

Internship in Environmental Sciences

Supervisor	Prof. Dr. Amanda Gonçalves Kieling
Project	Waste Characterization http://www.unisinos.br/graduacao/engenharia-ambiental/presencial/sao-leopoldo
Description	The main objective for the industry is to reduce the generation of wastes, or to find better uses to them, such as in the own productive process or as raw material in the elaboration of other materials. Besides that, a great amount of funds has been invested in research for the transformation of such wastes, in by-products of commercial interest. For this, the first step of the study is to verify the characteristics of the waste to propose future applications.
Tasks	The laboratories have different equipment to carry out the characterization of wastes from different industrial activities. Samples are characterized based on physical, chemical, and microstructural standards: grain size distribution, surface area, porosity, specific weight, hydration capacity, pH, zero load test, loss on ignition, total carbon, chemical composition, crystalline phases, functional groups, and image analysis.
Requirements	<ul style="list-style-type: none"> • Students of Environmental Sciences • Undergraduate student (at least beginning of the 2nd year) • Basic skills in scientific working (lab and/or field experiments)
Language Skills	English (Portuguese would be nice, but is not necessary).
Duration	4 months
Possible Beginning	Between February/July
Credits	According to agreement
Payment	None