

Research Projects

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

2007 ITN budget in €

<i>RPI Core Conversion</i> , IAEA, POR4016, 1 January 2005 - 31 December 2008 Prime contractor: ITN Coordinator: J.G. Marques	185 065,00
<i>Neutron Tomography at the Portuguese Research Reactor</i> , FCT, POCTI/FIS/59287/2004 Oct. 2005 – Sept. 2007, Total budget € 80.000, ITN budget € 80.000, Prime contractor: ITN Coordinator: J.G. Marques	21 655,00
<i>Perturbed Angular Correlations experiments at the Portuguese Research Reactor</i> , FCT, POCTI/FIS/58498/2004. Nov. 2005 – Oct. 2007, Total budget € 85.000, ITN budget € 85.000 Prime contractor: ITN Coordinator: J.G. Marques	38 132,00
<i>Desenvolvimento de detectores de gotas superaquecidas para aplicações em dosimetria e espectrometria de neutrões</i> , POCTI/FIS/55930/2004, 1 Sept. 2005-31 Dec. 2007 Total budget: 65000 EUR, Prime contractor: ITN, Coordinator: Ana Rita L. Ramos Wahl	17 225,00
<i>Integrated Infrastructure Initiatives for Material Testing Reactors Innovations (MTR-I3)</i> , Eur. Atomic Energy Community, 036440 (FI60), Oct.2006- Oct.2009, Total budget: € 3.500.000, ITN budget € 120.000, Prime contractor: CEA, France, ITN Coordinator: J.G. Marques	44 200,00
<i>Desenvolvimento de um detector SDD de CF3I para pesquisas de matéria escura spin-independente</i> , POCI/FP/63407/2005, 1 Sep.2005-31 Jan.2007, Prime contractor: CFNUL, Coordinator: Tomoko Morlat	---
<i>Continuação do projecto de matéria escura SIMPLE</i> , POCTI/FIS/57834/2004, 1 Sep./2005-30 June 2008, Prime contractor: CFNUL, Coordinator: 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., Sep. 2007 – Aug. 2010, Total budget: € 15.000, ITN budget € 15.000, Prime contractor: ITN, Coordinator: N.P. Barradas	2 500,00
Total budget 308 777,00	

Applied Dynamics

2007 ITN budget in €

<i>Flow-Induced Vibrations of Nuclear Rods (VITAMINE-2)</i> , Contractor CEA, France. April 2007-March 2008, Total budget € 14000, ITN budget € 14000, Prime contractor: ITN (Coordinator: J. Antunes), Partners: Commissariat à l'Energie Atomique – CEA/Saclay, France (L. Borsoi)	14 000,00
<i>Optimization of the Noise Reduction in Tubular Heat Exchangers</i> , POCI/EME/57278/04/2005-2007 Total budget 50000 €, ITN budget 30000 €, Prime contractor: Instituto Politécnico de Setúbal (Coordinator: M. Moreira), Partners: ITN (J. Antunes), IST (H. Pina)	8 426,32
Total budget 22 426,32	

Radiological Protection and Nuclear Safety

Environmental Radioactivity

2007 ITN budget in €

Contribuição da combustão de biomassa para a emissão de poluentes atmosféricos (bioemi).

Contract FCT

Ptdc/amb/65706/2006- Inv. Responsável: F.P. Carvalho

Total budget: 199,957€ (years 2007-2010) ITN budget: 74340 €

Total budget

Radiological Risk and Safety Assessment

2007 ITN budget in €

EUROpean Research Programme for the TRANsmutation of High Level Nuclear Waste in an Accelerator Driven System (IP-EUROTRANS) 62 405,04

Participation of ITN in the n-TOF-Ph2 experiment (PS213) at CERN

POCI/FP/63433/05

21 646,68

POCT/FP63929/05

7 000,00

POCI/FP/81931/07

6 000,00

PATEROS - Partitioning and Transmutation European Roadmap for Sustainable Nuclear Energy ---

CONRAD – COordinated Network for RADiation Dosimetry (CONRAD) ---

EURISOL DS - Design Study of an European Isotope Separation On-Line Radioactive Ion Beam Facility 2 000,00

