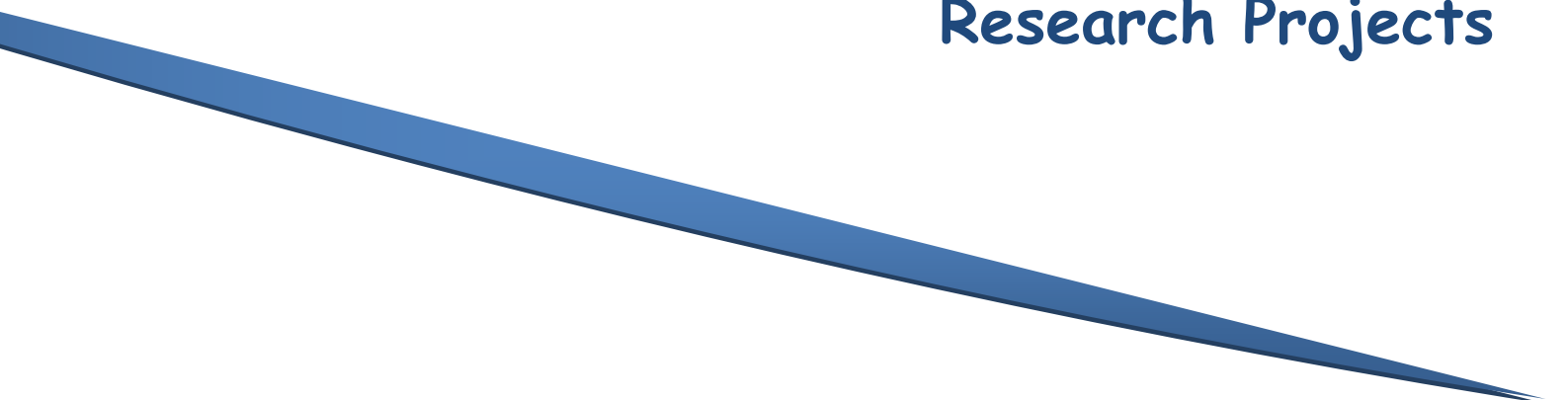


Research Projects



Reactors and Nuclear Safety Unit

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

Current Projects

2009 ITN budget in €

<i>Integrated Infrastructure Initiatives for Material Testing Reactors Innovations (MTR-I3)</i> , European Atomic Energy Community, Contract Number 036440 (FI60), October 2006- October 2009	0
Total budget: € 3.500.000, ITN budget € 120.000	
Prime contractor: CEA, France ITN Co-ordinator: J.G. Marques	
<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	7.000,00
Total budget: € 15.000, ITN budget € 15.000	
Prime contractor: ITN, Co-ordinator: N.P. Barradas	
<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	4.000,00
Total budget: € 16.000, ITN budget € 16.000	
Prime contractor: ITN, Co-ordinator: A. R. Ramos	

Total budget 11.000,00

Applied Dynamics

Current Projects

2009 ITN budget in €

Flow-Induced Vibrations of Nuclear Rods (VITAMINE-3), Contractor CEA, France. April 2008-March 2009	14.000,00
Total budget € 14000, ITN budget € 14000	
Prime contractor: ITN (Co-ordinator: J. ANTUNES)	
Partners: Commissariat à l'Energie Atomique – CEA/Saclay, France (L. BORSOI)	
Nonlinear Fluid-elastic Vibrations of Nuclear Steam-Generator Tubes (TGV-ICESurVITAMINE/1), Contractor CEA, France. February 2009-September 2009	
Total budget € 14500, ITN budget € 14500	
Prime contractor: ITN (Co-ordinator: J. ANTUNES)	14.500,00
Partners: Commissariat à l'Energie Atomique – CEA/Saclay, France (T. LAPORTE)	
Extension of the contract Nonlinear Fluid-elastic Vibrations of Nuclear Steam-Generator Tubes (TGV-ICESurVITAMINE/2), Contractor CEA, France. October 2009- April 2010	
Total budget € 11500, ITN budget € 11500	
Prime contractor: ITN (Co-ordinator: J. ANTUNES)	0
Partners: Commissariat à l'Energie Atomique – CEA/Saclay, France (T. LAPORTE)	

