

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

2008 ITN budget in €

- <i>RPI Core Conversion</i> , IAEA, POR4016, 1 January 2005 - 31 December 2008 Prime contractor: ITN Co-ordinator: J.G. Marques	250.000,00
- <i>Neutron Tomography at the Portuguese Research Reactor</i> , FCT, POCTI/FIS/59287/2004, October 2005 - June 2008 Total budget € 80.000, ITN budget € 80.000 Prime contractor: ITN Co-ordinator: J.G. Marques	16.380,55
- <i>Integrated Infrastructure Initiatives for Material Testing Reactors Innovations (MTR-I3)</i> , European Atomic Energy Community, Contract Number 036440 (FI60), October 2006-October 2009 Total budget: € 3.500.000, ITN budget € 120.000 Prime contractor: CEA, France ITN Co-ordinator: J.G. Marques	16.136,90
- <i>Continuação do projecto de matéria escura SIMPLE</i> , POCTI/FIS/57834/2004, 01/09/2005-30/06/2008 Prime contractor: CFNUL, Co-ordinator: Thomas A. Girard	---
- <i>Two Contributions to the Search for Dark Matters of the Universe</i> , PTDC/FIS/83424/2006, May 2008 - April 2009 Prime contractor: CFNUL, Co-ordinator: Thomas A. Girard	---
- <i>Accurate heavy ion ERDA of oxynitride films: Improved modelling of straggling and multiple scattering and extension of the stopping data bases.</i> , IAEA, Research Contract No. 14365/R0/Regular Budget Fund., September 2007 - August 2010 Total budget: € 15.000, ITN budget € 15.000 Prime contractor: ITN, Co-ordinator: N.P. Barradas	6.000,00
- <i>Measurement of proton elastic scattering cross sections for light elements - validation of a "bulk sample" method</i> , IAEA, Research Contract No. 13273/R0/Regular Budget Fund., September 2005 - August 2009 Total budget: € 16.000, ITN budget € 16.000 Prime contractor: ITN, Co-ordinator: A. R. Ramos	---

Total budget 288.517,45

Applied Dynamics

2008 ITN budget in €

- <i>Flow-Induced Vibrations of Nuclear Rods (VITAMINE-3)</i> , Contractor CEA, France. April 2008-March 2009 Total budget € 14000, ITN budget € 14000 Prime contractor: ITN (Co-ordinator: J. ANTUNES) Partners: Commissariat à l'Énergie Atomique – CEA/Saclay, France (L. BORSOI)	14.000,00
- <i>Optimization of the Noise Reduction in Tubular Heat Exchangers</i> . POCTI / 2005 - 2008 Total budget 50000 €, ITN budget 30000 € Prime contractor: Instituto Politécnico de Setúbal (Co-ordinator: M. MOREIRA) Partners: ITN/Applied Dynamics Lab. (J. ANTUNES) IST/Dep. Mechanical Engineering (H. PINA)	8.438,21

Total budget 22.438,21

Radiological Protection and Nuclear Safety

Dosimetry and Radiobiology Group

2008 ITN budget in €

<i>EU-TRIMER – European Union Technical Recommendations for Individual Monitoring of External Radiation.</i> TREN/07/NUCL/S07.70121. (2007-2009). Total budget € 182.700,00, ITN budget € 20.000,00. ITN Coordinator J.G. Alves.	10.000,00
<i>Evaluation of acute pulmonary oedema - development of a new technique using giant unilamellar liposomes.</i> Project PTDC/SAU-BEB/76455/2006. Total budget € 79 620,00; ITN budget 2160 €, Prime contractor Faculdade de Medicina, Univ. Coimbra - Project leader: A. C. Santos. ITN Coordinator: M. Neves. 2006 – 2009.	---
<i>Chemical studies for design and production of new radiopharmaceuticals.</i> EU-FP6 Programme Marie Curie Host Fellowship for Transfer of Knowledge, Institute of Nuclear Chemistry and Technology (ICHTJ), Warsaw, Poland Contract n° MTKD-CT-2004-509224, Total budget 170000€. Prime contractor: Prof. J. Narbutt, Institute of Nuclear Chemistry and Technology. Partners: Instituto Tecnológico e Nuclear (M. NEVES), Chalmers Institute of Technology, Forschungszentrum Rossendorf, University of Zurich, Paul Scherrer Institute, Centre National de la Recherche Scientifique, University of Mainz. 2004-2008.	---
<i>Novel indazolebisphosphonates: quelation, molecula modelling and biological studies.</i> Project POCI/QUI/55508/2004. Total budget € 63000, ITN budget € 7800, Prime contractor: INETI, F. C. Teixeira; ITN Coordinator M. Neves. 2006 – 2008.	500,96
<i>Transition metal complexes as novel agents of expected biological activity directed towards Auger electron therapy.</i> Portugal-Poland scientific agreement. Mobility researchers supported by GRICES (Portugal) and Minister of Science and Education (Poland) (M.Neves).	1.010,00
<i>New bisphosphonates ligands labeled with soft beta emitters Sc-47, Rh-105 and Lu-177 for bone pain therapy.</i> Portugal-Poland scientific agreement. Mobility researchers supported by GRICES (Portugal) and Minister of Science and Education (Poland) (M.Neves).	1.010,00
EUROpean Research Programme for the TRANsmutation of High Level Nuclear Waste in an Accelerator Driven System (IP-EUROTRANS) a European Union co-financed project (ref. FI6W-CT-2004-516520) in the 6 th Framework Program EURATOM (2006 - 2009), ITN Coordinator P. Vaz.	11.623,39
PATEROS - Partitioning and Transmutation European Roadmap for Sustainable Nuclear Energy, a European Union co-financed Coordinated Action (ref. FP6-036418) in the 6 th Framework Program EURATOM. ITN. Coordinator P. Vaz.	1.568,08
<i>“Participation of ITN in the n_TOF-Ph2 experiment at CERN (Second Year)”</i> (project ref. POCI/FP/81931/2007). FCT Project. Coordinator P. Vaz.	5.805,95
<i>“EURISOL Design Study” “Cooperation with CERN in the framework of the Portuguese participation in the project</i> (project ref. POCI/FP/81951/2007). FCT Project. Coordinator P. Vaz.	2.275,30
CANDIDE – Coordination Action on Nuclear Data for Industrial Developments in Europe. An European Union co-financed Coordination Action (ref. FP6-036397) in the 6 th Framework Program EURATOM. ITN Coordinator P. Vaz	---
Total budget	33.793,68

