

# Foreword

*The Scientific Council Co-ordinating Committee*

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The present Report, produced along the same lines as its predecessors since 1999, contains a considerable amount of information intended to give the interested reader a fair perspective of the scope and contents of the work carried out in this Institute. In many respects, the Report bears witness to the unique nature of ITN among Portuguese public laboratories. This follows from the fact that the laboratory was founded to assimilate, develop and apply the multipurpose specialized techniques, methods and instruments, found in the realm of Nuclear Science and Technology, rather than to exploit a particular scientific discipline or give support to a certain sector of the economy. These origins associated with the competence and skills developed through the years by a host of dedicated co-workers and available today at the Sacavém campus, make the Institute an element of particular value of the Portuguese scientific and technological infrastructure.

As a whole the activity and the results reported do not depart in any significant way from those of preceding years either in quality or in quantity. It is nevertheless necessary to say that the times are not easy for R&D activities in Portugal and the Institute's opportunities have suffered and are suffering under the prevailing conditions. Heavy budgetary reductions affecting investment and to a minor degree operational expenses as well; severe freezing of all career developments and of new recruitments while a growing number of researchers and technicians reach retirement age or the end of fixed-term contracts; the curtailing of autonomy in the management of financial resources — force Project and Department heads and the newly appointed Board of Directors to constantly walk a tightrope.

In distinct and important cases missions of the Institute of national relevance are jeopardized by the unconsidered limitation of resources. This happens namely in the crucial area of radiological protection involving such activities as environmental monitoring, survey of professionally exposed workers and the management of radioactive waste. The progressive loss of skilled workshop personnel, on the other hand, severely reduces the capability to build and experiment with prototypes for which sub-contracting does not offer a viable alternative.

The Scientific Council has worked with the new Directive Board, in office since December 2002, in several matters of importance for the life of the Institute, including measures to re-establish access to scientific journals, following an interruption of several years due to financial constraints. Education and Training of personnel and students both graduate and post-graduate, which is an area where the Institute traditionally develops a significant activity has deserved special attention. A Center for co-ordinating Education and Training actions was created internally. Data relative to July 2002 indicate that 51 students were working for their Ph.D theses in the different departments of the Institute while the total number of Master, Doctor and Post-doctoral students amounted to 78, a number exceeding that of research staff members. Human resources are a matter of very special concern when several important lines of work are threatened with extinction as they are left without qualified R&D personnel. Also the return of investment in costly equipments and installations is at risk unless new recruitments are authorized. A survey carried out under the auspices of the Scientific Council indicated that not less than 20 new researchers holding appropriate Ph.D's would have to be employed in the short term to correct for this situation. A similar situation exists in respect to laboratory technicians and workshop personnel. The 2003 operational budget of the Institute has been again grossly inadequate especially since there is a pressing need of capital investment for developing existent laboratories and refurbishing facilities and buildings.

On the positive side it is noteworthy that significant improvements were achieved in the management and operation of the Institute's Intranet as well as in the application of Information Society Technologies to internal management and accounting.

In spite of the many difficulties, a tradition of excellence that has earned recognition in the scientific community continues to be honored in the Sacavém campus, due primarily to the quality and motivation of its scientific staff, and technicians, as well as to the contribution of students and junior co-workers that represent a sizeable fraction of the total human resources of the Institute.