Citation by J. Pašava (SGA Executive Secretary):

Mr. State Secretary, distinguished guests, ladies and gentlemen,

it is a very great honor to present David Dolejš, an associate professor at the Charles University in Prague, as the recipient of the SGA Barrick Young Scientist award in 2013. David was born in the Czech Republic and graduated with an M.Sc. degree summa cum laude in petrology from Charles University. Links between magmatic and hydrothermal processes attracted David's interests since his early university days, and they continue to provide a solid foundation for his ability to see ore-forming processes, petrogenesis and geodynamic interpretations in one interrelated context. David has always been strongly interested in unraveling global hydrothermal processes as opposed to case studies, and this led him to add laboratory experiments and numerical models of remarkable quality and insight to his research projects.

For his Ph.D. at McGill University in Canada, he restarted the experimental laboratory and developed an extensive research program devoted to magmatic-hydrothermal transition in highly evolved granitic systems. He addressed mineral stabilities and melt-fluid partitioning in fluorine-bearing systems, a ligand, whose relevance for mass transport is still not completely appreciated. His doctoral thesis at McGill, crowned with a dean's honour list, led to six papers with a total impact factor of 21.5. He provided definite resolutions for the dichotomy of volatile composition and mineralization in magmatic arcs versus continental collision, and critically assessed the role of exsolution of fluoride liquids or brines from granitic melts that lead to the formation of deposits of various critical metals, such as Zr, Nb, Ta, or rare earth elements.

Subsequently, David accepted postdoctoral position at the University of Bayreuth in Germany, with the support from the Elite Network of Bavaria, and developed strong and successful international collaboration to address some of the long-standing deficiencies in our understanding of feedback relations between alteration mineralogy, the chemistry of aqueous fluids, reaction mechanisms, and environmental factors such as oxygen or sulfur fugacities. Together with Thomas Wagner, they modelled alteration reactions in shallow-level granites, with implications for redox variations and identified solute ratios, now analytically accessible, which may provide potential geothermometers for hydrothermal fluids. With Andreas Audétat and Jacob Lowenstern, they documented multiple occurrences of primary magmatic molybdenite worldwide and calibrated the potential of molybdenum as a sulfobarometer at the magmatic-hydrothermal transition. More recently, David began to investigate the nature of fluidmediated element transport in the deeper lithosphere. He questioned the conventional wisdom of zirconium immobility and with his graduate student Diego Bernini published in-situ diamond-anvil cell measurements, first of its kind in the world. Finally, David developed a new solubility model for representative minerals in aqueous fluids and changed our views on the significance of retrograde solubility in hydrothermal or geothermal systems. These few examples indicate the breadth and impact of his research published in numerous papers appearing in Geofluids, Geochimica et Cosmochimica Acta, Journal of Petrology, Reviews in Mineralogy and Geochemistry and other major international journals.

In 2008, David has accepted position of assistant, now associate professor at the Charles University in Prague and maintained a strong sense for outreach and student education. For the last five years, he has been acting as the faculty advisor to the SGA student chapter in Prague and a relentless excursion guide in central Europe and Scandinavia. Under his leadership, the chapter has rapidly grown from 8 to 42 student members, and it became a very active and one of the largest groups in Europe. David's enthusiasm and personal devotion to promotion of economic geology among young generation of students is clearly a very

important and successful aspect of his academic activities. The Faculty of Science of his alma mater has already recognized him as a double recipient of the excellent teacher award.

David's scientific productivity has been extraordinary, and he earned the Walter Hitschfeld award in Montréal 2001 and the Albert Maucher award in Munich 2007. To date, he has published more than 35 papers in major international journals and the number of his citations is on a sharp increase, exceeding 390 worldwide. This clearly reflects his sense for scientific pursuit, the relevant scope of his approaches, and the application of his research results to an interdisciplinary area between economic geology, geochemistry and mineralogy.

I would like to present David Dolejš to you as the 2013 recipient of the SGA Barrick young scientist award in recognition of his scientific enthusiasm, creativity and leadership.