Environmental Radioactivity

2008 ITN budget in €

<i>Contribuição da combustão de biomassa para a emissão de poluentes atmosféricos (BIOEMI). Contract FCT PTDC/AMB/65706/2006-. Total budget: 199,957€ (years 2007-2010) ITN budget: 74340 €. ITN Coordinator F.P. Carvalho.</i>	22.302,00
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Total budget 22.302,00

Metrology Laboratory of Ionizing Radiation

2008 ITN budget in €

<i>Increasing cancer treatment efficacy using 3D brachytherapy - T2.J06 Brachytherapy EMRP 2007 EURAMET e.V. (2008 a 2011). Total project cost € 3 661691, EC funding requested 1 175403, ITN budget € 19 370. Prime contractor: ENEA, ITN Coordinator C. Oliveira.</i>	---
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Total budget ---

Radioprotection and Radioactive Waste Group

2008 ITN budget in €

<i>Study of the Adsorption Mechanisms and Kinetics in Geomaterials and Their Structural Characterisation: Implications for Processes of Natural Attenuation of Heavy Metal Contamination and Radioactive Wastes Confinement – KADRWaste; (PTDC/CTE-GEX/82678/2006). Total budget € 200 000, ITN budget € 51760. Prime contractor: FFC/FC/UL; ITN Coordinator I.Paiva.</i>	15.528,00
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<i>Actinide reCycling by SEParation and Transmutation ACSEPT (7th Programme EURATOM-FP7-Fission2007); ACSEPT - FP7-Contract N° 211267. Total budget € 8999000, ITN budget € 20000. Prime contractor: CEA; ITN Coordinator I. Paiva.</i>	6.000,00
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<i>Radioactive Liquid Discharges from Hospitals in Public Sewage of Lisbon Borough Council, 2007. Total budget € 16121,56, ITN budget €16121,56. Prime contractor: CML; ITN Coordinator R. Trindade.</i>	
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Total budget 21.528,00

New Materials and Compounds

Advanced Materials Research

Current Projects

	2008 ITN budget in €
<i>The Ocean Reservoir Effect In The Transition Areas of The West-Iberian Coastal Upwelling</i> (Aveiro/Mouth of The River Minho; Cape Santa Maria/Mouth of The River Guadiana), PTDC/MAR/68932/2006 (2008-2011); Total Budget: 128.507,00 €; Principal Contractor: ITN; Participating Institutions: Fundação da Univ. de Lisboa (FUL/UL) and Fac. de Letras da Universidade do Porto (FL/UP); Researcher Coordinator: M. Soares, ITN Responsible: E.Alves.	38.552,10
<i>Novel layered ferrite materials with mixed ionic-electronic conductivity for applications in alternative energy sources (2008-2010)</i> , Funding Budget: 146.000,00 €, PTDC/CTM/64357/2006, Principal Contractor: ITN; Participating Institutions: Univ. de Aveiro (UA); Research Coordinator: João Carlos Bentes Waerenborgh.	43.800,00
<i>Studies of material erosion and redeposition in iter-relevant divertor target temperatures, plasma impact energies and divertor chamber geometries</i> , EFDA (European Fusion Development Agreement), 2006-2008, Total budget: 65.000,00 €, Prime contractor: ITN Coordinator: E. Alves	---
<i>Deposition of photocatalytic and self-cleaning Titania on glass surfaces</i> , POCTI/FIS/58240/2004; (2005-2008), Total budget: 95.000,00 €, ITN budget 11.565,00 €, Prime contractor: Universidade do Minho (C. Tavares); ITN Co-ordinator: E. Alves	---
<i>Synthesis and characterization of diluted magnetic semiconductors for spintronics applications</i> , POCTI/FIS/61462/2004; (2005-2007), Total budget: 75.000,00 €, ITN budget 22.000,00 €, Prime Contractor: Univ. Aveiro (N. Sobolev); ITN Coordinator: E.Alves	7.601,93
<i>Development of transparent and conductive oxide semiconductors p-type: from synthesis to devices-poxi</i> , POCTI/CTM/55945/2004, (2005- 2007), Total budget: 78.170,00 €, ITN budget 19.372,00 €, Prime Contractor: Univ. Nova (E. Fortunato); ITN Coordinator: E.Alves	17.116,04
<i>Friction and wear mechanisms in orthopaedic prostheses: influence of the composition of the periprosthetic fluid</i> , POCI/SAU-BMA/55493/2004, (2005- 2007), Total budget: 95.220,00 €, ITN budget 25.200,00 €, Prime Contractor: IST (Benilde Saramago); ITN Coordinator: E.Alves	3.478,89
<i>NanoFFAWN - Functionalization, friction, adhesion, and wear at nanoscale</i> , PTDC/CTM/68142/06 (2007-2009), Total budget 140.000,00 €, ITN budget 35.005,00 €, Prime Contractor: IST (Rogério Colaço); ITN Coordinator: E.Alves	10.501,50
<i>POLIFILM - Multifunctional films for flexible and plastic material applications</i> , PTDC/CTM/69362/06 – (2007-2009), Total budget: 108.000,00 €, ITN budget 18.166,00 €, Prime Contractor: Univ. do Minho (Filipe Vaz); ITN Coordinator: E. Alves	5.449,79
<i>Physics and Technology of ultra-fast memories based on SiI-xGex nanocrystals with dielectric tunneling layers</i> , PTDC/FIS/70194/06, (2007-2009), Total budget: -€, ITN budget 25.560,00 €, Prime Contractor: Univ. do Minho (Maria de Jesus); ITN Coordinator: E.Alves	7.668,00
<i>Low dimension diluted magnetic oxides Structure</i> , PTDC/FIS/72843/06 (2007-2009), Total budget: -€, ITN budget 34.300,00 €, Prime Contractor: Univ. Aveiro (Nikolai Sobolev); ITN Coordinator: E.Alves	---
<i>Designing ultra-fine textured microstructures by laser floating zone – LaFlorZone</i> , PTDC/CTM/66195/2006, Total budget: - €, ITN budget - €; Prime Contractor: Univ. Aveiro (Florinda Costa), ITN Coordinator: E.Alves.	4.732,50
<i>Search for the optimum luminescence efficiency in Er-doped wide band gap semiconductors like GaN and ZnO</i> , GRICES: Colaboração bilateral Portugal-Polónia (2007-2008).	2.020,00
<i>Defect studies on GaN and ZnO doped with rare earth ions by ion implantation</i> , GRICES: Cooperação científica e Técnica Luso-Tunisina (2007-2008); Coordinator: E. Alves.	2.020,00

