Eye examination for Laser users

Lesions outside the macula and fovea can be present even though person has not noticed the interaction. For employees working with laser of class 3B or 4, an ophthalmic check-up before activity starts and at the end of activity allows examination of the eye fundus to determine possible damage.

According to laser products safety standard IEC 60825-1, ophthalmic pre-employment, intermediate and post-employment exams are not a necessary element of a laser safety program. Nevertheless they have legal and medical value, and also educate users to laser risks.

Pre-employment (entry) ophthalmic exam, provided by EPFL, is strongly recommended for regular users of class 3B and 4 lasers with open beam path. The post-employment (departure) exam is offered to people who have worked with these lasers more than four years; majority of PhD students are therefore not eligible for the departure exam.

The CoSec should ensure that eligible users register for the entry and departure exam using the form available on the following web page:

http://securite.epfl.ch/ophtalmiccontrol

Towards less dangerous chemicals

As chemicals are used in scientific research works as well as for maintenance, the chemical exposure risk at the School of Basic Sciences is ubiquitous. Both physical and health hazards (toxicity) of chemicals must be taken into consideration. Hence each user should

1) Identify the hazards associated to the chemicals: read and understand the corresponding Safety Data Sheet. This should be the first step, even before ordering a chemical. Indeed, if too dangerous, one will look for a less dangerous one.

2) Understand and put in place all means and recommendation to store, use and eliminate it safely.

3) Anticipate and prevent risks. In this matter, the most efficient way is to avoid, or at least reduce the use of hazardous chemicals. As it is not always feasible, the user must know how to manage them and protect himself.

Indeed, even if a co-worker is only using small amounts of a compound without acute toxicity, this chemical could lead to intoxication after a certain period of time. Typically carcinogenic, mutagenic and/or reprotoxic chemicals (CMR) are substances having chronic toxicity. Their use or the way they are being handled cannot always be changed. However, the evolution of the technic and the publications facilitate more and more this reflection. Hence, for some processes it has been shown that benzene could be replaced by ketones, xylene, cyclohexane or other hydrocarbons. Chlorinated solvents can also be substituted ...

4) Make sure a new risk assessment is done for each change/substitution in a process. If necessary, new safety equipment must be put in place.