# Workshop program

#### Time is given in UTC+1 (Prague)

### Monday 7 December 2020

- 13:00 Opening (Michal Dušek)
- 13:10 Lecture: Introduction to Jana2020 and examples (Michal Dušek)
- 13:40 Download of documents, installation of Jana2020 Please use the latest Jana2020
- 14:00 Solution of examples Participants will independently solve examples and contact lectors in case of troubles using Zoom Example 1.1. Zn Simple structure from X-ray single-crystal data Example 2.1.1 PbSO<sub>4</sub> Simple inorganic structure from X-ray powder data Example 3.1 AD3 Simple structure with pseudo-merohedric twinning Example 4.1 PtCu Disordered structure
- 17:00 End of workshop

## Tuesday 8 December 2020

- 13:00 Lecture: Introduction to twinning options (Václav Petříček)
- 13:30 Step-by step introduction to Example 3.3.1 (Václav Petříček)
- 14:30 Solution of examples Participants will independently solve examples and contact lectors in case of troubles using Zoom Example 3.3.1 CsLiSO4 Simple structure with reticular pseudo-merohedric 3-fold twinning Example 3.2 Pyninit Simple structure with non-merohedric twinning. Handling twin overlaps
  17:00 End of workshop

### Monday 14 December 2020

- 13:00 Lecture: Introduction to modulated structures (Václav Petříček)
- 13:30 Step-by step introduction to Example 5.1 (Václav Petříček)
- 14:30 Solution of examples

Participants will independently solve examples and contact lectors in case of troubles using Zoom

Example 05.1 YPO

Simple structure where a light atom has a discontinuous modulation function.

Example 05.2 Na<sub>2</sub>CO<sub>3</sub>

Simple structure with strong harmonic modulation.

17:00 End of workshop

## Tuesday 15 December 2020

- 13:00 Lecture: Introduction to powder structures (Jan Rohlíček)
- 13:30 Step-by step introduction to Example 2.4 (Jan Rohlíček)
- 14:30 Solution of examples

Participants will independently solve examples and contact lectors in case of troubles using Zoom Example 02.4 PFPhenyl Refinement of an organometallic structure from powder data with help of geometry constrains. Example 02.7.1 LaPO<sub>4</sub> Crystallite size by fundamental approach.

17:00 End of workshop

### Thursday 14 January 2021

- 13:00 Lecture: Collection of 3D ED data (Mariana Klementová)
- 13:45 Lecture: Data processing with PETS 2.0 (Lukáš Palatinus)
- 14:30 Installation of software (PETS, VESTA)
- 14:45 Solution of examples data processing Participants will independently solve examples and contact lectors in case of troubles using Zoom.
  Example 13.1 Pyrite – very simple inorganic structure
  Example 13.2 paracetamol
  Example 13.3 borane - optional
- 17:00 End of workshop

## Friday 15 January 2021

13:00 Lecture: Structure refinement of 3D ED data (Lukáš Palatinus)

- 14:00 Solution of examples kinematical and dynamical structure refinement
  Participants will independently solve examples and contact lectors in case of troubles using Zoom.
  Example 13.1 Pyrite very simple inorganic structure
  Example 13.2 paracetamol
  Example 13.3 borane optional
- 17:00 End of workshop