Total budget 28.500,00

Neutron Activation in Environment, Nutrition and Epidemiology

Current Projects

	2009 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	20.506,50
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	0
(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). PTDC/AMB/65462/2006. August 2007-July 2010 Total budget € 178969, ITN budget € 23940 Prime contractor: IMAR Coordinator: A. Bettencourt ITN Coordinator: M.C. FREITAS	0
Exhaled breath condensate: a tool for noninvasive evaluation of pollutant exposition? PTDC/AMB/65828/2006. October 2007-September 2010 Total budget € 199006, ITN budget € 55087 Prime contractor: ISQ Coordinator: S.M. ALMEIDA	16.526,10
Assessment of emissions and impact of steel production processes. June 2009 – December 2012 Total budget €, ITN budget € 40000 Prime contractor: CORUS Coordinator: D. ANDERSON ITN Coordinator: S.M. ALMEIDA	0
Selenium distribution in cereals and Portuguese cultivation soils. Interactions between selenium and iodine uptake by cereals – A case study. PTDC/QUI/65618/2006. January 2009-December 2011 Total budget € 73440, ITN budget € 36000 Prime contractor: IST Coordinator: Adriano M.G. Pacheco ITN Coordinator: M.C. FREITAS	10.800,00
Enhancing the sustainability of Research Reactors and their safe operation through regional cooperation, networking and coalition. IAEA RER/4/032 January 2009-December 2011 International Atomic Energy Agency ITN Coordinator: M.C. FREITAS \$4,932 for acquisition of equipment, one scientific visit to IPEN, Lima, Peru	0
Characterizing seasonal variations in elemental particulate matter concentrations in European urban and rural areas under different climatic conditions. Technical Cooperation Project RER/2/005 January 2009-December 2011 International Atomic Energy Agency ITN Coordinator: M.C. FREITAS 1032.56€ in Teflon and polycarbonate filters, one meeting in Krakow, one training course at ITN	0
Total budget €	47.832,60

Radiological Protection and Nuclear Safety Unit

Dosimetry and Radiobiology

Current Projects

	2009 ITN budget in €
<i>Novel indazolebisphosphonates: quelation, molecular modeling and biological studies.</i> Project POCI/QUI/55508/2004, 2006 – 2009. Total budget € 63000, ITN budget € 7800, Prime contractor: INETI, F. C. Teixeira; ITN Co-ordinator M. Neves.	3.128,18
<i>Evaluation of a acute pulmonary oedema – development of a new technique using giant unilamellar liposomes.</i> Project PTDC/SAU-BEB/76455/2006. 2008-2010. Total budget € 79620,00, ITN budget € 2160, Prime contractor: Faculdade de Medicina, Universidade de Coimbra, A. C. Santos. ITN Co-ordinator M. Neves.	---
<i>EU-TRIMER – European 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>EUROpean Research Programme for the TRANsmutation of High Level Nuclear Waste in an Accelerator Driven System (IP-EUROTRANS)</i> a European Union co-financed project in the 6 th Framework Program EURATOM (ref. FI6W-CT-2004-516520), Total budget: € 46000000, ITN budget: € 250000. ITN Coordinator P. Vaz.	1.495,00
<i>CDT – Central Design Team for a Fast Spectrum Transmutation Experimental Facility,</i> , European Union co-financed project in the 7 th Framework Programme EURATOM (Grant agreement n°: FP7-232527), Total budget € 3000000, ITN Budget € 70000 Euro, ITN Coordinator: P. Vaz.	32.938,85
<i>ENETRAP-II : European Network for Education and Training in Radiation Protection (Part-II),</i> European Union co-financed project in the 7 th Framework Programme EURATOM (agreement number 232620) Total budget. € 1473000, ITN budget: € 78000, ITN Coordinator: P. Vaz.	0
<i>“Cooperation with CERN in the Framework of the project EURISOL Design Study (2nd year)”</i> , FCT project CERN/FP/83586/2008, ITN budget € 15000. Coordinator: P. Vaz.	9.000,00
<i>Participation of ITN in the n-TOF-Ph2 experiment (PS213) at CERN (Fourth Year),</i> FCT project, ITN budget € 30000. Coordinator: I.F. Gonçalves.	18.000,00
Total budget	74.562,03

