

## **Jana2020 – the universe of crystallography in one software package**

JANA is a crystallographic software developed to help users solve crystal structures from diffraction data. The first version of JANA software was developed in 1984 by Vaclav Petricek to solve modulated and composite structures from single crystal data. Over the years and versions (Jana94, Jana98, Jana2000, Jana2006 and Jana2020), the software has evolved to accept all types of diffraction data (powder and single crystal from x-ray, synchrotron, electron, time of flight or neutron sources) and solve many kinds of structures (simple, twinned, disordered, modulated, composite, magnetic).

Jana2020 is the newest version of JANA software. The graphical interface allows the user to solve the crystal structure interactively. It can be used by an experienced scientist as well as a student. The new interface makes it possible to understand complicated concepts such as magnetic or aperiodic structures without spending too much time by setting up simple constraints or restrictions. Using different examples, I introduce the new Jana2020 interface, its performance, and the new tools in this presentation.

**Primary authors:** Dr POUPON, Morgane (FZU AV CR); Dr PETŘÍČEK, Václav (FZU AV ČR); Dr DUŠEK, Michal (FZU AV ČR)