RESEARCH PROJECTS

<i>Fusion Energy Material Science (FEMaS)</i> , Euraton Seventh Framework, Programme for Nuclear Research and Training, Grant agreement No 224752-CA, Leading Institution: Max-Planck Institut für Plasmaphysik, Garching, Germany.	---
<i>METALTRAVEL - Time evolution of mine tailings and their environmental impact: rates and mechanisms of concentration, liberation and migration of (low-grade) metals during weathering</i> , POCI/CTE-GEX/61700/2004, 2006-2007. ITN Budget for 2008: 3.130,00 €, Total budget 53.400,00 €, ITN budget € 10.113,00 €. Prime contractor: FCUL/Dep. of Geology, Co-ordinator: J. FIGUEIRAS Partners: ITN (J.C. WAERENBORGH), INETI.	3.129,67
<i>INCA: Characterisation of crucial mineral resources for the development of renewable energy technologies: The Iberian Pyrite Belt ores as a source of indium and other high-technology elements</i> , PTDC/CTE-GIN/67027/2006, 2007-2009. ITN budget for 2008: 3.360,00 €, Total budget 90.000,00 €, ITN budget 9.600,00 €; Prime contractor: INETI/CREMINER-FCUL; Co-ordinator: Diogo Namorado Rosa; Partners: FCUL, ITN (L.C. Alves).	3.360,00
<i>Analytical work carried out through the FCT project: POCI/CTE-GEX/59819/2004 - Retention of pollutant metals by secondary minerals in abandoned mines: a study on S. Domingos mining area</i> , Coordinated by José António Paulo Mirão, Universidade de Évora (UE). ITN budget for 2008: 3.000,00 €.	---
<i>Instalação de Análise em Feixe Externo na Microsonda Iónica (MICROFEX) [Development of External Ion Beam Analysis at the ITN Ion Microprobe]</i> , Proj. POCTI CTM/60685/2004, 2005-2008. Total budget: 76000 €; Prime contractor: ITN Coordinator: R.C. da Silva.	15.096,17
<i>Ion-implanted magnetic nanolayers of wide band gap semiconductors for spintronics applications</i> , PTDC/FIS/66262/2006, May 2007-April 2010, Total budget: 157.980,00 €, ITN budget: 50.766,00 €; Prime Contractor: ITN, Coordinator: U. Wahl; 2008 ITN budget: € 0.	---
<i>Ion implantation doping of perovskites and related oxides</i> , IAEA Research Agreement N° 13325, Total budget: 2.000,00 €, ITN budget 2.000,00 €; Prime Contractor: ITN, Coordinator: U. Wahl; 2008 ITN budget: € 0.	---
<i>Optical doping of AlN and GaN/AlN nanostructures by ion implantation</i> POCI/FIS/57550/2004. July 2005-February 2009, Total budget: 75.000,00 €, ITN budget: 43.740,00 €; Prime Contractor: ITN, Coordinator: K. Lorenz; 2008 ITN budget: € 0	7.841,90
<i>Ternary and quaternary nitride alloys for lattice matched heterostructures: Novel materials for high efficiency field effect transistors and optoelectronic devices</i> , PTDC/FIS/65233/2006. June 2007-May2010, Total budget: 153.240,00 €, ITN budget: 93.720,00 €; Prime Contractor: ITN, Coordinator: K. Lorenz; 2008 ITN budget: € 45276.	---
<i>Rare Earth doped GaN quantum dots for efficient light emitters</i> , with the CEA-Grenoble (EGIDE (France) / GRICES (Portugal)). January 2008-December 2009; Prime Contractor: ITN, Coordinator: K. Lorenz; 2008 ITN budget:	3.000,00
Submitted and approved	
<i>Support of Public and Industrial Research Using Ion Beam Technology (SPIRIT)</i> , Seventh Framework Programme: Capacities Specific Programme Research Infrastructures, Grant agreement: N° 227012-CP-CSA-Intra, Leading Institution: Forschungszentrum, Dresden-Rossendorf, Germany	---
<i>Post-mortem analysis and simulation</i> , EFDA JET Technology Workprogramme, 2009, Coordinator: E. Alves	
<i>Comparative study of different doping processes in semiconductor nanowires (Funded by CRUP, in the scope of bilateral cooperation agreement "Acções Integradas Luso-Espanholas", between Portugal and Spain, AE-70/08)</i> , Partners: Univ. Nova de Lisboa, ITN, Univ. Complutense, Dep. Física de Materiales (Madrid). Portuguese Coordinator: R.C. da Silva.	
Total budget	175.368,49