Metrology Laboratory of Ionizing radiation

Current Projects

	2009 ITN budget in €
<i>Increasing cancer treatment efficacy using 3D brachytherapy - T2.J06 Brachytherapy EMRP 2007 EURAMET e.V. (2008 a 2011).</i> Total project cost € 3 661691, EC funding, ITN budget € 19 370. Prime contractor: ENEA, ITN Coordinator C. Oliveira.	4.847,85
Total budget	4.847,85

Environmental Radioactivity

Current Projects

	2009 ITN budget in €
<i>Contribuição da combustão de biomassa para a emissão de poluentes atmosféricos (BIOEMI).</i> Contract FCT PTDC/AMB/65706/2006 Total budget: 199,957€ (years 2007-2010) ITN budget: 74340 €. ITN Coordinator F.P. Carvalho	0
<i>Participation in the education web based project CAPTAR (Web site: captar.web.ua.pt) in the field of environmental sciences.</i> Project coordinated by the University of Aveiro, funded by the Gulbenkian Foundation. ITN Coordinator F.P. Carvalho.	
Total budget	0

Radioprotection and Radioactive Waste

Current Projects

	2009 ITN budget in €
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.	15.528,00
<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>	10.000,00
<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>	---
<i>GEOSAF- European Pilot Study on The Regulatory Review of the Safety Case for Geological Disposal of Radioactive Waste. Prime contractor: IAEA/NEA/EC; ITN Coordinator: I. Paiva.</i>	---
<i>PETRUS II—Towards an European training market and professional qualification in Geological Disposal. Total budget: €800000, ITN budget € 37000. Prime contractor: INPL, France; ITN Coordinator: I. Paiva.</i>	---
Total budget	25.528,00

Chemical and Radiopharmaceutical Sciences Unit

Applied Geochemistry & Luminescence on Cultural Heritage

Current Projects

2009 ITN budget in €

<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	2.940,00
Total budget 95.785,00 €; ITN budget: 29.600,00 €	
ITN Coordinator: M.I. DIAS	
Prime contractor: U. Lisboa, C. FABIÃO	
<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	51.021,00
Total budget: 156.439,00 €; ITN budget: 87.595,00€	
Prime contractor: ITN, M.I. DIAS	
<i>Transition landscapes: Settlement, technology and chrono-stratigraphy o the transition to farming, in Central Portugal</i>	
PTDC/HAH/71361/2006	8.140,00
Total budget 199.740,00 €; ITN budget: 32.400,00 €	
ITN Coordinator: M.I. DIAS	
Prime contractor: I.P.Tomar, L. OOSTERBECK	
<i>"Using Nuclear Techniques for the characterization and preservation of Cultural Heritage Artefacts in the European Region".</i>	---
Technical Cooperation Project - RER 8015	
Portuguese nuclear scientist nominated (2009-2011): M. I. PRUDÊNCIO	
Total budget	62.101,30

Closed projects and Services

<i>Fluvial Terraces, references to evaluate the fluvial incision and crustal uplift in central Portugal (western Iberia).</i>	
POCTI/CTE-GEX/58120/2004	1.485,00
Total budget 24 158 €; ITN budget: 4800 €	
ITN Coordinator: M.I. DIAS	
Prime contractor: UE, A. MARTINS	
Luminescence (TL-OSL) absolute dating	5.666,67
Total budget	7.151,67
Total budget	69.252,97

