

Title of the course: Organometallic Chemistry (a Chemistry BSc course)

kv1n1en5

Credits: 2 credits

Coordinator/Department: László Szepes Professor in Chemistry

Department of Inorganic Chemistry

Terms for joining: general entrance requirements of Chemistry MSc program, basic knowledge in Inorganic and Organic Chemistry. (In the case of completed ELTE BSc prerequisites are Inorganic Chemistry 1 (kv1n1en1) and 2 (kv1n1en2), as well as Organic Chemistry 1 (kv1n1es1) and 2 (kv1n1es2), or equivalent in any other case.)

Topics covered by the course:

The course intends to provide the students with the definitions and basic principles of organometallic chemistry, its history and its position in chemistry, the main trends in research and applications. Further topics as the nature of the metal-carbon bond, the basic groups of compounds, stability and thermochemistry, preparation as well as characteristic reactions are discussed. Typical examples concerning structure and bonding, as well as industrial applications are shown.

Literature:

Faigl Ferenc, Kollár László, Kotschy András, Szepes László: Szerves Fémvegyületek Kémiája, Nemzeti Tankönyvkiadó, Budapest, 2001., I.-III. fejezet (Hung.)

Ch. Elschenbroich, A Salzer: Organometallics, VCH, Weinheim, 1992. (Eng.)