

SUMMER SCHOOL “RESEARCH AND DEVELOPMENT OF REMEDIATION TECHNIQUES FOR POLLUTED SITES”

Savona (Italy). September 7th – 12th, 2003

The second edition of the Summer School “Research and Development of Remediation Techniques for Polluted Sites” took place in September 7th – 12th, 2003, in Savona (Italy). Soil reclamation was the underlying theme of this School related to Green Chemistry, where teachers were both professors of chemistry, biology and engineering from Italian Universities, and industrial and political experts working in the field of environmental protection.

The School was sponsored by the Italian Ministry for Education, University, and Scientific Research, the Ministry for Environment, the Liguria region, and the Province of Savona. The course dealt with problems related to the re-use of abandoned industrial areas, and – more generally – of degraded areas, a problem which is actually very important, but which is also a strategic element for an environmentally compatible economic development in Italy.

A survey carried out according to the Decree of the Ministry dated May 16th, 1989, pointed out that more than 3,000 polluted sites in the sole four regions of Lombardia, Piemonte, Liguria, and Toscana need remediation works.

It is essential though to start re-using the abandoned industrial areas (those that were already used for industrial production and/or related activities, and those used as industrial landfills), since - according to the survey - number of new and existing polluted sites is expected to increase quickly. Besides, in Italy the ratio of operators working at sites remediation is quite low in relation to surface to be reclaimed and these experts have to be highly qualified.

The lack of specific know-how in this field in Italy is one of the main factors, which induced INCA to cooperate with the University of Genova, the Ministry for Education, University and Scientific Research, and the Ministry for the Environment to start a Summer School entitled “Research, Testing, and Development of Remediation Techniques of Polluted Sites”, whose first edition took place in Savona in September 8th – 13th, 2002. The aim was to provide 30 young graduates - with proved past experience in the field of remediation - with a valid report on Italian polluted sites and the specific legislation on classification and management of these sites. Scientific topics were principles and applications of new direct approaches for site monitoring and risk assessment, and chemical, physical, and biological techniques for reclamation of polluted ex-industrial areas.

The second edition of the Summer School took place from September 8th, to 12th, 2003, and took place in Savona (at the facilities of SPES). The participants were 25 young graduates already involved in chemical-physical and biological remediation activities of some Italian sites - mainly belonging to Lombardia and Liguria regions - where reclamation is finished or yet in progress. Along with a short presentation on the situation of polluted sites in Italy, legal issues, risk assessment criteria, and main remediation methods and techniques, participants and teachers examined all phases of 6 case studies related to remediation (i.e. site characterization, laboratory investigations about tractability of matrixes, and on-field application of optimized protocols). Moreover visits to laboratories and companies, involved in remediation activities were organized. On September 12th, the Summer School ended with a final workshop about technical and administrative problems related to remediation activities in Liguria, and a discussion to examine closely all subjects treated during the course.