Contracts

ITN budget in €

Chemical and mineralogical characterization of ceramics and clay materials

Environmental and Analytical Chemistry

Current Projects

2009 ITN budget in €

<i>Metallurgy and Society in Central Portugal Late Bronze Age</i> POCTI/HAR/58678/2004, 2005 - 2009 Total budget: 52 150 €, ITN budget: 27 535 € Prime contractor: Faculdade de Letras, ITN coordinator: M.F. ARAÚJO	0
<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 Faculdade de Ciências, ITN coordinator: M.F. ARAÚJO	0
<i>The Ocean Reservoir Effect in the Transition Area of the West-Iberian Coastal Upwelling (Aveiro/Mouth of the Minho River; Cape Santa Maria/Mouth of the Guadiana River)</i> PTDC/MAR/68942/2006, 2008 - 2011 Total budget: 128 507 €, ITN budget: 106 068 € Prime contractor: ITN coordinator: A.M. SOARES	0
<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 € Prime contractor: Universidade dos Açores, ITN coordinator: P.M. CARREIRA	0
<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: 15 000 € Prime contractor: Instituto das Ciências da Terra e do Espaço, ITN coordinator: P.M. CARREIRA	0
<i>Groundwater Resources Assessment and Evaluation of Marine Intrusion in the Cap Bon Area, Northern Tunisia, Using Geochemical, Geophysical and Isotope Techniques. Bilateral Cooperation TUNÍSIA - GRICES, Proc. 4.1.5 Tunísia; ITN coordinator: P.M. CARREIRA.</i>	2.020,00
<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). Bilateral Cooperation GRICES, Proc. 4.1.5 CNRST/Marrococ; ITN coordinator: P.M. CARREIRA.</i>	0
<i>Identification of interaction processes between surface waters and shallow groundwaters within Sado hydrographical basin - SW Portugal. IAEA/F3.30.15 -POR-12957 (2004-2010). Co-ordinator T.Vitvar (IAEA); ITN coordinator: P.M. CARREIRA.</i>	0

Total budget 2.020,00

Closed projects and Services

POCTI/CTA/39435/2001 - Groundwater resources as indicators and archives of palaeoclimatic changes (NW - Portugal)	2.733,75
POCTI/CTA/44235/2001 - Role of high mountain areas in catchment water resources - Northern / Central Portugal	10.550,00
POCTI/CTA/45159/2002 (DISGAS) - Dissolved gases in subsurface hydrology - CO ₂ -rich thermomineral waters (N-Portugal)	5.000,00
<i>Services/Contracts</i>	8.648,00

Total budget 26.931,75

Total budget 28.951,75

Inorganic and Organometallic Chemistry

Current Projects

External funding 2009 in €

<i>Coupling catalysts and nonthermal plasma for low temperature decomposition of organic volatile compounds</i>	38.160,00
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. Gonçalves (UCQR); ISEL Partner: L. Redondo	
<i>Potassium - lanthanide molten salt catalysts</i>	14.769,00
PTDC/QUI/72290/2006, Jan 2009 – Dec 2010	
Total budget 24 615 €, ITN budget 24 615 €	
Prime contractor: ITN; Coordinator: J. Branco	
<i>Energetics of metallic polyalkoxides</i>	0
PTDC/QUI/65507/2006, Jan 2009 - Dec 2011	
Total budget 70 944 €, ITN budget 70 944 €	
Prime contractor: ITN; Coordinator: J. P. Leal	
<i>Ti(III) and U(III) complexes with bis(phenoxide)diamine ligands - Applications in C-C bond forming by electron-transfer reactions</i>	5.207,85
PTDC/QUI/66187/2006, Nov 2008 – Nov 2011	
Total budget 72 719 €, ITN budget 34 719 €	
Prime contractor: IST; Coordinator: A.M. Martins	
Partners: ITN, J. Marçalo	
<i>Ansa-bridged organorhenium(VII) oxides and their applications as homogeneous and heterogeneous catalysts</i>	0,00
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	
<i>Mass Spectrometry Network - Instituto Tecnológico e Nuclear</i>	13.500,00
REDE/1503/REM/2005, Jan 2009 - Dec 2011	
Total budget 44 500€, ITN budget 44 500€	
Prime contractor: ITN; Coordinator: J. Marçalo	
<i>Gas Phase Reactions of Ionic Liquids</i>	---
PTDC/QUI/66199/2006, Jan 2008- Dec 2010	
Total budget € 75 300 €	
Prime contractor: FCUL; Coordinator: J.P. Leal	
Partners: ITQB, L. P. Rebelo	
<i>Research Unit “Vidro e Cerâmica para as Artes”, FCT/UNL-FBAUL</i>	---
Supported by FCT/MCTES, 2009	
Total budget 28 000€	
Members from ITN: A. Pires de Matos, Coordinator; J. Marçalo; F. Araújo.	
<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	71.636,85

