

Current Trends and Future of Crystallography

Workshop organized at the occasion of the anniversary 25th General Assembly and Congress of the International Union of Crystallography in 2020

Prague Congress Centre, Prague, May 14, 2019

The workshop and following meeting of the International Programme Committee of the 25th General Assembly and Congress of the International Union of Crystallography precedes this congress which will be held from August 22 to August 29, 2020, in Prague.

About the Congress

Modern crystallography is interdisciplinary area covering structural biology, pharmacy and chemistry as well as physics and materials science. It includes study of protein structures and also the crystal structure and microstructure of minerals, new functional materials, nanoparticles, bulk materials, thin films, etc. It is interested also in relation between structure and function of materials. Development of instrumental techniques including large facilities – XFELs, synchrotrons and neutron sources as well as continuous improvement of laboratory equipments allow investigation of structural changes under extreme conditions like high and low temperatures, high pressures, time-resolved studies, different in-situ experiments in external fields (magnetic, electric) or chemical reactions. The core methods of modern crystallography are X-ray and neutron scattering but in last years also electron diffraction and microscopy, NMR and different spectroscopies noticed increasing interest.

The 25th anniversary IUCr congress will complete one era of these congresses that started in 1948.

About the Programme

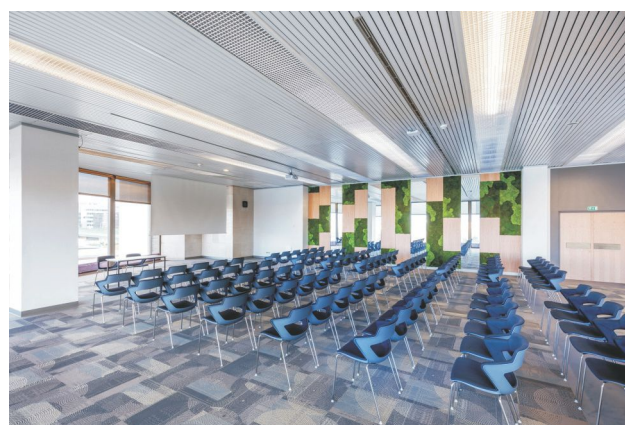
The congress programme is prepared by the International Programme Committee (IPC) representing mainly the [IUCr commissions](#) that also show main focus of the congress.

All the organizers and IPC will do the best in setting up an attractive programme covering latest advances in crystallography and related sciences to attract both young and senior scientists as well as companies.

IPC meeting takes place in May 15-16, 2019 in Prague and it will be preceded by one-day workshop *Current Trends and Future of Crystallography*. We have decided to organize such a meeting from several reasons. This will be anniversary congress and it is worthwhile to make some summary at this occasion. All the IUCr commissions were asked to submit a text with highlights in their fields and possible considerations on future. This will be presented at the workshop in short talks by commission representatives in the IPC. This should also help the IPC members to understand crystallography in a broader sense and not just defeat their topics at the IPC meeting.

About Prague and Prague Congress Centre

We are inviting crystallographers from all over the world to Prague, the capital of the Czech Republic and one of the principal European cities with a long history. Its original



Prague Congress Centre (foyer - top, lecture room H - bottom)

medieval monuments are attractive for visitors from any part of the world and its modern infrastructure makes it easily accessible and friendly. The congress will take place in a modern and well-equipped Prague Congress Center that already hosted several large congresses, the largest of which were NATO Summit in 2002 (8,000 participants), Annual Meeting of International Monetary Fund and World Bank Group (17,000 participants), and some world medical conferences. The center has five halls for 400 - 3,000 people and 8 rooms with capacity of about 100 people (<http://www.praguecc.cz>). Total number of meeting rooms is 50 and exhibition space covers 13000 m². The conference center is located in a walking distance from the city center and offers a magnificent view of the historical part of the city including the Prague Castle.

Prague has an accommodation capacity of about 100,000 visitors. There are almost 800 guest rooms in 4 or 5 star hotels in the immediate vicinity of the congress centre. Many other hotels and dormitories in all categories and prices from 20 to 200 EUR per day are easily accessible via public transport in less than 30 minutes. Frequently running and comfortable Metro ensures very fast transport from any part of Prague.