
NEED FOR CAPACITY BUILDING AND KNOWLEDGE MANAGEMENT IN NUCLEAR APPLICATIONS, AN IAEA PERSPECTIVE

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In many countries, particularly in Europe and the United States, a gradual decrease of teaching and training opportunities in radiochemistry has been observed since more than two decades. Due to public misconception of anything nuclear related, the dramatic decrease of students enrolled in nuclear chemistry and radiochemistry resulted in closure of institutes via un-replaced retirements of faculty members and drastic reduction of financial support. Lack of teaching opportunities in radiochemistry and nuclear physics as the basic discipline for radio-pharmaceutical, nuclear medical, health physics, and nuclear energy technology has a strong multiplicity effect on various branches of applied and basic research and, hence, on some major parts of society's welfare.

Concern about the world-wide decline in nuclear expertise due to retirements and an obvious lack of students in many countries in the field of nuclear and radiochemistry has triggered the initiative of setting up a programme on 'Training and Education in Radiochemistry' at the Division of Physical and Chemical Sciences. This programme is intended to raise awareness of the situation and to increase the political momentum to secure existing opportunities and to initiate new facilities for training and education of nuclear experts. In view of the technical and scientific challenges ahead of us related to energy, health care, safety, industrial development etc. nuclear expertise is indispensable and strong efforts should be made to secure knowledge on a national and international level.

This contribution tries to summarize the IAEA Department of Nuclear Science and Applications' activities in the field of training and education of nuclear expertise through the various mechanisms available to support projects, fellowships, and technical cooperation. The mandate of the IAEA to strengthen the peaceful applications of nuclear techniques presents a particular responsibility to foster human capacity building and education in nuclear skills. Member States need to take up this challenge actively and support the initiatives on nuclear knowledge management to ensure long term sustainability of their nuclear programmes and to secure responsible treatment of existing nuclear materials.

Examples of successful training programmes in nuclear skills will be given and advise how to participate and/or contribute in Agency's programmes will be discussed.