

ChIR
Erasmus Mundus Master in Chemical Innovation and Regulation

Duration: 24 months

Course description:

Chemicals play an important role in everyday life. However, the use of chemicals involves a risk: some are highly toxic to humans and to the environment, or they may cause physical and chemical hazards. The toxicity of many chemicals is still unknown. International regulations such as the European regulations REACH - Registration, Evaluation, Authorisation and Restriction of Chemical substances – aim to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. There is still insufficient information on the hazards that many commonly used chemicals pose to human health and the environment. There is a need to fill these information gaps to ensure that industry is able to assess hazards and risks of the substances, and to identify and implement the risk management measures to protect humans and the environment. ChIR provides professionals with all the tools and knowledge needed from the scientific, the regulatory and the economic point of view to manage the risks of chemicals responsibly and to meet responsibilities over chemical legislation worldwide.

The master is offered by a Consortium of four European Universities: University of Algarve (Portugal) University of Barcelona (Spain) University of Bologna (Italy) Heriot Watt University (UK) The programme duration is 2 years consisting of a 1 year taught course and 1 year of research project and thesis. The main language of instruction is English. Each university also offers local language training during the course. The taught course is made of stand-alone modules. Students are allowed to build their own study plan according their own interests. By the end of the course students will: - have a thorough understanding of international regulations on the use of chemical substances; - understand the principles behind the design of new safe chemical products; - be able to project a business plan for the commercialization of new chemical products; - understand the principles behind the industrial implementation of new processes; - evaluate potential environmental, toxicological, physical and reactivity hazards of chemical substances. Classes take place in one of the Universities of the consortium and are lectured by specialists from all the partner institutions.

The Host University rotates every year. In the second year each student moves to a different University of the Consortium to complete a research project. Part of the research project can be done in one of the associated partner institutions of the Consortium either in Europe, in Brazil, China, Japan or the USA. The final Qualification obtained is a European Joint Master Degree in Chemical Innovation and Regulation which is awarded by the Universities that the student visited as part of the ERASMUS MUNDUS programme. Details of the modules and research projects that were followed by the students are given in a Diploma Supplement.

Website: <http://www.emmcchir.org>

Partners:

UNIVERSIDADE DO ALGARVE, Portugal (Co-ordinating Institution)
ALMA MATER STUDIORUM UNIVERSITA BOLOGNA, Italy
UNIVERSITAT DE BARCELONA, Spain
HERIOT WATT UNIVERSITY, United Kingdom

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