Materials Characterization with Radioactive Nuclear Techniques

Current Projects

2008 ITN budget in €

<i>Perturbed Angular Correlations and Emission Channeling Experiments at ISOLDE-CERN, POI-81921-2007, with budget: 65.000,00 € (1 Nov 2007 – 31 Oct 2008), ITN Coordinator: J.G. Correia.</i>	---
<i>Perturbed Angular Correlations and Emission Channeling Experiments at ISOLDE-CERN, CERN-FP-83506-2008, Budget: 80.000,00 € (started 1 Nov 2008), ITN Coordinator: J.G. Correia</i>	24.000,00
Total budget	24.000,00

Condensed Matter Physics

Current Projects

2008 ITN budget in €

<i>Hybrid Materials Prepared by Irradiation, POCTI/CTM/44150/02, 8 699,98 € received in 2008. Total budget: 87.000,00 €; ITN budget: 78.125,00 €, Prime contractor: ITN, Coordinator: F.M. Margaça; Partners: Univ. Aveiro (I.M. Miranda Salvado). Project closed.</i>	8.699,98
Total budget	8.699,98

Solid State

Current Projects

2007 ITN budget in €

<i>Novel layered ferrite materials with mixed ionic-electronic conductivity for applications in alternative energy sources, PTDC/CTM/64357/2006, 1st January 2008 – 31st December 2010</i>	43.800,00
Total budget 146.000 €, ITN budget 69.240€ Prime contractor: ITN, J.C. Waerenborgh Partners: Univ. Aveiro, V.V. Kharton	
<i>METALTRAVEL: Time evolution of mine tailings and their environmental impact: rates and mechanisms of concentration, liberation and migration of (low-grade) metals during weathering</i>	3.129,67
POCI/CTE-GEX/61700/2004, 1st January 2006 – 31st July 2008 Total budget 53 400 €, ITN budget 10 111 € Prime contractor: Fundação FCUL, Coordinator: J. Figueiras Partners: ITN, J.C. Waerenborgh	
<i>Switchable molecular conductors, PTDC/QUI/65379/2006. 1st November 2007 - 31 October 2010</i>	28.851,68
Total budget € 93.300 ITN budget € 82.810 Prime contractor: ITN; Coordinator: V. Gama Partners: Univ. Técnica de Lisboa, IST (M.T. Duarte)	
<i>Transition metal complexes based on new thio-azo ligands for heterobimetallic networks and molecular conductors, PTDC/QUI/64967/2006. 1st November 2007 - 30 April 2010</i>	37.530,00
Total budget € 125.100, ITN budget € 73.680,00 Prime contractor: ITN; Coordinator: M. Almeida Partners: Instituto de Telecomunicações/ IST (R.T. Henriques)	
<i>Synthesis and characterization of new U and Fe compounds with Ge, Ga and Sb, PTDC/QUI/65369/2006. 1st October 2007 - 30 September 2009</i>	16.830,00

RESEARCH PROJECTS

Total budget € 56.100, ITN budget € 56.100	
Prime contractor: ITN; Coordinator: A.P. Gonçalves	
Partners: Univ. Técnica de Lisboa, IST (P.A. Carvalho)	
<i>Molecular approach to nanomagnets and multifunctional materials – MAGMANET</i>	
NOE 500341-2 Priority3-NMP, in collaboration with 15 other Institutions, lead by D. Gatteschi, Florence, May 2005-April 2009	96.941,50
Total budget € 10 000 000	
ITN Co-ordinator: M. Almeida	
<i>EXTADITIOL Novel highly extended transition metal bisdithiolene complexes</i>	
POCTI/QUI/57528/2004, June 2005-May 2007	16.387,92
Total budget € 63 500	
ITN Co-ordinator: M. Almeida	
<i>Brownmillerite compounds containing Iron (IV): new materials for SOFCs</i>	
POCI/QUI/58915/2004, 1st September 2005 – 31st August 2007	1.525,77
Total budget 58 000 €, ITN budget 9 600 €	
Prime contractor: Fundação FCUL, Coordinator: M. Deus Carvalho	
Partners: ITN, J.C. Waerenborgh	
<i>Structural and Magnetic Study of Low-dimensional Coordination Compounds</i>	
POCI/FIS/57876/2004, March 2005 – February 2007.	5.800,00
Total budget € 80 000, ITN budget € 12 500.	
Prime contractor: Dept. Física da Univ. de Coimbra. Coordinator: M. Ramos Marques da Silva.	
Partners: ITN Coordinator L.C.J. Pereira (team member J.C. Waerenborgh)	
<i>Electrochemical synthesis of actinide intermetallic compounds</i>	
ACTINET 07-09, 1st November 2007– 31st December 2008	28.000,00
Total budget 58 000 €, ITN budget 9 600 €	
Prime contractor: EC, JRC,ITU, Karlsruhe, Germany; Coordinator: F. Wastin	
Partners: ITN; Coordinator A.P. Gonçalves	
<i>PAC-ATD, AdI Consortium, Development of a multipurpose high temp. furnace 2006 - 2007</i>	
ITN budget 52 000€	13.806,95
Prime contractor: Termolab; Partners: ITN; Coordinator: A.P. Gonçalves	
<i>Low temperature properties of new intermetallic compounds containing uranium and rare earths, Projecto de Acções Integradas de Cooperação Científica e Técnica Luso-Francesas, Programa Pessoa 2008 (acordo GRICES/EGIDE)</i>	
Total budget € 2.500, ITN budget € 2.500	2.500,00
Prime contractor: ITN; Coordinator: A.P. Gonçalves	
<i>New materials for thermoelectric applications, Projecto de Cooperação Científica e Técnica Luso-Francesas ao abrigo do Convénio GRICES/CNRS, 2007-2008.</i>	
Total budget € 2.000, ITN budget € 2.000	2.000,00
Prime contractor: ITN; Coordinator: A.P. Gonçalves	
<i>Study of new strongly correlated systems, ICCTI/ASCR (Academia das Ciências da Republica Checa) 2007</i>	
Total budget € 900, ITN budget € 900	900,00
Prime contractor: ITN; Coordinator: A.P. Gonçalves	
<i>Films and multilayers with U and Fe: preparation and magnetism, POCTI/CTM/12068/2001.</i>	
March 2001- March 2004	2.690,00
Total budget € 26 900, ITN budget € 4 800	
Prime contractor: ITN Co-ordinator: A.P. Gonçalves	
Partners: Fundação da Faculdade de Ciências da Universidade de Lisboa (M. Godinho)	
<i>Workshop on Molecular Materials 2008</i>	
Organizing Committee: M. Almeida, S. Rabaça	1.000,00