Radiopharmaceutical Sciences

Current Projects

	2009 ITN budget in €
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	13.995,22
Evaluation of Acute Pulmonary Oedema – Development of a New Technique Using Giant Unilamellar Liposomes, PTDC/SAU-BEB/76455/2006, October 2007- October 2010, Total budget 77460,00 €. Prime contractor FMUC, ITN budget 2160,00 €, Co-ordinator, L. Gano	648,00
Specific Organometallic Complexes, Research Contract, MALLINCKRODT/Covidien/HEALTHCARE, June 2006- June 2009, Total budget 262 500, 00€, ITN budget 262 500, 00 €; Prime contractor: ITN, Co-ordinator, I. Santos	46.651,00
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	14.325,12
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.	12.460,22
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.	0
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.	11.407,66
Novel Drugs to Target Bio-Receptors Aimed at Pharmacological Applications. POCI/QUI/56985/2004, Sept 2006-Sept 2009. Total budget 59000€, ITN budget 4800 € Prime contractor: IST, M.A. Santos, ITN Co-ordinator: L. Gano	0
Radioligandos para o receptor estrogénico –potencial clínico em imagem e terapia de tumores da mama. Fundação Calouste Gulbenkian. Proc. N° 96476. Outubro 2009-Outubro 2011, Total budget 47.500 €. Partners: IBILI, CIMAGO. ITN budget 30.000 €, Co-ordinator: M. C. Oliveira.	---
Complexos de Ruténio para aplicação anti-tumoral. FCUL FCT project: PTDC/QUI-QUI/101187/2008 and ITN partner. ITN budget 9,600€. ITN Co-ordinator: F. Marques.	0
Radiosynthesis and biological evaluation of novel receptor tyrosine kinase inhibitors for in vivo targeting of EGFR and VEGFR. Bilateral Project Portugal/Germany (FCT/DAAD). Project number: 0811983 (441.00), 2009-2010. Total budget 5,000€. ITN Co-ordinator: I. Santos	2.500,00
Services and Training	1.155,00
Total budget	103.142,22

Closed projects and Services

Complexos Organometálicos de Rénio e Tecnécio: Design de Radiofármacos para visualização de Receptores do Cérebro. POCTI/QUI/42939/2001, February 2002–February 2005. Total Budget ITN 42.700,00 €, Co-ordinator, A. Paulo	4.270,00
Complexos de Re/Tc para Radiofármacos específicos para Receptores de Péptidos: Química, Radioquímica e Estudos Biológicos in Vitro e in Vivo, POCTI/QUI/35423/2000. October 2000-October 2003.Total budget 91.679,08 € . Prime Contractot ITN, Co-ordinator, I. Santos	8.907,17
Total budget	13.177,17
Total budget	116.319,39

Solid State

Current Projects

2009 ITN budget in €

<i>Novel layered ferrite materials with mixed ionic-electronic conductivity for applications in alternative energy sources</i> , PTDC/CTM/64357/2006, 1st January 2008 – 31st December 2010 Total budget 146.000 €, ITN budget 69.240€ Prime contractor: ITN, J.C. Waerenborgh Partners: Univ. Aveiro, V.V. Kharton	0
<i>Switchable molecular conductors</i> , PTDC/QUI/65379/2006, 1 st November 2007 - 31 October 2010 Total budget € 93.300 ITN budget € 82.810 Prime contractor: ITN; Coordinator: V. Gama Partners: Univ. Técnica de Lisboa, IST (M.T. Duarte)	28.003,95
<i>Transition metal complexes based on new thio-azo ligands for heterobimetallic networks and molecular conductors</i> , PTDC/QUI/64967/2006, 1 st November 2007 - 30 April 2010 Total budget € 125.100, ITN budget € 73.680,00 Prime contractor: ITN; Coordinator: M. Almeida Partners: Instituto de Telecomunicações/ IST (R.T. Henriques)	37.530,00
<i>Synthesis and characterization of new U and Fe compounds with Ge, Ga and Sb</i> , PTDC/QUI/65369/2006, 1 st October 2007 - 30 September 2009 Total budget € 56.100, ITN budget € 56.100 Prime contractor: ITN; Coordinator: A.P. Gonçalves Partners: Univ. Técnica de Lisboa, IST (P.A. Carvalho)	16.830,00
<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 Total budget € 10 000 000, ITN budget € 500.000 ITN Co-ordinator: M. Almeida	51.026,46
<i>Search for novel uranium and ytterbium-based intermetallics containing zinc and determination of their crystallochemical and physical properties</i> , Projecto de Cooperação Científica e Técnica Luso-Polaca ao abrigo do Acordo Portugal/Polónia, 2009-2010. Total budget € 2300, ITN budget € 2300 Prime contractor: ITN; Coordinator: A.P. Gonçalves	2.300,00
<i>Síntese e caracterização de novos compostos intermetálicos ternários de urânio</i> , Projecto de Cooperação Científica e Técnica Luso-Francesas ao abrigo do Convénio FCT/CNRS, 2009-2010. Total budget € 2200, ITN budget € 2200 Prime contractor: ITN; Coordinator: A.P. Gonçalves	2.200,00
<i>Study of new strongly correlated systems</i> , ICCTI/ASCR (Academia das Ciências da Republica Checa) 2009 Total budget € 1600, ITN budget € 1600 Prime contractor: ITN; Coordinator: A.P. Gonçalves	1.600,00
<i>CERCA, Consortium, Development of techniques for processing uranium alloys as foils</i> , PTDC/EAT/65445/2006 and TERMOLAB Total budget 37 500€ Prime contractor: ITN; Coordinator: A.P. Gonçalves	6.033,00
Total budget 145.523,41	

