

## EMMC-ChIR - Erasmus Mundus Master in Chemical Innovation and Regulation

### List of modules for 3<sup>rd</sup> edition

Code	Name of module	Name of lecturer	Univ.
<b>D Design</b>			
D01	Alternative Green Products	Emilio Tagliavini	UniBo
D02	Properties of Materials and New Materials	Mercè Segarra	UB
D03	Patenting New Products	Lurdes Cristiano	UAlg
D04	Drug Design	Axel Bidon-Chanal	UB
D05	Structure Toxicity Relationship	Assimo Maris	UniBo
D07	Chemical Databases	Gabriel Aullón	UB
D08	Modeling and Simulation	Gabriel Aullón	UB
D09	Food and Chemistry	Carme González	UB
D10	Soft Materials	Francesc Sagués	UB
D11	Design of Chemical formulations	Santiago Esplugas	UB
D12	Synthesis and Properties of Inorganic Nanomaterials	Giuseppe Falini	UniBo
D13	Sustainable biocatalytic processes	Alessandra Tolomelli	UniBo
D14	Peptides and peptidomimetics as green chemistry tools	Claudia Tomasini	UniBo
<b>I Industry</b>			
<b>I01 Sustainable Chemistry</b>			
I0101	Renewable Sources	Emilio Tagliavini	UniBo
I0102	Green Metrics	Marco Lombardo	UniBo
I0103	Catalysis for a Sustainable Synthetic Chemistry	Marco Bandini	UniBo
I0104	Alternative Green Solvents	Claudio Trombini	UniBo
I0105	Green Synthetic Strategies	Pier Giorgio Cozzi	UniBo
I0108	Chiral Technology in the Chemical & Pharmaceutical Industry	Albert Moyano	UB
<b>I02 Chemical and fine chemical industry</b>			
I0203	Pharmaceutical and Fine Chemicals Industry	Walter Cabri	external
I0204	Industrial Forgery Detection	José Moreira	UAlg
I0205	Chemical Process Safety	Joan Padilla	external
I0206	Chemical Industry	Managed by E. Tagliavini	Unibo
I0207	Nanomanufacturing and Nanoprocessing	Albert Romano	UB
<b>M Marketing and Social</b>			
M01	Business Planning	Jaume Argerich	UB
M02	Market Research	Rubén Huertas	UB
M03	Social Perception of the Chemical Risk		UB
M04	Health and Safety in Chemistry	Daniel Sainz	UB
M05	Life Cycle Assessment	Fabrizio Passarini	UniBo
M06	Quality Management	Isabel Cavaco	UAlg
M07	Innovation Management	Jaume Valls	UB
M08	Biosafety	Cristina Massa	external
M09	Entrepreneurship	Jaume Argerich	UB



<b>A Assessment</b>			
<b>A01 Environmental Assessment</b>			
A0101	Chemical Transformation and Degradation in the Environment	Paola Galletti	UniBo
A0102	Chemical Pollutants	Paola Galletti	UniBo
A0104	Environmental Analysis and Detection in the Environment	Laura Tositti	UniBo
A0106	Environmental and Health Safety of Nanotechnology	Teresa Fernandes	HWU
A0108	Chemical Pollutant Remediation	Thomas Aspray	HWU
A0109	Transport processes and dispersion of pollutants in the atmosphere	Alberto Modelli	UniBo
A0110	Marine Microbial Diversity and Ecology	Tony Gutierrez	HWU
A0111	Chemical and biological treatment of wastewater	Clara Costa	UAlg
A0112	Bioavailability	Ted Henry	HWU
<b>A02 Toxicological Assessment</b>			
A0201	Genotoxicity Assessment	Vera Marques	UAlg
A0202	Toxicokinetics and Toxicogenetics	Vera Marques	UAlg
A0204	Toxicology	Teresa Fernandes	HWU
A0206	Principles of Toxicological Assessment	Vera Marques	UAlg
A0207	Human Physiology	Vera Marques	UAlg
<b>A03 General Assessment</b>			
A0304	Reference Materials and Laboratory Proficiency Testing Schemes	Angels Sahuquillo	UB
A0305	Measuring Variability and Statistical Decision	Isabel Cavaco	UAlg
A0306	Chemometrics	Anna de Juan	UB
A0307	Sampling Strategies	Anna de Juan	UB
<b>A04 Physical Hazard Assessment</b>			
A0402	Chemical Reactivity Hazards	Victor Garrido	external
<b>R Regulation</b>			
R02	Risk Management	Paolo Ricci	Scholar
R03	REACH and CLP Regulations	Ruth Jiménez	external
R04	Non-EU Regulations: Japan, Brazil and China	Daniel Sainz	UB
R06	Pharmaceutical Regulations	João Rocha	UAlg
R07	Nanomaterials and Nanotechnologies Regulations	Teresa Fernandes	HWU
R08	Chemical Waste Materials Regulations	Victor Garrido	external
R09	Priority Substances in EU Environmental Legislation	Alice Newton	UAlg
R10	Comparative Analysis of Chemical Regulations – EU and US	Paolo Ricci	Scholar
R12	Introduction to EU and US law	Paolo Ricci	Scholar
R13	Advanced Risk Analysis	Paolo Ricci	Scholar
R14	Safety in the use of Chemicals	Eugenia Anta	external



### T Transferable Skills

T01	IT tools	Emilio Tagliavini/Other	Host
T02	Communication skills	Emilio Tagliavini/Other	Host
T03	Laboratory skills	Emilio Tagliavini/Other	Host
T04	Research skills	Emilio Tagliavini/Other	Host
T09	Intensive "Survival" Language Course - Italian	CLA	UniBo
T11	Personal Branding	Xavier Ripoll	external