressure dabco*HA complexes. **13:00** Lunch break

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14:30 Laboratory exercises: DAC construction, alignment, loading, diffraction experiment.

Tuesday 19th:

9:00 Kamil Dziubek (UAM): High-pressure spectroscopic calibration.

10:00 Damian Paliwoda (UAM): New polymorph of imidazole.

10.25 Katarzyna Kurpiewska (UJ Kraków) High-pressure diffraction of proteins.

Coffee break 10:50-11:20

11:20 Marek Tkacz (IChF Warszawa) Loading diamond-anvil cell with gases.

- 12:20 Armand Budzianowski (U. Warszawski): Probing structures of silver(II) compounds at high pressure conditions by powder x-ray diffraction.
- 13:05 Maciej Bujak (U. Opolski) Pressure- and temperature-induced changes in symmetrically and asymmetrically-substituted chloroethanes.
- 14:05 Weizhao Cai (UAM): High pressure study of 1,2-diaminocyclohexane.
- 14:30 M. Mansfeld & W. Zieliński (UAM): Compressed NH…N bonded crystals.

15:00 Closing ceremony

