LITHUANIAN UNIVERSITY OF HEALTH SCIENCES

International **Summer School** Practice

Creating my BRAND - formulation of personal cosmetic care products

The aim of this summer internship project is to introduce students to the principles of cosmetic product development and formulation through practical laboratory work. During the internship, students will gain hands-on experience in designing and preparing a range of personal care products, such as shampoo, hair conditioner, body scrub, shower gel, or other cosmetic formulations.

The project will combine theoretical knowledge with practical experimentation. Students will become familiar with the main groups of cosmetic ingredients, their functions, compatibility, and influence on the properties of the final product. Particular attention will be given to surfactants, emulsifiers, oils, humectants, thickeners, preservatives, fragrances, and other functional ingredients commonly used in cosmetic formulations.

During the practical sessions, students will learn how to select suitable raw materials, develop a basic formulation, calculate ingredient concentrations, and follow appropriate preparation procedures. They will investigate how changes in formulation affect product characteristics such as texture, viscosity, foaming, spreadability, appearance, fragrance, and overall sensory properties.

An important part of the internship will be the development of an individual cosmetic product concept. Students will be able to choose the type of product they would like to create, define its intended use and target consumer, select suitable ingredients, and develop their own formulation.

The internship will provide students with an understanding of the interdisciplinary nature of cosmetic science, combining elements of chemistry, formulation science, material science, product development, and quality control. It will also help develop practical laboratory skills, creativity, problem-solving abilities, and an understanding of how scientific knowledge can be applied to the development of everyday consumer products.

By the end of the project, each student or student group is expected to develop and prepare one or several prototype cosmetic products and present the formulation process, product properties, challenges encountered, and final results.

The project is suitable for international students interested in chemistry, chemical technology, biotechnology, pharmacy, cosmetic science, materials science, or related fields. No previous experience in cosmetic formulation is required.