## **Foreword**

## The Coordinating Committee of the Scientific Council

This report highlights the activities and main scientific and technical achievements of ITN in 2011.

Overall, ITN continues to show a high scientific productivity among the Portuguese R&D institutions as measured by the number of publications (book chapters: 10; ISI journals: 200; conference proceedings: 74; other communications: 304), thesis concluded (MSc: 19; PhD: 9) and research contracts obtained. Considering only the output of the first three types of publications, these numbers translate to an average of 2.5 publications per research personnel, representing a slight decrease comparing with 2010. The number of thesis concluded has, however, increased (+8).

The involvement of ITN researchers in graduate or post-graduate teaching in Portuguese higher education institutions and in international courses, in the organization of scientific events, in jury membership and in international technical committees is also significant. In parallel with these research activities, ITN has continued to fulfill Portugal's international obligations regarding the environmental radiological survey of the country, the control of radioactive waste, the metrology on ionizing radiations, supporting the industry on nuclear equipment, and representation of Portugal in international organizations, among others.

For a proper assessment of these results, however, we need to analyze the conditions in which the work was produced. 2011 was a very difficult year for the country and also for ITN. Along the year, the overall financial situation has deteriorated to the point of compromising the timely execution of projects and provision of basic supplies. This situation has put a burden on management, aggravated by the retirement of ITN Directive Board President in the middle of the year, without a replacement. The year finished with the results of the FCT bid for projects where the number of projects approved declined sharply and ITN results were the worst ever obtained. The situation of the support infrastructure has also deteriorated with the retirement, without replacement, of technicians and the aging of equipment.

The situation of the neutron diffraction spectrometers and the new ICP-MS equipment, awaiting since 2009 to be installed, has remained stagnant.

The impact of these research conditions is not yet visible on the overall scientific output of the institute but has already been responsible for the delays on the execution of projects and will be more evident in the next years.

Regarding the activities of the Scientific Council coordinating committee, a new cycle of evaluation of the activity reports of tenure researchers was started, according to the obligations of the present research career law, and covering the period 2008-2011. In this evaluation exercise all the activity reports of principal researchers were refereed by at least one external evaluator, either from the Academia or other State Laboratories. The CC/CC has also insisted with the Directive Board of ITN on clear and transparent information on ITN's financial situation and has contributed with several proposals to improve management. The future of post-doc researchers hired though the Science 2007 and 2008 programs, of which 10 contracts will end in 2013, remains unsolved and is a subject of concern.

Finally in the framework of the Forum of Scientific Councils of State Laboratories we have intervened in the Parliament and Ministry of Science for the awareness and solution of problems related to research in State Laboratories.

The year ended with the announcement of the integration of ITN with the Instituto Superior Técnico of Lisbon Technical University. This represents a change of the nature of ITN from a Sate Laboratory to a University Research Institute. It is expected that most of the research conducted in ITN will be smoothly integrated into the new framework. Along these years, due to a lack of guidance from the Government and the nature and scarcity of research funds and human resources available, a large part of the research conducted in ITN had diversified to areas outside the initial scope of the institute and to more fundamental problems. It is not yet clear, however, how and in what terms the state's international obligations that have been carried out by ITN, are going to be guaranteed by the Portuguese State.

As a closing remark, it is important to note that the scientific staff and the technicians of ITN deserve to be commended on the extent and quality of the work performed during the past year notwithstanding the many difficulties.