



18TH HEART OF EUROPE BIO-CRYSTALLOGRAPHY MEETING

Welcome to Kutná Hora!

In the last 17 years the end of September has been marked for protein crystallographers from several countries of middle Europe by this outstanding event – the Heart-of-Europe bio-Crystallography meeting. This year we have the honour to welcome you to HEC-18 organized under the Czech Society for Structural Biology and the Biotechnology Institute of the Czech Academy of Sciences in the medieval town Kutná Hora (pronounced [‘kutna: ‘hora]).

We hope that the choice of this town will bring a new experience and you will enjoy the atmosphere of the place with a number of picturesque places, alleys, shops, pubs and squares. Kutná Hora belongs to the Czech and world cultural heritage (since 1995 a UNESCO World Heritage Site) thanks to its many medieval sites and pieces of architecture being conserved. The monumental gothic building of the Church of St. Barbara is one of the symbols of the town together with the old silver mines, the Mint, the Jesuit College and other sites and churches.

The HEC lecture aims at bringing a top speaker from outside of the HEC community touching an important aspect of the protein crystallography method. We are pleased that Professor Randy Read from the University of Cambridge accepted our invitation to give the HEC lecture on applying likelihood in the Phaser software.

This year we welcome representatives of 23 research groups including a new group from Prague. The scientific program consisting of 32 presentations of young scientists from 20 research groups brings a feast on recent results in bio-crystallography applied to enzymes, disease-related topics, receptors, signalling, basic principles, structural proteins, large macromolecular complexes or transport systems.

We appreciate participation of the commercial sponsors who made it possible to organize such event at an affordable price. We thank Jena Bioscience for sponsoring the traditional Friday night social and IUCr for supporting the HEC prize.

In the Friday afternoon social program we will dive into the history of this significant medieval centre, the second most important one after Prague. We will visit the silver mine accompanied by the mining and silver processing exhibition. Apart from this Kutná Hora offers other sites and pleasures which you are invited to enjoy to the extent allowed by the time frame of this conference.

I would like to thank all the members of our research group who contributed to planning and organization of this year’s HEC meeting, in particular my colleagues Karla Fejfarová, Jarmila Dušková and Jan Stránský.

Jan Dohnálek

Contents

Introduction	323
Programme	324
Abstracts - Sessions	326
I Thursday, September 24, 16:30 18:15	326
HEC talk	332
II Friday, September 25, 8:30 10:15	333
III Friday, September 25, 10:45 12:30	339
IV Friday, September 25, 17:45 19:00	345
V Saturday, September 26, 8:30 10:00	350
VI Saturday, September 26, 10:30 12:30	356
Author Index	366
Map	366
Programme Overview	367