Closed projects and Services

<i>EXTADITOL Novel highly extended transition metal bisdithiolene complexes</i> POCTI/QUI/57528/2004, June 2005-May 2007 Total budget € 63 500 ITN Co-ordinator: M. Almeida	10.610,60
<i>PAC-ATD, AdI Consortium, Development of a multipurpose high temp. furnace</i> 2006 - 2007 ITN budget 52 000€ Prime contractor: Termolab; Partners: ITN; Coordinator: A.P. Gonçalves	4.601,48

RESEARCH PROJECTS

<i>Thiophenic Dithiolates as building blocks in molecular materials: Physical properties – Crystal structure correlation, POCTI/QUI/45108/2002.</i>		
Total budget € 88 045, ITN budget € 88 045		8.804,05
Prime contractor: ITN Co-ordinator: I.C. Santos		
<i>Molecule magnets based on decamethylmetallocenes and DCNQI derivative planar acceptors, POCTI/39601/QUI/2001.</i>		
Total budget € 71 400, ITN budget € 60 300		7.130,21
Prime contractor: ITN Co-ordinator: V. Gama		
Partners: Univ. Técnica de Lisboa, IST (M.T. Duarte)		
<i>Synthesis, crystal growth and characterization of new f-element borides and borocarbides with Ni, Pd, or Pt, POCTI/QUI/46066/2002.</i>		
Total budget € 28 440, ITN budget € 28 440		2.844,00
Prime contractor: ITN Co-ordinator: A.P. Gonçalves		
<i>Study of the Dy-Fe-Sn phase diagram, POCTI/CTM/38320/2001.</i>		
Total budget € 41 188, ITN budget € 41 188.		3.934,57
Prime contractor: ITN Coordinator: L.C.J.Pereira.		
<i>2CHIMAG Two chain compounds under high magnetic field, POCTI/FAT/39115/2001.</i>		
Total budget € 90 000, ITN budget € 60 000		9.000,00
Prime contractor: ITN Co-ordinator: R.T. Henriques		
Partners: ISEL (M. MATOS)		
<i>Closing of older projects: POCTI/CTM/35462/2000; POCTI/QUI/35342/2000.</i>		
Prime contractor: ITN; Coordinator:: M. Almeida		19.790,84
Total budget		66.715,75
Total budget		212.239,16