Total budget 301693,49

Neutron Activation in Environment, Nutrition and Epidemiology

Current Projects

	2008 ITN budget in €
- Impact of atmospheric aerosol in human health, PPCDT/AMB/55878/2004. January 2007-May 2009 Total budget € 62844, ITN budget € 35952 Prime contractor: ITN Coordinator: M.C. FREITAS	36.187,80
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- Optimization of neutron activation technique in the Portuguese Research Reactor. Application to studies on environment, nutrition and health, REEQ/1075/FIS/2001. January 2005-December 2006 Total budget € 220000, ITN budget € 220000 Prime contractor: ITN Coordinator: M.C. FREITAS	801,90
- Impact of atmospheric indoor aerosol in human health, PTDC/SAU-ESA/65597/2006. July 2008-June 2011 Total budget € 176859, ITN budget € 54878 Prime contractor: ITN Coordinator: M.C. FREITAS	53.057,70
- (Hyper)accumulation of arsenic and other elements in plants adapted to sites impacted by mining and smelting activities. Speciation, identification of accumulation and detoxication mechanisms and applications in bioremediation (HYPERAS). August 2007-July 2010 Total budget € 178969, ITN budget € 23940 Prime contractor: IMAR Coordinator: A. Bettencourt Coordinator at ITN: M.C. FREITAS	7.182,00
Total budget	36.187,80

Environmental and Analytical Chemistry

Current Projects

	2008 ITN budget in €
<i>Centre for isotopes and trace elements research – CISTER</i> REEQ/618/CTE/2005, 2005 - 2008 Total budget: 184 000 € Prime contractor: ITN, Coordinator: M.F. ARAÚJO	9 200,00
<i>Metallurgy and society in central Portugal Late Bronze Age</i> POCTI/HAR/58678/2004, 2005 - 2009 Total budget: 52 150 €, ITN budget: 27 527 € Prime contractor: Faculdade de Letras, ITN coordinator: M.F. ARAÚJO	1767,82
<i>Microecology and littoral dynamics: definition of multi-proxies applicable to quaternary paleogeographical and paleoclimatic reconstruction</i> POCTI/CTA/45185/2002, 2005 - 2008 Total budget: 100 000 €, ITN budget: 12 820 € Prime contractor: FCUL, ITN coordinator: M.F. ARAÚJO	---
<i>Paleoenvironmental evolution of the Nazaré coastal plain since the Lateglacial</i> PTDC/CTE-GEX/65789/2006, 2007 - 2010 Total budget: 160 000 €, ITN budget: 21 120 € Prime contractor: Fundação da FCUL, ITN coordinator: M.F. ARAÚJO	---

