Internship at the University of Bergen

As a recent graduate at Lund University, I conducted two months Erasmus+ internship at the Department of Geography at the University of Bergen in Norway. Much of the work done at the department is devoted to paleoclimate research, with sediment analysis being one of the focus areas. The aim of my internship was to extend the knowledge about data collection and processing and get a deeper insight in field and laboratory techniques used in physical geography. My contact person, post-doc Pål Ringkjøb Nielsen, enabled me to enrol in field and laboratory components of the courses he coordinates at the department.

During the internship, I joined a few fieldworks taking place in the area around Bergen, worked in the sediment and computer lab and performed individual literature study to better understand different processes and techniques. Field-based research included collecting soil samples, marking geomorphological features using iPad and a map, lake coring using piston corer and gravity corer, bathymetric analysis, DGPS sampling, using ground-penetrating radar (GPR) and deriving hypotheses about the processes observed in a dynamic environment. The objective of laboratory work was to understand and quantify sediments deposited by different geomorphological agents and reconstruct climate, glacier activity, floods and landslides. The methodology comprised of sediment core CT scanning, X-ray fluorescence, loss on ignition, magnetic susceptibility and grain size analysis. In the computer lab, the tasks were to interpret GPR data, construct an age-depth model and produce geomorphological and bathymetric maps in ArcGIS.

The internship was very rewarding. My supervisors, post-doc Pål Ringkjøb Nielsen and professor Svein Olaf Dahl, provided me with guidance throughout the work and gave me insight into possibilities for pursuing further academic studies. Besides learning how to use different types of sampling equipment as well as to summarise and interpret information obtained with various methods, I also gained an understanding of practical challenges associated with field- and laboratory-based research.