

Physical Methods in Inorganic Chemistry

General Introduction – D. Hetterscheid

In this lecture a general overview is given of the various techniques that can be used to analyse and characterize an inorganic compound (coordination compound, organometallic compound). As most techniques will be discussed in detail during this 6-day course, emphasis will be here on the choices that can be made depending on the particular compound (paramagnetic or diamagnetic; redox active or not). In addition, this contribution will particularly focus on elemental analysis: CHNS analysis, chloride determination, and ICP analysis, to answer the questions: when can these techniques be applied? how should the sample be prepared? and how to interpret the results?