

## **Prof. Ing. Pavel LEJČEK, DrSc.**

### ***Fields of study***

- Growth of crystals of metals and alloys (melt growth, solid–state techniques)
- Solute segregation at grain boundaries and free surfaces (Auger Electron Spectroscopy)
- Grain boundary migration and corrosion
- Grain boundary engineering
- Archaeological metallurgy

### ***List of current projects headed by P. Lejček***

- Compensation effect and grain boundary properties (Czech Science Foundation, 2006–2008, Grant No. 202/06/0004)
- Modelling of mechanical and chemical properties of heterogeneous structures in construction materials (Czech-Slovak Coop. in RD, 2006–2007, No. CZ–2006/37) (+ University of Žilina, Faculty of Mechanical Engineering, Žilina, Slovakia)
- Role of grain boundary morphology and chemistry in intergranular fracture (Czech Science Foundation, 2005–2007, Grant No. 106/05/0134).
- Crystallization of single- and multiphase materials (Grant Agency of the AS CR, 2004–2008, Grant No. A1010414).