

Inauguration of the 15th batch of the One-Year Health Physics Stipendiary Training Course

The One Year Health Physics Stipendiary Training Course being conducted by the Health Physics Division since 1989 has been largely meeting the requirements of professionally trained Health Physicists at BARC, NPCIL, IGCAR and AERB. The Training Programme for the 15th batch of Health Physics trainees was formally inaugurated by Mr. N.D. Sharma, Controller, BARC at HPD Auditorium, Radiation Protection Training & Information Centre on November 24, 2009. Mr. H.S. Kushwaha, Director, Health Safety & Environmental Group and Dr. P. K. Sarkar, Head, Health Physics Division were also present.

The inaugural function commenced with a welcome address by Dr. P. K. Sarkar. He stressed on the relevance of a specialized professional course in Health Physics discipline as the wide range of subjects relevant to the profession are not offered in the curriculum of any of the Indian Universities. He recollected the recent discussions with Chairman, UGC regarding the necessity of starting a full fledged course in Radiation Physics at graduate level in the Indian Universities to cater to the needs of our expanding nuclear power programme and the increasing use of radioactive sources in the country. Considering all the aspects, UGC also had expressed interest to initiate such courses in the near future. Dr. Sarkar expressed satisfaction that the scientists who had passed out through the previous training batches were doing well in their career and are holding important posts in different units of our department.

In his presidential address, Mr. H. S. Kushwaha observed that over the past few years, there was a rapid growth in the activities of the Department of Atomic Energy—not only in volume, but also in the

variety of jobs involving radiation and radioactive systems. The Health, Safety & Environment Group had been making efforts to provide an efficient team of professional Health Physicists at each Unit of Nuclear Fuel Cycle Facilities. They are persons, technically competent and experienced to handle safety related problems with confidence and could suggest corrective actions wherever necessary. Simultaneously, efforts are being made to strengthen the R&D activities and theoretical studies to update our technology to international standards.

To meet the manpower needs, it was felt necessary to induct science graduates and impart them training in a well-structured Health Physics professional course, so that on successful completion of the course and with a few years of experience, they could take up responsibility at supervisory levels. Thus, the one-year Health Physics training course being conducted by the Health Physics Division since 1989 at HP Lab Tarapur and BARC Mumbai had been largely meeting the requirement of trained man power at the Scientific Assistant level.

The objective of this training programme essentially is to prepare the candidates to adopt a scientific approach in their job, to inculcate an analytical attitude in solving problems and to develop innovative methods in their field of work. With this objective in view, during the training, emphasis is given on familiarizing the basics of nuclear engineering, nuclear fuel cycle facilities, reactor physics, engineered safety features and safe operating procedures in nuclear facilities in addition to conventional topics relevant to operational Health Physics. Also, care has been taken to include new computer codes and programmes for safety



Mr. H.S. Kushwaha, addressing the gathering

evaluation, shielding calculations, atmospheric diffusion modeling, management and response to radiological emergencies etc. The course also includes general familiarization with the entire nuclear fuel cycle operations and regulatory aspects. Basic information on electronics and computer applications has also been introduced. Emphasis is given on making the trainees familiar with the systems and their safety aspects. Over the years, the Health Physics training programme has undergone significant upgrades with respect to the syllabus, structure of the training programme, training methodology, assessment procedures etc. Under the guidance of the 'Apex Committee for Health Physics Training Programmes', the syllabus, training material and the structure of the training programme are periodically upgraded so as to bring up this training to international standards.

Mr. Kushwaha observed that during these years, the department had undertaken a variety of operation and maintenance activities involving radiation sources which were accomplished successfully. Similarly the uses of radioisotopes in

medical and industrial fields had grown manifold in recent years. An appreciable feature of all these activities was the record of safety that was maintained – both in conventional safety and radiological safety. In the above achievements, the silent contributions of teams of dedicated Health Physicists needed to be appreciated. Also, it was binding on everyone of us to ensure that the nuclear power generation and other activities of the department should have no adverse impact on the environment. It was important to develop a safety culture among the staff at every facility and every employee should be properly trained in radiological safety so as to make him capable of observing safety regulations as a built in habit. The overall safety should be focused on the safety of the plant, plant personnel, general public and the environment.

He appreciated the efforts of the course coordinators and the faculty for sparing time to share their knowledge and experience with the new entrants and helping the department in building up a young generation of scientific professionals.

He also acknowledged the assistance received from different facilities of BARC and NPCIL who had been extending cooperation for providing the facilities for "On the Job Training".

In his inaugural address, Mr. N. D. Sharma, Controller BARC noted that radiation was part of human life because of the presence of natural radioactivity everywhere on the surface of the earth.

Mr. Sharma appreciated the efforts of HS&EG in providing professionally qualified Health Physicists to various units of the department. He appreciated the syllabus and expressed satisfaction that the course was properly designed and was relevant to the challenges of our expanding nuclear power programme. Also, he observed that the course

consisted of a wide range of subjects and is an example of a smooth merger of different disciplines, breaking the imaginary barriers of different branches of science and technology. He reminded the trainees of the necessity of developing a safety culture among the workers and building confidence in general public on nuclear power as a clean and safe source of energy. He concluded his address by congratulating the trainees for opting to join the Department of Atomic Energy and wished each one of them a successful career.

The inaugural function was concluded with a vote of thanks proposed by Mr. K. Narayanan Kutty, Officer In Charge, Training Group. He expressed gratitude to a large number of agencies for their valuable contributions in the successful completion of the training programme.