Physics and Accelerators Unit

Advanced Materials Research

Current Projects

	2009 ITN budget in €
<i>Post-mortem analysis and simulation, JW9-FT-3.47, EFDA JET Technology Workprogramme 2009. Coordinator: E. Alves.</i>	---
<i>Deposition of photocatalytic and self-cleaning Titania on glass surfaces, 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>	0
<i>NanoFFAWN - Functionalization, friction, adhesion, and wear at nanoscale, 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.</i>	0
<i>POLIFILM - Multifunctional films for flexible and plastic material applications, 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.</i>	0
<i>Physics and Technology of ultra-fast memories based on Si1-xGex nanocrystals with dielectric tunneling layers, 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.</i>	0
<i>Structure of low dimension diluted magnetic oxides, PTDC/FIS/72843/06, 2007-2009, Total budget -€, ITN budget 34.300,00 €, Prime Contractor: Univ. Aveiro (Nikolai Sobolev), ITN Coordinator: E.Alves.</i>	0
<i>Designing ultra-fine textured microstructures by laser floating zone – LaFlorZone, PTDC/CTM/66195/2006, 2007-2009, Total budget -€, ITN budget -€. Prime Contractor: Univ. Aveiro (Florinda Costa), ITN Coordinator: E.Alves.</i>	0
<i>Fusion Energy Material Science (FEMaS), Euraton Seventh Framework Programme for Nuclear Research and Training, Grant agreement No 224752-CA. Leading Institution: Max-Planck Institut für Plasmaphysik, Garching, Germany. ITN Co-ordinator: E. Alves.</i>	24.257,97
<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, PTDC/CTE-GIN/67027/2006, 2007-2009, Total budget: 90.000,00 €, ITN budget 9.600,00 €. Prime contractor: INETI/CREMINER-FCUL Co-ordinator: D.N. Rosa; Partners: FCUL, ITN (L.C. Alves).</i>	2.688,00
<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) (2009-2011). Partners: Univ. Nova de Lisboa, ITN, Univ. Complutense, Dep. Física de Materiales (Madrid). Portuguese Coordinator: R.C. da Silva (ITN/UFA).</i>	---
<i>Defect studies on GaN and ZnO doped with rare earth ions by ion implantation, 2008-2009, GRICES: Scientific cooperation Portugal-Tunisia, ITN Co-ordinator: E. Alves.</i>	2.020,00
<i>Ion-implanted magnetic nanolayers of wide band gap semiconductors for spintronics applications, PTDC/FIS/66262/2006, 2007-2010, Total Budget: 157.980,00 €; ITN Budget: 50.766,00 €. Prime Contractor: ITN; ITN Coordinator: U. Wahl; Partners: Universidade de Aveiro (UA), Fundação da Universidade de Lisboa (FUL/UL), Faculdade de Ciências da Universidade do Porto (FC/UP).</i>	0
<i>Optical doping of AlN and GaN/AlN nanostructures by ion implantation, PPCDT/FIS/57550/2004 (POCI), 2005-2009, Total Budget: 75.000,00 €; ITN Budget: 43.740,00 €. Prime Contractor: ITN, ITN Co-ordinator: K. Lorenz; Partners: Universidade de Aveiro (UA)</i>	---
<i>Rare Earth doped GaN quantum dots for efficient light emitters, with the CEA-Grenoble [EGIDE (France) / GRICES (Portugal)], 2008-2009, Prime Contractor: ITN, Coordinator: K. Lorenz.</i>	3.000,00
<i>Ternary and quaternary nitride alloys for lattice matched heterostructures: Novel materials for high efficiency field effect transistors and optoelectronic devices, PTDC/FIS/65233/2006, 2007-2010, Total budget: 153.240,00 €, ITN Budget: 93.720,00 €, Prime contractor: ITN, ITN Co-ordinator: K. Lorenz; Partners: Universidade de Aveiro (UA), University of Strathclyde (U-STRATH).</i>	45.972,00

RESEARCH PROJECTS

<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; Partners: Fundação da Univ. Lisboa (FUL/UL) and Faculdade de Letras da Univ. Porto (FL/UP); Co-ordinator: M. Soares; ITN Responsible: E.Alves.		---
<i>Support of Public and Industrial Research Using Ion Beam Technology (SPIRIT)</i> , JW10-FT-3.59, Seventh Framework Programme: Capacities Specific Programme Research Infrastructures, Grant Agreement No 227012-CP-CSA-Intra (2009/03/01). Leading Institution: Forschungszentrum, Dresden-Rossendorf, Germany. ITN Co-ordinator: E. Alves.		116.984,04
Total budget		194.922,01

