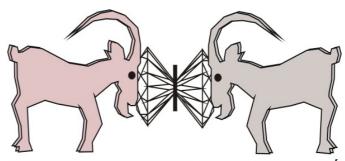
High-Pressure
Diffraction Workshop
19-22 April, 2009
Faculty of Chemistry
Adam Mickiewicz University, Poznań



HIGH-PRESSURE DIFFRACTION IN POZNAŃ

Local Organizing Committee

Andrzej Katrusiak (chairman), Małgorzata Ratajczak-Sitarz, Armand Budzianowski, Maciej Bujak, Marcin Podsiadło, Anna Olejniczak, Roman Gajda, 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 hannap@amu.edu.pl. 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 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. Wrocławska 16/6 bed & breakfast; *ca.* 50 Euro/200 złotych (<u>online reservations</u>)

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

Trave

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.

Tentative Programme of the Workshop*

19.IV.2009

Arrivals

20.IV.2009

- 8:30 Registration (Collegium Chemicum, first floor, room 24)
- 9:00 Opening Ceremony
- 9:10 A. Olejniczak (UAM Poznań) Diamond-anvil cell (DAC), applied for polymorphism studies
- 10:10 A. Budzianowski (UW) High-pressure diffractometry for single-crystal and powder studies
- 11:10 Coffee break
- 12:10 R. Gajda (UAM Poznań) Close packing of molecules in crystals studied by high-pressure diffraction
- 13:10 Lunch break
- 14:30 Laboratory exercises in groups
- Lab 1: DAC preparation, loading, pressure calibration
- Lab 2: X-Ray diffraction experiments with a DAC

21.IV.2009

- 9:00 M. Bujak (UO) Strategies of structure solutions and refinements
- 10.00 **M. Podsiadło** (UAM Poznań) *Isomorphism of halomethanes at varied temperature and pressure*
- 11:00 Coffee break
- 11:30 K. Lewiński (UJ Kraków) High-pressure crystallography proteins
- 12:30 K. Dziubek (UAM Poznań) Structural similarities between crystals in high pressure
- 13:30 Lunch break
- 14:30 Laboratory exercises in groups

22.IV.2009

- 9:00 A. Katrusiak (UAM Poznań) Conections of high-pressure diffraction data
- 10:30 Concluding remarks
- 11:00 Closing ceremony

Departures.

*Uczestnicy proszeni są o zgłaszanie wystąpień, które zostaną dodane do programu Workshopu.





The frolic goats (Bartlomiej of Gubin, 1551) at high noon on the Poznań Town Hall.



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