RESEARCH PROJECTS

<p><i>The Ocean Reservoir Effect in the Transition Areas of the West-Iberian Coastal Upwelling (Aveiro/Mouth of the River Minho; Cape Santa Maria/ Mouth of the River Guadiana)</i> PTDC/MAR/68932/2006, 2008 – 2011 Total budget: 128 507 €, ITN budget: 106 068 € Prime contractor: ITN, Coordinator: A.MONGE SOARES</p>	<p>38 552,10</p>
<p><i>Dissolved gases in subsurface hydrology–CO₂-rich thermomineral waters (N-Portugal)</i> POCTI/CTA/45159/2002, 2005-2008 Total budget: 50 000 € ITN budget: 35 800,00€ Prime contractor: ITN, Coordinator: P.M. CARREIRA</p>	<p>---</p>
<p><i>Role of high mountain areas in catchments water resources – Northern/Central Portugal</i> POCTI/CTA/44235/2002, 2005-2008 Total budget: 100 000€ , ITN budget: 15 590,00€ Prime contractor: Instituto Superior Técnico, ITN coordinator: P.M. CARREIRA</p>	<p>---</p>
<p><i>Evaluation of the hydrogeological potential and sea water intrusion monitoring in semi-arid zones using a multitechnique approach: application to the Santiago and Maio Islands (Cabo Verde)</i> POCI/CTE-GEX/55399/2004, 2005 - 2009 Total budget: 61 500 €, ITN budget: 15 215,00€ Prime contractor: Instituto das Ciências da Terra e do Espaço, ITN Coordinator: P.M. CARREIRA</p>	<p>693,03</p>
<p><i>Assessing the impacts of agriculture on groundwater quality using nitrogen isotopes</i> POCTI/AGG/47223/2002, 2004- 2008 Total budget: 105 000€ , ITN budget: 28 000,00€ Prime contractor: Instituto Superior Técnico, ITN coordinator: P.M. CARREIRA</p>	<p>0</p>
<p><i>Urban groundwater and environmental management in the Northwest Portugal</i> POCI/CTE-GEX/59081/2004, 2005-2008 Total budget:58 000 €, ITN budget: 7 110,00€ Prime contractor: Universidade de Aveiro, ITN coordinator: P.M. CARREIRA</p>	<p>609,99</p>
<p><i>Isotopes, noble gases and water-rock interaction of the Central Group of Azores Islands: a contribution to the geothermal potential evaluation and the seismo-volcanic hazard assessment</i> PTDC/CTE –GIN/68851/2006 2007-2010 Total budget: 90 000 €, ITN budget: 13 700,00€ Prime contractor: Universidade dos Açores , Coordinator: P.M. CARREIRA</p>	<p>7 044,30</p>
<p><i>Groundwater Resources Assessment and Evaluation of Marine Intrusion in the Cap Bon Area, Northern Tunisia, Using Geochemical, Geophysical and Isotope Techniques</i> GRICES Total budget :2020 € , ITN budget 2020 € Prime contractor: ITN, Coordinator: P.M. CARREIRA</p>	<p>2 020,00</p>
<p><i>Evaluation, Management and Protection of the Hydrological Resources in Semiarid Zones. Application of Hydrodynamic, Hydrochemical and Isotopic Methods in the Essaouira Synclinal Basin (Morocco).</i> GRICES Total budget: 3140 €, ITN budget: 3140 € Prime contractor: ITN, Coordinator: P.M. CARREIRA</p>	<p>0</p>

Total budget 59 887,24

Services

<p><i>Services</i></p>	<p>12 035,60</p>
	<p>Total budget 71 922,84</p>

Biomedical Studies

Current Projects**2008 ITN budget in €**

<p><i>Exhaled breath condensate: A tool for noninvasive evaluation of pollutant exposition?</i>, PTDC/AMB/ 65828/2006, Total funding: 199.366,00 €; Coordinator: S. Marta Almeida/ITN, Principal Contractor: Instituto de Soldadura e Qualidade (ISQ) (Marco Costa); Participants: ITN/MCTES, Hospital de Santa Maria, Serviço Pneumologia (A. Bugalho de Almeida); ITN budget 2008: 16.562,00 € (Start Oct. 2007).</p> <p><i>Density changes in femoral bones from rats under osteoporosis preventive treatments, HasyLab DESY, HARWI-II (GKSS)</i>, Principal Contractor: TU-Dresden/GKSS (Forschungszentrum Geesthacht); Coordinator: I. Gomez-Morilla, Technische Univ. Dresden, Germany (2008/2009); Participants: ITN/MCTES, CMM, Univ. Autónoma Madrid, Spain (M.D. Ynsa).</p> <p><i>IAEA, CRP-FI.20.19 - Development of Nuclear Microprobe Techniques for the Quantitative Analysis of Individual Microparticles</i>, Contract N° 13262/R1 - Nuclear Microprobe Analysis of Human Skin Applied to the Study of Haemochromatosis; Total Budget 15.000,00 €; Principal Contractor: Instituto Tecnológico e Nuclear (ITN/MCTES); Participants: Hospital de Santa Maria (Serviço de Dermatologia, R. Silva & Serviço Imuno-hemoterapia, R. Fleming) LAACQ, INETI, Lisboa, Portugal (A. Barreiros); ITN Budget 2008: 5.000,00 € (Start May 2005).</p> <p><i>Plaque instability and endothelial function in Coronary Disease – relationship between circulating biomarkers of apoptosis and cell activation with plaque composition as imaged by IVUS VH</i>; Prime contractor: Dept. Cardiology, Sta. Marta Hospital; Co-ordinator: R. Cruz Ferreira; Partners: ITN (T. Pinheiro), CBA-FFC-UL (A. Viegas-Crespo). Budget of 2008: 8.000,00 € (administered by Liga dos Amigos do Hospital de Santa Marta); Total budget: 24.000,00 €* (Jun. 2006 - Dec. 2008)</p> <p><i>A pele como órgão de monitorização da acumulação de Ferro na hemocromatose – one year renewal, SPDV - Sociedade Portuguesa de Dermatologia e Venereologia</i>; Prime contractor: Dept. Dermatology, Sta. Maria Hospital; Co-ordinator: Raquel Silva; Partners: ITN (T. Pinheiro), Dept. Immunohemotherapy, St. Maria Hospital (R. Fleming) (Jan 2008 – Jan.2009). Total budget: 3.000,00 € (Budget controlled by project co-ordinator).</p>	<p>---</p> <p>---</p> <p>---</p> <p>---</p> <p>---</p>
Total budget	---

