Recent Work

Title
The Crisis in Nuclear and Radiochemistry Education

Permalink
https://escholarship.org/uc/item/82n4j1d7

Author
Nitsche, Heino

Publication Date
2005-02-15
This abstract was prepared for an invited oral presentation at the 2nd International Workshop on Radiological Sciences and Applications (IWRSA) to be held March 16-18, 2005, in Vienna, Austria

Prepared: February 15, 2005
The Crisis in Nuclear and Radiochemistry Education

Heino Nitsche
Department of Chemistry, University of California Berkeley and Nuclear Science Division, Lawrence Berkeley National Laboratory, MS 70R0319, Berkeley, CA 94720-8169, U.S.A., HNitsche@lbl.gov

The lack of highly-trained nuclear and radiochemists has reached crisis-like proportions in the U.S. A. and parts of Western Europe and may soon jeopardize the safety and well being of our societies. There is a great need for scientist with training in nuclear and radiochemical sciences in frontier research and in a variety of applied areas including prediction and monitoring of behavior of radionuclides/actinides in the environment; nuclear medicine and isotope production; radio-pharmaceutical preparation; nuclear power, nuclear waste isolation and site remediation; treatment, processing, and minimization of nuclear wastes; ultra-sensitive instrumentation and analyses; automated and computer-controlled remote processing; stockpile steward ship, surveillance of clandestine nuclear activities and many other national and international security issues.

This talk will present an overview of the current status on nuclear and radiochemistry in the U.S.A. and selected European countries and discuss potential causes and solutions to this imminent problem.