Biomedical Studies

Current Projects

	2009 ITN budget in €
<i>The relationship of circulating biomarkers of apoptosis and endothelial function with the plaque composition using VH IVUS</i> , PIC/IC/82734/2007, 2009-2012, Total budget: 155.000,00 €. Co-ordination: ITN (Teresa Pinheiro); Partners: Hospital de Santa Marta (Rui Cruz Ferreira); Cooperativa de Ensino Superior Politécnico e Universitário, (Maria do Céu Monteiro); FFC-UL Fundação da Faculdade de Ciências da Universidade de Lisboa – CBA (Ana Maria Viegas-Crespo) & CEAUL (Antónia Turkman).	38.328,11
<i>Density changes in femoral bones from rats under osteoporosis preventive treatments</i> , Hasylab DESY, HARWI-II (GKSS), 2008-2009, Budget of 2009: travel and stipends for beam time attendance, Technische Univ. Dresden, Germany (2008/2009); Area: Tomography - Medical Applications. Contracting Institution: TU-Dresden/GKSS (Forschungszentrum Geesthacht).	---
<i>Inflammation markers in acute coronary syndrome</i> , 2006-2009, Total budget: 35.000,00 € (Budget of 2009 - administered by Liga dos Amigos do Hospital de Santa Marta). Prime contractor: Dept. Cardiology Sta. Marta Hospital Co-ordinator: R. Cruz Ferreira; Partners: ITN (T. PINHEIRO), CBA-FFC-UL (A. Viegas-Crespo).	---
<i>PM_{fugitive}: Mitigating the Environmental and Health Impacts of Particles from Fugitive Emissions</i> (approved –waiting contract), PTDC/AAC-AMB/098825/2008 (FCT), Total budget: 126.000,00 €. Prime contractor: ITN, Co-ordinator: Susana M.L. Almeida; Partners: Instituto de Soldadura e Qualidade; SAPEC.	---
<i>Exhaled breath condensate: A tool for non-invasive evaluation of pollutant exposition?</i> , 2007-2010, FCT - PTDC/AMB/65828/2007, Total budget: 199.366,00 €. Prime contractor: Instituto de Soldadura e Qualidade Co-ordinator: Susana M.L. Almeida; Partners: ITN (T. Pinheiro); Hospital de Santa Maria (A. Bugalho de Almeida).	16.526,10
<i>A pele como órgão de monitorização da acumulação de Ferro na hemocromatose – one year renewal</i> , 2008-2009, Total Budget: 2.000,00 €; SPDV – Sociedade Portuguesa de dermatologia e Venereologia; Prime Contractor: Dept. Dermatology, Stª Maria Hospital; Co-ordinator: Raquel Silva; Partners: ITN (T. Pinheiro), Dept. Immunohemotherapy, Sta. Maria Hospital (R. Fleming).	---
Total budget	54.854,21

Materials Characterization with Radioactive Nuclear Techniques

Current Projects

	2009 ITN budget in €
<i>Perturbed Angular Correlations and Emission Channeling Experiments at ISOLDE-CERN</i> , CERN-FP-83506-2008, Budget: 80.000,00 € (from the 17 th November 2008 up to the 31 st December 2009). ITN Coordinator, J.G. Correia, U. Wahl <i>et al.</i>	24.000,00
Total budget	24.000,00

Radiation Technologies: Processes and Products

Current Projects

2009 ITN budget in €

“Control environment in surgical rooms at the army hospitals and its impact on incidence of cross infections”, LPM/MDN PIDDAC, 2003-2009. 0

Total budget €, ITN budget 63 000€, Prime contractor: Hospital Militar, ITN Co-ordinator:

M. Luisa Botelho

“Pulsed Power advanced applications” QREN 1600 A2P2, 2009-2011.

Prime contractor: ISEL, ITN Co-ordinator: M. Luisa Botelho, Total budget €, ITN budget

Total budget 0

Nuclear Instruments and Methods

Current Projects

2009 ITN budget in €

Coupling catalysts and non-thermal plasma, for low temperature decomposition of organic volatile compounds, PTDC/EQU-EQU/65126 /2006, (2007-2010) 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. 39.452,43

Participação do ITN na experiência n_o ToF-Ph2 no CERN, 3^o ano, CERN/FP/83525/2008, Total budget: 30.000,00 €, Prime contractor: ITN; Coordinator: I. Gonçalves, ITN/UFA (2008). 30.000,00

ANDES, Accurate Nuclear Data for nuclear Energy Sustainability, 7th Framework Programme, Grant Agreement No 249671, Prime contractor: CIEMAT. ---

Total budget 69.452,43