

REACTOR SECTOR

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The Portuguese Research Reactor (RPI), as a unique infrastructure in the Iberian Peninsula, houses as well the *Atmospheric Elemental Dispersion* and *Applied Dynamics* groups. The RPI also supports activities in the Chemistry and Physics Sectors. Foreign users from Universities and Research Laboratories accounted for 15% of the total irradiation time of the RPI and one must refer that, for the first time since 1996, the RPI delivered services to the Spanish industry.

As part of the strategy started in 1996 by the Directive Board, the RPI was the first sector to have an infusion of personnel that was essential not only to keep the reactor running, but also to reinforce its research activities. Three young researchers were hired in 1998 and 1999 after a long process. Four new reactor operators were also trained with grants from the PRAXIS XXI program. The hiring of eight technicians for the operation and maintenance of the RPI was granted by the Portuguese Government in 2000 and the recruiting process is underway. Dr. António Ramalho has been the central piece in the training of operators and in coordinating a new team which presents its activities under the headline of

Operation and Exploitation of the Reactor, Dosimetry (RPI) and Reactor Calculations. The number of research projects has increased in 2000 and each of the recently hired researchers had at least one project funded by FCT.

The **Atmospheric Elemental Dispersion** group is the main user of the RPI, accounting for 36% of the total irradiation time performed in the reactor. This group also makes an important bridge with the Physics Sector, complementing the NAA work done in the Reactor with PIXE in the van de Graaff accelerator. The group has a large number of graduate students and performs several services by contract, from which we highlight the monitoring of the atmosphere around the waste incinerator of São João da Talha.

The *Applied Dynamics* group is one of the smallest groups in terms of ITN staff, since it has only one researcher and one technician. This is compensated with an active collaboration with Universities and Research Laboratories both in Portugal and abroad. The vitality of this group is well demonstrated in their list of research contracts.

Summary of the **research groups in the Reactor Sector:**

- Operation and exploitation of the Reactor, Dosimetry (RPI) and Reactor Calculations
- Applied Dynamics
- Atmospheric Elemental Dispersion

The composition of these groups is presented in the following pages.

Other Research Staff:

Jaime Oliveira (Co-ordinator Researcher)
Eduardo Martinho (Principal Researcher)

Administrative and Auxiliary staff:

Odete Mendes
Teresa Fernandes
Albano Silva