



# Faculty of Physical Chemistry

# Physical Chemistry

at Faculty of Physical Chemistry, 12 Studentski trg–16, 11000 Belgrade, [www.ffh.bg.ac.rs](http://www.ffh.bg.ac.rs)

ECTS: 60/ LANGUAGE OF INSTRUCTION: SERBIAN/ DEGREE: MASTER

## Study program content

Master study program in Physical Chemistry lasts two semesters; upon completion, it is equivalent to 60 ECTS points. Realization of master program is accomplished through lectures, laboratory work and research work.

Program consists of a mandatory course on methods and methodology of investigation in physical chemistry. Optional courses account for 85 % of overall ECTS points and are grouped into six areas: spectrochemistry, electrochemistry and chemical kinetics, biophysical chemistry, environmental physical chemistry, physical chemistry of materials and radiochemistry. Students are working on their master thesis during both semesters.

## Study program goals

The aim of the master study program in Physical Chemistry is to broaden students' understanding of the key concepts in Physical Chemistry and thus allow them to better comprehend specific areas of Physical Chemistry. Students will be trained to independently plan and execute experiments, understand the importance of obtained results and properly discuss them.

During master program, students are expected to become more independent and expand their creative abilities. Students develop their abilities to apply and adapt scientific methodologies in order to solve particular problems. Students will be exposed to different instrumental techniques such are: chromatography (gas, liquid, ionic, gel permeation, capillary electro chromatography, etc.), spectroscopy (atomic emission, absorption, IR, Raman, NMR, EPR, mass, x-ray, fluorescent, etc.), electrochemical analysis methods, electronic microscopy, thermal analysis and radiochemical methods.

## Study program outcomes

Master students in Physical Chemistry will attain extended and deeper knowledge in one of the following areas of physical chemistry: spectrochemistry, electrochemistry and chemical kinet-

ics, biophysical chemistry, environmental physical chemistry, physical chemistry of materials and radiochemistry. Accomplishment of master study program will make the graduate eligible for employment at all positions where required degree is BSc in Physical Chemistry, but also at higher education institutions as well as research institutions oriented towards natural sciences and development.

Graduates of the master program in Physical Chemistry can continue education at the PhD level.

## Admission requirements

Candidates must have 240 ECTS and completed undergraduate academic study programs in the field of physical chemistry or related sciences.

## Contact

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