Inorganic Chemistry, Radiochemistry and Radiopharmacy

Inorganic and Organometallic Chemistry

Current Projects

2008 ITN budget in €

<p><i>Coupling catalysts and nonthermal plasma for low temperature decomposition of organic volatile compounds</i></p> <p>PTDC/EQU-EQU/65126/2006, 2008 - 2011 Total budget 127 200 €, ITN budget 115 200 € Prime contractor: ITN Coordinator: J. Branco; ITN Partners: N. Pinhão (UFA), A.P. Goncalves (UCQR); ISEL Partner: L. Redondo</p>	38 160,00
<p><i>Mass Spectrometry Network - Instituto Tecnológico e Nuclear</i></p> <p>REDE/1503/REM/2005, Jul 2007 - Dec 2008 Total budget 175 615€, ITN budget 175 615€ Prime contractor: ITN; Coordinator: J. Marçalo</p>	---
<p><i>Thermochemistry Studies of Actinide Species in the Gas Phase by FTICR/MS</i></p> <p>PPCDT/QUI/58222/2004, Jun 2007 - Jun 2008 Total budget 58 000 €, ITN budget 58 000 € Prime contractor: ITN; Coordinator: J. Marçalo</p>	---
<p><i>Ansa-bridged organorhenium(VII) oxides and their applications as homogeneous and heterogeneous catalysts</i></p> <p>PTDC/QUI/71198/2006, Jan 2008 – Dec 2010 Total budget 59 700 €, ITN budget 17 328 € Prime contractor: U. Aveiro; Coordinator: I.S. Gonçalves Partners: ITN, J. Marçalo</p>	5 198,40
<p><i>Gas Phase Reactions of Ionic Liquids</i></p> <p>PTDC/QUI/66199/2006, Jan 2008- Dec 2010 Total budget € 75 300 € Prime contractor: FCUL, Coordinator: J. P. Leal Partners: ITQB, L. P. Rebelo</p>	---
<p><i>Energetics of metallic polyalkoxides</i></p> <p>PTDC/QUI/65507/2006, Jan 2009 - Dec 2011 Total budget 70 944 €, ITN budget 70 944 € Prime contractor: ITN; Coordinator: J. P. Leal</p>	21 283,20
<p><i>Research Unit “Vidro e Cerâmica para as Artes”, FCT/UNL</i></p> <p>Supported by FCT/MCTES, 2008 Total budget 24 000 € Members from ITN: A. Pires de Matos, Coordinator; J. Marçalo; F. Araújo</p>	---
<p><i>Provenance Studies of Portuguese Glasses</i></p> <p>POCI/HAR/55882/2004, Sep 2005 - Jun 2008 Total budget 45 240€, ITN budget 13 488€ Prime contractor: Research Unit “Vidro e Cerâmica para as Artes”, FCT/UNL; Coordinator: A. Pires de Matos</p> <p>Partners: ITN, A. Pires de Matos; Instituto Politécnico de Tomar, J. Coroado; IPPAR, Coimbra, M. Ferreira de Almeida</p>	12 602,70
<p><i>Glass in Art: Light and Colour</i></p> <p>POCI/EAT/60496/2004, Sep 2005 - Dec 2007 Total budget 60 603€, ITN budget 4 800€ Prime contractor: Research Unit “Vidro e Cerâmica para as Artes”, FCT/UNL; Coordinator: A. Pires de Matos Partners: ITN, A. Pires de Matos</p>	1 923,27

RESEARCH PROJECTS

<i>Glass Art and 2D and 3D Printing</i>	---
PTDC/EAT/67354/2006, Sep 2007 - Aug 2010	
Total budget 135 472€	
Prime contractor: Research Unit “Vidro e Cerâmica para as Artes”, FCT/UNL; Coordinator: A. Pires de Matos	
Total budget	77.244,30

Radiopharmaceutical Sciences

	2008 ITN budget in €
<i>Radiopharmaceuticals for Treatment of Bone Cancer Pain and/or Therapy Based on Macrocyclic Lanthanide Complexes: POCTI/35859/SAU/99, March 2002- March 2005</i>	8.516,00
Total budget 86 616 €; Prime contractor: ITN, Co-ordinator, I. Santos	
Novel Metal Fragments Potentially Useful for Labelling Biologically Relevant Molecules with Tc and /or Re POCI/QUI/58245/2004, Oct. 2005-Abril. 2009, Total budget 73000€, ITN budget 73000€; Prime contractor: ITN, Co-ordinator, I. Santos	10.778,87
<i>Specific Organometallic Complexes, Research Contract, MALLINCKRODT/TYCO/HEALTHCARE, June 2006- June 2009, Total budget 262 500, 00€, ITN budget 262 500, 00 €; Prime contractor: ITN, Co-ordinator, I. Santos</i>	11.6039,00
Novel Radioactive Probes for Molecular Imaging of Sigma Receptors , POCI/QUI/59588/2004, Oct. 2005- April. 2009, Total budget € 45000, ITN budget € 45000; Prime contractor: ITN, Co-ordinator, A. Paulo	2.800, 00
Multicomponent Technetium and Gallium Metallointercalators for Targeted Radiotherapy POCI/QUI/57632/2004, Oct. 2005-April 2009, Total budget € 47500, ITN budget € 42200	
Prime contractor: ITN, Co-ordinator A. Paulo; Partner: C. de Inv. Genética Molecular e Humana, FCM, UNL	2.282, 63
Chemical, Radiochemical and Biological Studies of Pyrazolyl- alkylamine Pt(II) Complexes: Applications on the Development of Novel Anti-Cancer Drugs , PTDC/QUI/66813/2006, 2009- 2012. Total budget € 127 000, 789, ITN budget € 101789,00; Prime contractor: ITN, Co-ordinator A. Paulo. Partner: C. de Inv. Genética Molecular e Humana, FCM, UNL	38.336, 70
Novel Estrogen Receptor Ligands as Potential Probes for Targeted Tumour Imaging and Therapy, CIMAGO/FLAD, PI 0905, July 2005-July 2008, Total budget 31000€, ITN budget 25000€; ITN Co-ordinator M. C. Melo e Silva; Partners: FMUC, IBILI, Graduate School of Engineering Science, Kyushu University, Fukuoka, Japan	
Radiolabelling of L-Arginine Analogues with the fac-[^{99m} Tc(CO) ₃] ⁺ for Probing Nitric Oxide Synthase (NOS) in vivo: Synthesis, Characterization and Biological Evaluation. POCI/SAU-FCF758855/2004, Jan. 2005-June 2009; Total budget 80000€, ITN budget 79000€; Prime contractor : ITN, Co-ordinator J. D. G. Correia, Partner: FCUL	23.481,29
Lanthanide Complexes as Potential Therapeutic Agents: Chemistry, Radiochemistry and Biological Studies. Bilateral Project GRICES/Academy of Sciences of the Czech Republic. 2007/2008; Total budget 1570€, ITN budget 1570 €; Prime contractor : ITN Co-ordinator: I. Santos	-----
<i>Novel Drugs to Target Bio-Receptors Aimed at Pharmacological Applications.</i>	
POCI/QUI/56985/2004, Sept 2006-Sept 2009. Total budget 59000€, ITN budget 4800 €	1.000,00
Prime contractor: IST, M.A. Santos, ITN Co-ordinator: L. Gano	
<i>Services and Training</i>	8.666,63
<i>European Science Foundation and Companies : Cost D38 Conference</i>	10.000,00
Total budget	221.901, 12

