option due to the scarcity of professionals and the large volume of work currently on offer.

However, as the training activities currently available in this sector are limited, we decided to establish a Masters in Environmental Toxicology and Risk Assessment that would equip students with the knowledge and practical skills required to recognise, analyse and evaluate the various qualitative and quantitative factors associated with exposure of humans and animals to potentially hazardous environmental factors of a chemical nature and the effects caused by said exposure on human and animal health and in the environment and/or ecosystem as a whole.

This Master program provides theoretical and practical experience of the basic tenets of environmental toxicology with an emphasis on risk assessment, as well as complementary practical training (on-campus) that is essential for reinforcing the knowledge gained and the skills that students hope to acquire in order to join the job market and apply their training in the chemicals industry and/or for research in the field of environmental toxicology.

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P20-002
Comparison of teratogenic potency of azoles using in silico and in vitro methods

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Craniofacial morphogenesis is affected in rodents by a number of clinical or agrochemical azole fungicides. The hypothesized mode of action of azoles includes abnormal neural crest cell specification and migration from hindbrain to the embryonic branchial region due to retinoic acid (RA) excess. Moreover, the additive effects after the multiple exposure to triazole fungicides account for a common mode of action. In analogy to their antifungal mode of action and hepatic side effects (inhibition of CYP isozymes), the proposed molecular initiating event for azole teratogenicity is the inhibition of embryonic CYP26 isozymes which are key proteins in RA catabolism.

Experiments performed on postimplantation rat whole embryo cultures show that all tested azoles are teratogenic at micromolar concentrations, but characterized by different potencies (flusilazole = imazalil = ketoconazole > triadimefon = triadimenol > cyproconazole > tebuconazole > fluconazole).

Molecular docking of eight azoles has been performed on CYP26a1, CYP26b1 and CYP26c1 isozymes, which play different roles in their teratogenic outcomes. Different affinities, consistent with the different azole teratogenic profiles and potencies, have been computed, confirming this hypothesis

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P20-003
Animal poisoning by baits in Italy

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Although the improper or malicious use of poisoned baits is banned in Italy, incidents of intentional animal poisoning are still widespread representing a serious threat to pets as well as wildlife species. Data from this retrospective study were taken from 44 pesticide-based baits sent for toxicological analysis to the laboratory of the Lombardy and Emilia Romagna Experimental Zootechnic Institute (IZSLER) from January 2010 to December 2014. Analyses were performed, in relation to the toxicant, in GC-MS, LC-MS, TLC or physical chemical (zinc phosphide). In 14% of the analysed baits more than one pesticide was present. The use of a combined toxicant is probably due to its assume higher lethal toxicity. Anticholinesterase insecticides (carbamates and organophospates) proved to be the most common pesticides detected (36%) followed by organochlorine insecticides (30%), anticoagulant rodenticides (20%) and molluscicides (11%). The non-anticoagulant rodenticides alpha-chloralose (5%), strychnine (5%) and zinc phosphide (2%) were also detected. Among anticholinesterase insecticides, analysis of data identified the organophosphate methamidophos (18%) and the carbamate carbofuran (9%) as the main poisoning agents. Despite the organochlorine insecticide endosulfan has been withdrawn from the market in 2011, the active ingredients of its commercial formulation (α-endosulfan and β-endosulfan) occurred in 30% of the analysed baits. Anticoagulant rodenticides included brodifacoum (5%), bromadiolone (9%), coumatetralyl (7%), difenacoum (2%) and flocoumafen (2%).

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P20-005
Investigation of Cu, Fe and Zn in some foundation products in turkey

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There are many kinds of cosmetics are being used for many years. Cosmetics which applied to skin surface can pass into the systemic circulation depending on the components inside and which may cause systemic exposure. Thus, the possible toxic effects associated with the use of these products are considered to be decisive of components of cosmetics. The most important of these components are heavy metals which originated from production as inevitable impurities and/or contaminations. We carried out investigation of 52 foundation samples which obtained from 15 different brands. In our study, levels of Fe, Zn and Cu was measured using atomic absorption spectrometric analysis (AAS). Cu was not detected in the samples. Fe was detected in all samples and Zn was detected in all samples except one sample. The mean concentration of Fe