

Foreword

The Directive Board

This annual report summarizes the research activities of ITN during the year 2003 which was the first year of the mandate of the present Directive Board (in office since December 2002). It also includes details of the evolution in management, human resources, publications and budget of the last years of activity of ITN under authority of the Ministry of Science and Higher Education (formerly the Ministry of Science and Technology). The research activity is presented for each sector (Reactor, Radiological Protection and Nuclear Safety, Chemistry and Physics) and the scientific output is grouped under the different areas of activity.

ITN is a State Laboratory and its main objective is the development of nuclear sciences and techniques, providing the country with advanced capabilities in the domain of peaceful applications of radiations and radioisotopes. The strategies adopted by the new Directive Board were to fulfil this objective through:

- **Research,**

- establishing ITN as a key partner in research networks and projects involving the application of nuclear and non nuclear techniques to the areas of materials sciences, environment and life/health sciences;
- maintaining and developing unique infrastructures (such as the Portuguese Research Reactor, Van de Graaf accelerator, Dating Laboratories, Cryogenic and High Magnetic Fields Laboratory, etc.) and making them available to scientific community;

- **Education and training,**

- adopting and implementing an organized institutional policy, via the establishment of a Training Centre, with the purpose of ensuring stronger cooperation with higher education institutions, both at the graduation and post-graduation levels, and supplying the community with other training and education activities at all levels;

- **Cooperation,**

- establishing research partnerships with higher education institutions and other research centres, favouring the development of common interest activities in laboratories to be located within the “campus” of ITN;
- creating better cooperation conditions with industrial sectors, health sectors, environment sectors, services, etc. , favouring the establishment of partnerships and technology transfer activities;
- creating the necessary conditions for the transformation of part of the ITN “campus” into a Technology Centre;

- **Protection and Safety,**

- reinforcing research activities in the areas of Radiation Protection and Nuclear Safety;
- promoting training and education;

- supplying services of public interest;
- ensuring the fulfilment of international treaties obligations assumed by the Portuguese State and providing it with technical support.

It must be said that, upon taking charge of its position, the Directive Board was confronted with a number of difficulties namely those created by severe delays for receiving due financial resources, changes in the regulatory framework entailing loss of financial autonomy and the impossibility of replacing a gradual loss of human resources (mainly due to retirement).

Thus, the initial main concern of the new Directive Board was solving most of the problems that were encountered. A word of praise is due to the scientific and non scientific staff of ITN that never failed helping the Directive Board maintaining the tradition of excellence of this institution. All the work that was carried out in 2003 could not be possible without the quality and motivation of ITN staff.

In summary and according to the above defined ITN strategies, the main 2003 achievements can be described as:

- a needed reorganization of the Department of Radiation Protection and Nuclear safety, in order to improve its service supply capabilities and to favour a stronger research activity;
- a deep reorganization of ITN administrative services and improvement of the applications of information technologies to management and accounting;
- the improvement of the management and operation of the institute’s Intranet;
- the creation of ITN’s Training and Education Centre;
- the establishment of partnerships with two universities for the joint organization of two Master’s courses in the areas of Radiation Protection and Radiopharmacy;
- the establishment of a partnership for technology transfer with an industry with the purpose of recovering, modernizing and exploiting the institute’s Radiation Technology Unit;
- The organization of several relevant scientific international conferences and workshops.

These achievements must be considered together with a successful year as far as research and service activities are concerned. Reading through this report is the best proof of this statement.

Finally, ITN acknowledges the ready and constant support of the Ministry of Science and Higher Education that helped solve some of the main problems faced by the Directive Board during 2003. Despite all the human resources and budgetary difficulties, ITN looks forward to further establishing its importance and excellence.