Applied Geochemistry & Luminescence on Cultural Heritage

Current Projects

	2008 ITN budget in €
<i>Paleoenvironmental reconstruction using Chemical Analysis and Single-Grain Luminescence Dating. A non-biostratigraphical approach.</i> CONC-REEQ/590/2001 Total budget: 323 500 €; ITN budget: 323 500€ Prime contractor: ITN, M.I. PRUDÊNCIO	3.235,00
<i>Fluvial Terraces, references to evaluate the fluvial incision and crustal uplift in central Portugal (western Iberia).</i> POCTI/CTE-GEX/58120/2004 Total budget 24 158 €; ITN budget: 4800 € ITN Coordinator: M.I. DIAS Prime contractor: UE, A. MARTINS	1.328,93
<i>Halieutical resources industry in roman times: the Casa do Governador da Torre de Belém, the Tagus estuary and the Atlantic coast.</i> PTDC/HAH/74057/2006 Total budget 95.785,00 €; ITN budget: 29.600,00 € ITN Coordinator: M.I. DIAS Prime contractor: U. Lisboa, C. FABIÃO	5.880,00
<i>Dating, authenticity, materials, pigments. A laboratory study on Portuguese Faience and Chinese Porcelain produced for the Portuguese market (XVI to XVIII centuries).</i> PTDC/HAH/69506/2006 Total budget: 156.439,00 €; ITN budget: 87.595,00€ Prime contractor: ITN, M.I. DIAS	46.931,70
<i>Transition landscapes: Settlement, technology and chrono-stratigraphy o the transition to farming, in Central Portugal</i> PTDC/HAH/71361/2006 Total budget 199.740,00 €; ITN budget: 32.400,00 € ITN Coordinator: M.I. DIAS Prime contractor: I.P.Tomar, L. OOSTERBECK	3.520,00
Total budget	60.895,63

Contracts / Services

	ITN budget in €
- Luminescence (TL-OSL) absolute dating	---
- Chemical and mineralogical characterization of ceramics and clay materials	---
Total budget	---

Radiation Technologies: Processes and Products

Current Projects

2008 ITN budget in €

<i>Control environment in surgical rooms at the army hospitals and its impact on incidence of cross infections, LPM/MDN PIDDAC, 2003-2008 (Project total ITN budget: 63.000,00 €); Total budget ITN in 2008: 10.500,00€; Prime contractor: H. Militar Coordinator: Dr. Pet Mazarello, Scientific Co-ordinator: M. Luisa Botelho, ITN, Portugal.</i>	10.500,00
<i>Upgrading of Radiation Technology Unit, FCT CONC-REEQ/996/2005, 2005-2008; Total budget 1.430.000,00 €, ITN budget (139.208,83 € income in 2008); Prime contractor: ITN, Coordinator: M.L. Botelho ITN, Portugal.</i>	---
Expert Services to Industry	
<i>Medmat Inovattion: “Validação do Processo de Esterilização por Radiação Gama do Produto Bonelike® (2008-2009), Total budget: 8.012,00 € (without V.A.T.); Total budget in 2008: 2.576.940,00 €; Coordinator: M. Luisa Botelho.</i>	---
Total budget	10.500,00

Nuclear Instruments and Methods

Current Projects

2008 ITN budget in €

<i>Coupling catalysts and non-thermal plasma, for low temperature decomposition of organic volatile compounds</i> , PTDC/EQU-EQU/65126 /2006, Total budget: 127.200,00 €, ITN budget: 115.200,00 €, ITN budget: 34.560,00 € (2008), Prime contractor: ITN; Coordinator: J. Branco; ITN/UCQR; Co-participation N. Pinhão, A. Janeco, ITN/UFA. GRICES, Portuguese-Hungarian bilateral cooperation: 2006-2008; Coordinator: N. Pinhão, ITN/UFA.	38.160,00
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Submitted and Approved

<i>Participação do ITN na experiência n_ToF-Ph2 no CERN, 3º ano</i> , CERN/FP/83525/2008, Total budget: 30.000,00 €, Prime contractor: ITN; Coordinator: I. Gonçalves, ITN/UFA (2008).	9.000,00
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Total budget	47.160,00
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Elemental Characterization and Speciation CEEFI

Current Projects

2008 ITN budget in €

- <i>Laboratório de Caracterização e Especificação de Aerossóis LCEA</i> Programa Nacional de Reequipamento Científico, ref: REEQ/377/FIS/2005, Nov. 2005- Out. 2007 Total budget 782 000 €, FCT contribution 700 000 €, ITN contribution 82 000€ Prime contractor: ITN, ITN Co-ordinator: MIGUEL A. REIS	7 000,00
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Services

5.162,12

Total budget	12.162,12
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