
Operation and Exploitation of the Reactor, Dosimetry (RPI) and Reactor Calculations

Journals

T. Morlat, F. Giuliani, T.A. Girard, A.R. Ramos, M. Felizardo, J.G. Marques, Response study of a CF3I superheated droplet detector for dark matter applications, *Nucl. Instr. & Meth., A* **580** (2007) 274-277.

F. Nascimento, A.R. Ramos, A.C. Fernandes, M. Felizardo, T. Morlat, J.G. Marques, F. Giuliani, T.A. Girard, J.A. Paixão, optimization of filtered neutron beams for the calibration of superheated droplet detectors at the RPI, *Nucl. Instr. & Meth., A* **580** (2007) 282-285.

J.P. Santos, A.C. Fernandes, J.G. Marques and M. Osvay, photon and fast neutron dosimetry using aluminium oxide thermoluminescence dosimeters in a pool research reactor, *Nucl. Instr. & Meth., A* **580** (2007) 310-313.

Conference Proceedings

J.G. Marques, Core Conversion of the Portuguese Research Reactor, *Proc. 48th Annual Meeting of the Institute of Nuclear Materials Management*, Tucson (AZ), July 2007 (CDROM).

F. Giuliani, T. Morlat, A.R. Ramos, T.A. Girard, M. Felizardo da Costa, J.G. Marques, R.C. Martins, H.S. Miley, D. Limagne, G. Waysand, SIMPLE-icity in Direct Dark Matter Searches, *7th UCLA Symp. on Sources and Detection of Dark Matter and Dark Energy in the Universe*, Feb. 22-24, 2006, *Nucl. Phys. B* (Proc. Suppl.) **173** (2007) 129-132.

Communications

J.G. Marques, A.R. Ramos, A. Kocher, Core conversion of the Portuguese Research Reactor to LEU fuel, *Proc. Int. Meeting on Reduced Enrichment for Research and Test Reactors, Prague, 2007*, Argonne National Laboratory.

N.P. Barradas, Cisão nuclear, *I Jornadas de Energia GERA 1-3 June 2007*, Lisboa, invited.

N.P. Barradas, Nuclear Power: Risks, Safety and Perspectives, *Int. Conf. on Risk Management in Production Activities*, 10-12 Oct. 2007, Porto, invited.

Internal Reports

J.G. Marques, N.P. Barradas, A.R. Ramos, J. Sousa, Alteração da configuração do núcleo do RPI: Configuração N2-P1/9 - Relatório de execução, Jan. 2007

Analyses of the Core Conversion of the Portuguese Research Reactor, coordinated by J.E. Matos (RERT Program, Argonne Nat. Lab.) and J.G. Marques (ITN), Contributors: J.G. Matos, N.P. Barradas, A. Kling, A.R. Ramos, J.G. Stevens, J.A. Stillman, E.E. Feldman, F.E. Dunn, P. Pfeiffer, M. Kalimullah (Dec. 2006, revisto Maio 2007).

J.G. Marques, A.R. Ramos, A. Kling, J. Santos, Commissioning Data for the LEU core of the Portuguese Research Reactor – 1st part, Out. 2007.

J.G. Marques, A.R. Ramos, A. Kling, J. Santos, Commissioning Data for the LEU core of the Portuguese Research Reactor – 2nd part, Out. 2007.

A.R. Ramos, Relatório de Manutenção Anual das Instalações do RPI, Nov. 2007.

A. Kling, Radiological Control at the Portuguese Research Reactor (RPI): Report Jan. 1 – Dec. 31, 2006, ITN/RPI-R-07-95.

A.R. Ramos, J.G. Marques, Site Characteristics for the Safety Analysis Report of the Portuguese Research Reactor (RPI), July 2007, ITN/RPI-R-07/96.

A. Kling, Radiological Control at the Portuguese Research Reactor (RPI): Report Jan. 1– Jun. 30, 2006, ITN/RPI-R-07-97.

J.G. Marques, N.P. Barradas, A. Kling, A.R. Ramos, J.G. Matos, F.E. Dunn, E.E. Feldman, M. Kalimullah, P. Pfeiffer, J.G. Stevens, J.A. Stillman, Operating limits and conditions of the Portuguese Research reactor (RPI) ITN/RPI-R-07-98.

Applied Dynamics

Conference Proceedings

J. Antunes, O. Inácio, L. Henrique, Overview of nonlinear effects in impact and friction-excited musical instruments., *EUROMECH Colloquium 483, Geometrically Non-linear Vibrations of Structures*, FEUP, Porto, Portugal, 9-11 Jul. 2007.

G. Bennett, J. Antunes, J. Fitzpatrick, V. Debut, A method for optimal reconstruction of velocity response using experimental displacement and acceleration signals, *14th Int. Congress on Sound and Vibration (ICSV)*, Cairns, Australia, 9-12 July 2007.

V. Debut, J. Antunes, and M. Moreira, Experimental study of the flow-excited acoustical lock-in in a corrugated pipe, *14th Int. Congress on Sound and Vibration (ICSV)*, Cairns, Australia, 9-12 July 2007.

O. Inácio, J. Antunes, A linearized modal analysis of the bowed string, *19th Int. Congress on Acoustics (ICA)*, Madrid, Spain, 2-7 Sept. 2007.

J. Antunes, O. Inácio, A substructure method for the computation of complex string/body coupled modes from the unconstrained subsystems. *19th Int. Congress on Acoustics (ICA)*, Madrid, Spain, 2-7 Sept. 2007.

V. Debut, J. Antunes, M. Moreira, A phenomenological model for sound generation in corrugated pipes, *Int. Symp. on Musical Acoustics (ISMA)*, Barcelona, Spain, 9-12 Sept. 2007.

J. Antunes, O. Inácio, A theoretical analysis of multi-modal bass-trapping resonators coupled to control-room acoustics, *Int. Symp. on Room Acoustics (ISRA)*, Sevilla, Spain, 10-12 Sept. 2007

Communications

M. Moreira, J. Antunes, H. Pina, V. Debut, Optimization of baffle configurations: A genetic algorithm versus a simulated annealing approach. *Optimization 2007*, Porto, Portugal, 22-25 July 2007.

J. Antunes, O. Inácio, F. Axisa, V. Debut, A theoretical dissipative analysis of optimized multi-modal resonators coupled to room acoustics, *154th Meeting of the Acoustical Society of America*, New Orleans, USA, 27 Nov.-1 Dec. 2007.

M. Moreira, J. Antunes, V. Debut, H. Pina, and J. Paulino. Optimization of baffle configurations: preliminary experiments, *154th Meeting of the Acoustical Society of America*, New Orleans, USA, 27 Nov.-1 Dec. 2007.

Internal Reports

J. Antunes, X. Delaune, P. Piteau, Vitamine 2 : Formulation discrète de l'excitation par la turbulence des écoulements, *Report ITN/ADL-2007-Ago-01; also Report CEA/DM2S/SEMT/DYN-RT/07-023-A*.