

Courses offered by Department of Chemistry

Basic science courses

Nanotechnology - Prof. dr hab. inż. Marek Samoć

Obtaining fundamental knowledge about nanotechnology, Knowledge about methods of fabricating nanostructures, Knowledge about size effects, Familiarizing students with the trends of application of nanostructures in technologies and in medicine

Theoretical chemistry – Prof. dr hab. inż. Szczepan Roszak

The course provides basics of quantum chemistry (QC) and molecular modelling (MM). It starts from the introduction to quantum mechanics restricted to the description of problems found in chemistry. Methods of quantum chemistry are discussed as a potential tool applicable for the description of atomic and molecular properties and chemical processes. The molecular modelling part indicates practical use of QC in chemical laboratory useful for the interpretation of experimental results.

Photonics and Spectroscopy – Prof. dr hab. inż. Marek Samoć

Fundamental physics, Fundamental physical chemistry, Fundamental organic chemistry
Fundamental quantum mechanics

Interdisciplinary seminars

Nanophotonics Seminar - Dr inż. Joanna Olesiak-Bańska

Knowledge about photonics and light-matter interactions, Knowledge about nanotechnology and nanoscale materials, Knowledge about optical spectroscopy and microscopy, Knowledge about chemistry in the nanoscale and on interfaces

Interdisciplinary seminar on functional materials –physicochemical and mechanical properties - Prof. dr hab. inż. Andrzej Miniewicz

Mastering of skills in preparation and oral presentation of seminar via delivering multimedia presentation in English (preferably) language or Polish language, Acquiring advanced knowledge in the branch of science directly related to the field of PhD candidate research, including the most recent scientific achievements described in literature, Development of skills to conduct a scientific discussion in a group of PhD candidates in English or Polish

Humanities and management courses

Retrieving and composing of scientific information - Prof. dr hab. inż. W. Andrzej Sokalski

Teaching basic concepts of scientific literature and writing research papers, Teaching practical use of scientific literature and factographic databases, arranging international cooperation, basic concepts of organization and funding scientific research and writing grant applications, career planning, ethical problems in science and engineering