**Project description**

**About the project course**

Do you want to make your footprint in developing sustainable-future chemicals and processes? Are you interested in surfactant science and/or mineral flotation? Do you want to experience living in the subarctic region to see the midnight sun or endless nights and auroras? Join us at the Chemistry of Interfaces (CoI) group in the Chemical Engineering Division, Luleå University of Technology (LTU).

Many of today’s commonly used reagents in mineral industries pose health and safety concerns and often constitute a potential environmental risk. Consequently, efforts are needed to develop eco-friendlier alternative reagents for mineral recovery. In addition, due to the steady depletion of high-grade, relatively easy-to-process ores, the mineral industry is confronted with a challenging task of finding more efficient techniques to exploit low-grade, complex and disseminated types of ore deposits and historic tailings. The development of new selective and environmentally acceptable substances containing almost tailor-made reagents is thus inevitable for our future sustainability. The quick trailer: <https://vimeo.com/762228374>

In CoI group at LTU, we are working on a project to develop mineral-specific but eco-friendly novel collectors ‘for the future’. There are currently several sub-projects waiting for a future researcher like you. Projects are defined with a prospect of scientific publication, which means if you try, you will be a published researcher by the end of the project. This is a project course carried out as a placement. Credits are awarded. Projects can be considered for thesis projects or just as a project course. We are flexible to re-define the sub-projects according to your interest, time and experiences (as long as it takes our research a step forward, of course).

LTU, the northernmost University of Technology in Scandinavia, is a public research university located in Norrbotten, Sweden with more than 50 years of experience, 17000 students and 1500 staff. LTU is constantly ranked among the world`s top universities and the Chemical Engineering Division at LTU is ranked among the 300-400 top groups in the world according to the Shanghai ranking.

Requirements: Being interested in research, having basic Chemistry knowledge.

Are you ready for the challenge? Do not hesitate to get in touch with me. You may reach me by phone +46738160024 or email, [anuttam.patra@ltu.se](mailto:anuttam.patra@ltu.se)