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| Course title: | Inorganic chemical technology |
| Institute/Division: | FACULTY OF CHEMICAL ENGINEERING AND TECHNOLOGY |
| Number of contact hours: | 15 hours (15h - lectures) |
| Course duration: | 1 semester (spring) |
| ETCS credits: | 1 |
| Course description: | Lectures content: Inorganic fertilizers production technologies and rules for its application: Characteristic of soil environment, functions and division of selected nutrients, fertilizers classification, production technologies of nitrogen and phosphoric fertilizers, one- and two-component fertilizers, characteristic of multi-component fertilizers, mixed and complex fertilizers, characteristic and problems of the fertilizers market, new solutions at raw materials/ Sodium phosphates production technologies and its application. Advantages and disadvantages of basic inorganic technologies-sustainable development: definition of sustainable development, analysis and assessment of technological processes, advantages and disadvantages of basic inorganic technologies and directions of its development/ Industrial waste streams and waste management techniques: definition and classification of waste, waste management rules, waste quality and quantity, characteristics according to group distribution, effective ways for reducing and preventing waste production |
| Literature: | [1] Martin B. Hocking — Handbook of Chemical Technology and Pollution Control (3rd Ed.), 2005,Elsevier; [2] Wan Wazer Phosphorus and its Compounds — Phosphorus and its Compounds, London, 1958, Interscience publishers; [3] Salah M. El-Haggar — Sustainable Industrial Design and Waste Management,, , 2007, Elsevier Ltd |
| Assessment method: | Final tests (average grade from three sub-sections presented at the lectures), presence on lectures |
| Prerequisites: | Basic knowledge on general, inorganic and organic chemistry |
| Primary target group: | Chemical technology/engineering students |
| Lecturer: | dr hab. inż. K.Gorazda, prof. PK |
| Contact person: | dr hab. inż. K.Gorazda, prof. PK, e-mail: katarzyna.gorazda@ pk.edu.pl |
| Deadline for application: | 15 th of January |
| Remarks: | The course runs regularly |