

<b>Level:</b> PhD				
<b>Course title:</b> Specific Topics of Industrial Organic Chemistry (DSH-703)				
<b>Status:</b> Elective				
<b>ECTS:</b> 15				
<b>Requirements:</b> None				
<b>Learning objectives</b> Improve knowledge of basic raw materials and chemicals used in the process of organic chemical industry.				
<b>Learning outcomes</b> Capability for self-selection of raw materials and synthetic processes for the industrial production of base products and fine chemicals.				
<b>Syllabus</b> <i>Theoretical instruction</i> Basic raw materials and manufactures of industrial organic chemistry. Renewable raw materials. Alkenes and acetylene. Oxidation products of ethene. Alcohols. Components for polyamides. Production of aromatics and their conversion. The development of processes for the production of fine chemicals from grams to kilograms. Selected examples of technological processes for the production of intermediates and fine chemicals. Production of cephalosporin. Thromboxane antagonists. Synthesis of H <sub>2</sub> blockers. Synthesis of a potential anti-obesity agent. Synthesis a non-nucleoside drug against AIDS. Reagents for large-scale operations.  <i>Practical instruction</i> The exercises follow the lecture material.				
<b>Weekly teaching load</b>				<b>Other:</b>
<b>Lectures:</b> 5	<b>Exercises:</b>	<b>Other forms of teaching:</b>	<b>Student research:</b> 5	