CANDIDE – Coordination Action on Nuclear Data for Industrial Developments in Europe 13 739,00

POL-PHARM -Chemical studies for design and production of new radiopharmaceuticals. EU-FP6 Programme Marie Curie Host Fellowship for Transfer of Knowledge, Contract n° MTKD-CT-2004-509224 (2004-2008). Total budget 170 000 €, Prime contractor: Institute of Nuclear Chemistry and Technology (ICHTJ), Warsaw, Poland, Coordinator: Prof. J. Narbutt; ITN Coordinator: M. Neves 2 610,60

Novel indazolebisphosphonates: quelation, molecular modelling and biological studies. POCI/QUI/55508/2004, 2006 – 2008, Total budget € 63 00, ITN budget € 7800, Prime contractor: INETI, F.C. Teixeira; ITN Coordinator: M. Neves. ---

Metal transition complexes: biologic activity and electron Auger therapy. Portugal/Poland scientist exchange agreement. GRICES/MCES-Portugal and MCES-Poland (2007-2008) 1 010,00

New bisphosphonates labeled with low energy radionuclides Sc-47, Rh-105 and Lu-177 for bone therapy. Portugal/ Poland scientist exchange agreement. GRICES/MCES-Portugal and MCES-Poland (2007-2008) 1 010,00

Total budget 117 421,32

Radiological Protection and Radioactive Waste Management

2007 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; Total budget € 200 000, ITN budget € 51 760, Prime contractor: FFC/FC/UL; ITN Coordinator: I. Paiva</i>	---
<i>Actinide reCycling by SEparation and Transmutation ACSEPT (7th Programme EURATOM- FP7-Fission2007); Total budget € 8 999 000, ITN budget € 20 000, Prime contractor: CEA; ITN Coordinator: I. Paiva</i>	---
<i>Characterization of Suitable Areas for a Long-Term Radioactive Waste Repository Facility in Portugal; ITN funds, ITN Coordinator: I. Paiva</i>	---
<i>IAEA Regional Project Concept Strengthening and enhancing education and training capabilities in safety and management of radwaste from medical, industrial and teaching activities, IAEA funds, ITN Coordinator: R. Trindade</i>	---
<i>IAEA National Project Concept Strengthening and Enhancing the QA/QC System on the Nuclear Analytical and Service Providing Laboratories of DPRSN/ITN, IAEA funds, ITN Coordinator: N. Pinhão</i>	---
<i>Harmonising Practices in Radioactive Waste Management in Medical and Industrial National Establishments Action National Plan on Environment and Health (PNAAS), Ministry of Environment and Ministry of Health funds, ITN Coordinator: R. Trindade</i>	---
Total budget	---

