

Name of the course	Thermal analysis methods
Number of instruction hours	two day workshop
Outline of course/module content	Principles of thermal analysis methods. Methods: differential thermal analysis (DTA), differential scanning calorimetry (DSC), thermogravimetric analysis (TGA), evolved gas analysis (EGA), thermomechanical analysis (TMA) dynamic mechanical analysis (DMA), thermodilatometry, thermoelectrometry, thermooptometry. Simultaneous methods. New possibilities – sample controlled thermal analysis. Instrument calibration. Influence of sample preparation and measurement parameters on the results. Limitations of the methods. Application of the methods on characterisation of polymers and other materials. Analysis of DSC and TGA curves. Determination of polymerization and degradation kinetics. Isoconversional kinetics.
Description of instruction methods	Lectures, consultations and practical work on the instruments
Description of course/module requirements	Seminar papers and oral examination