

Editorial

Foreword to the thematic set “New Minerals and Mineralogy in the 21st Century”. A thematic set arising from the international mineralogical symposium Jáchymov 2016

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Jáchymov (Joachimsthal), the famous mining centre connected with the 16th century silver rush in the Krušné hory (Erzgebirge) Mountains, discoveries of the new elements radium and polonium, and known for the famous radon spa, is one of the most interesting and the richest mineralogical localities in the World. In September 2016 this small town hosted a three-day international symposium dedicated to mineralogy and crystal chemistry of minerals, held under the name “New Minerals and Mineralogy in the 21st Century – Jáchymov 2016”. This symposium was symbolically organized on the occasion of the 500th anniversary of the town’s foundation. The quality and topics of the talks given during the conference motivated us to collect selected papers and compile this thematic set of the *Journal of Geosciences*. It presents four contributions focused on mineralogy and crystal chemistry of minerals.

The first paper by *Krivovichev* aims to evaluate the role of hydrogen bonding and its importance for the thermodynamic stability of copper arsenate minerals, polymorphs clinoclase and gilmarite, and to assess their

structural complexities from viewpoint of the information content stored in the structures.

Paper by *Dal Bo et al.* describes very interesting structure of aluminum uranyl phosphate hydrate, mineral phuralumite, with a revised chemical formula.

Contribution of *Plášil and Škoda* focuses on the particularly interesting structure of uranyl carbonate containing REEs, shabaite-(Nd), which contains a sheet of REE-based polyhedra that has not been observed among uranyl carbonate minerals and compounds up to now.

Paper by *Kampf et al.* provides a complete description of a new mineral species, rietveldite, a novel uranyl sulfate from three well-known localities: Blue Lizard mine in Utah (USA), Jáchymov (Czech Republic) and Willi-Agatz mine (Germany).

We are grateful to all authors who contributed to this thematic set, and to referees who did a great job in handling the scientific and linguistic reviews under very tight schedule constraints. We believe that this volume brings both interesting and stimulating reading.



New Minerals and Mineralogy in the 21st Century International scientific symposium Jáchymov 2016



Attendants of the symposium Jáchymov 2016 in front of the Běhounek spa house (photo Klaas Boelen).

