Foreword

The Co-ordinating Committee of the Scientific Council

This Report presents the work carried out at ITN in 2007. The document highlights activities with results considered to be of particular relevance, and contains short descriptions of the progress made in other activities, as well as references to publications and data concerning human, technical and financial resources.

The report reflects the unique nature of ITN among Portuguese public laboratories, and the specific nature of the activities under way, that make use of or aim at the development and application of specialized multipurpose techniques, methods and instruments, in the general fields of nuclear science, nuclear technology and radiation protection.

The level of scientific production is consistently high. The total number of papers published in international journals (182), proceedings of conferences (112) and books (10) reproduces essentially the numbers of 2006. Also a large number of M.Sc., Ph.D. students and post-doctoral collaborators (a total of 130) participate in on-going research activities under the supervision or joint-supervision of members of the Institute's scientific staff.

Moreover, the degree of involvement of ITN with institutions of the Portuguese higher education system has been kept at high level. Roughly 20% of the ITN research staff is currently responsible for lecturing courses as Invited Professors at Universities or Polytechnic Institutes, and roughly 50% of the scientific staff collaborates in teaching activities at higher education level. Furthermore, the Institute participated in the organization of a M.Sc. course and an Advanced course, in specialized areas where the know-how of the Institute is outstanding, through partnerships with the University of Lisbon and the Technical University of Lisbon.

This was made possible by the commitment and quality of the staff of the Institute that enabled to maintain the scientific output of ITN at a high level in spite of the personnel and budgetary constraints, and the increasing bureaucratic difficulties in executing projects financed by the Foundation for Science and Technology, which represent a high share of the overall science budget of the institution.

Like in recent years, the near impossibility of recruiting personnel resulted in the fact that a large fraction of the Institute's work including R&D, technical support and services depended on the work of temporary staff, which the institution trains but is unable to keep, in many cases frustrating the purpose of building solid, well trained teams. This affects the institution as a whole and specially those activities in areas, such as radiological protection, where the contribution of ITN to the scientific, technological and even regulatory system of the country is mandatory and unique, including the supply of services to meet specific public needs.

In 2007 however, twelve new research positions became available to ITN in the framework of the *Ciência 2007* programme, and by the end of the year the selection of candidates was essentially concluded. Measures like this one are clearly welcome but should be complemented by similar measures devoted to solve the shortage of technical staff. In addition new positions should be opened to recruit young researchers (aiming at maintaining know-how that risks disappearing), and be extended to the top level of the research career (creating the conditions to fulfil just aspirations of many researchers). All this should be done, guided by the mission of the institution and in the framework of a plan establishing priorities and defining aims to be achieved in the medium and the long term.

In the framework of the reform of the State Laboratories a new Organic Law of the institution was published in 2007. While the final organization of the institute is yet to be known, the Scientific Council elaborated and voted its own regulations. The adoption of the new regulation framework waits for the ratification of the government, and will trigger the call for elections for the President and the Coordinating Committee of the Scientific Council.