LMAPR2690

2012-2013

Valorisation and Treatment of Solid Wastes

4.0 credits	30.0 h + 7.5 h	1q

Teacher(s) :	Devaux Jacques ; Proost Joris ;
Language :	Anglais
Place of the course	Louvain-la-Neuve
Main themes :	1- Comments, on economical and technological viewpoints, of possible flow-sheets for the treatment of main kinds of industrial metallic residues or scraps which are not directly recyclable by usual metallurgical processes, like : dust and fumes from siderurgy and non-ferrous metallurgy, slag from melting of aluminum scraps, exhausted catalysts, lead and silver residues from metallic lixiviation, slurries from waste water treatment in chemical or metallurgical plants (surface treatment, gas abatement), shredded car residues, exhausted cells and batteries, 2- Recycling and recovery of organic waste, mainly polymer scraps and wastes. Primary, secondary (mechanical) and tertiary (chemical or feedstock) recycling and thermal valorisation (quaternary recycling).
Aims :	Understanding and development of possible schemes of treatment of solid industrial wastes; of both organic and inorganic nature, with a view to their recycling, valorisation and disposal. *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Content :	1. Valorisation of solid organic waste 2. Valorisation of solid inorganic waste
Other infos :	References : I.K. Wernick and N.J. Themelis, "Recycling metals for the environnement", Annu. Rev. Energy Environ. 23, 465-497 (1998)
Cycle and year of study :	> Master [120] in Chemical and Materials Engineering > Master [120] in Chemistry and Bio-industries > Master [120] in Environmental Bioengineering > Master [120] in Environmental Science and Management
Faculty or entity in charge:	FYKI