New Materials and Compounds

Advanced Materials Research

Current Projects

2007 ITN budget in €

<i>Titanium beryllides oxidation studies</i> , EFDA (Eur. Fusion Development Agreement, Underlying technologies), 2007, ITN budget 5 000 €, Prime contractor: ITN Coordinator: E. Alves	---
<i>Studies of material erosion and redeposition in ITER-relevant diverter target temperatures, plasma impact energies and diverter chamber geometries</i> , EFDA, 2006-2008, Total budget: 65 000 €, Prime contractor: ITN, Coordinator: E. Alves	---
Participation on the European Fusion Programme	22 961,80
<i>Instalação de Análise em Feixe Externo na Microsonda Iónica</i> (MICROFEX: Development of External Ion Beam Analysis at the ITN Ion Microprobe), FCT, POCTI CTM/60685/2004, 2005-2008, Total budget: 76 000 €, Prime contractor: ITN, Coordinator: R.C. da Silva	34 267,62
<i>Development of a new decorative MeNxOy and MeCxOy Thin Film system, with with Me = Ti, Cr, Zr and Al</i> , FCT, POCTI/CTM/38086/2001, 2003-2007, Total budget: 89 473 €, ITN budget: 10 000 €, Prime contractor: Univ. do Minho (F. Vaz); ITN Coordinator: E. Alves	3 300,00
<i>Regularity and stability of ordered mesoporous materials containing aluminium and titanium</i> FCT, POCTI/CTM/45859/2002, 2004- 2007, ITN budget: 15 750 € Prime contractor: Univ. de Évora (M. Carrot); ITN Coordinator: E. Alves	4 725,00
<i>Superconducting borides: properties and materials processing</i> , FCT, POCTI/CTM/39340/2002, 2003-2007, Total budget: 122 775 €, ITN budget: 17 550 € Prime Contractor: Univ. Aveiro (V. Amaral), ITN Coordinator: E. Alves	---
<i>Deposition of photocatalytic and self-cleaning Titania on glass surfaces</i> FCT, POCTI/FIS/58240/2004, 2005-2008, Total budget: 95 000 €, ITN budget: 11 565 € Prime contractor: Universidade do Minho (C.Tavares); ITN Coordinator: E. Alves	5 000,00
<i>Synthesis and characterization of diluted magnetic semiconductors for spintronics applications</i> FCT, POCTI/FIS/61462/2004, 2005-2007, Total budget: 75 000 €, ITN budget: 22 000 € Prime Contractor: Univ. Aveiro (N. Sobolev), ITN Coordinator: E. Alves	9 670,46
<i>Development of transparent and conductive oxide semiconductors p-type: from synthesis to devices-poxi</i> , FCT, POCTI/CTM/55945/2004,2005-2007, Total budget: 78 170 €, ITN budget: 19 372 €, Prime Contractor: Univ. Nova (E. Fortunato), ITN Coordinator: E. Alves	---
<i>Optical doping of AlN and GaN/AlN nanostructures by ion implantation</i> FCT, POCI/FIS/57550/2004, 2005-2008, Total budget: 75 000 €, ITN budget: 43 740 € Prime Contractor: ITN; Coordinator: Katharina Lorenz	27 148,43
<i>Ion-implanted magnetic nanolayers of wide band gap semiconductors for spintronics applications</i> FCT, PTDC/FIS/66262/2006, 2007- 2010, Total budget: 157 980 €, ITN budget: 50 766 € Prime Contractor: ITN, Coordinator: U. Wahl, 2006 ITN budget: € 15.230	15 230,00
<i>Ion implantation doping of perovskites and related oxides</i> , IAEA Research Agreement no. 13325 Total budget 2 000 €, ITN budget 2 000 €, Prime Contractor: ITN, Coordinator: U. Wahl	---
<i>Friction and wear mechanisms in orthopaedic prostheses: influence of the composition of the periprosthetic fluid</i> , FCT, POCI/SAU-BMA/55493/2004, 2005-2007, Total budget: 95 220 €, ITN budget: 25 200 €, Prime Contractor: IST (B. Saramago), ITN Coordinator: E. Alves	---

RESEARCH PROJECTS

<i>Upgrade of the National Facility high-temperature materials laboratory and construction of a second beam line for a high-temperature small-angle X-ray scattering spectrometer, CONC-REEQ/814/2001, 2006-07, Total budget: 385000€, Prime contractor ITN Coordinator: E. Alves</i>	38 500,00
<i>Processing and Characterization of Nanostructure ODS-RAFM steels, Cooperação científica e Técnica Luso-Espanhol, Convénio GRICES/CSIC, 2007-2008, Coordinator: E. Alves</i>	---
<i>Ternary and quaternary nitride alloys for lattice matched heterostructures: Novel materials for high efficiency field effect transistors and optoelectronic devices, FCT, PTDC/FIS/65233/2006, 2007-2009, Total budget: 153 240 €, ITN budget: 93 720 €, Prime Contractor ITN, Coordinator K. Loren</i>	45 972,00
<i>NanoFFAWN, FCT, PTDC/CTM/68142/06, 2007-2009, Total budget: 140 000 €, ITN budget: 35 005 €, Prime Contractor: IST (R. Colaço), ITN Coordinator: E. Alves</i>	---
<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 FCT, PTDC/CTE-GIN/67027/2006, 2007-2009, Total budget: 90 000 €, ITN budget: 9 600 € Prime contractor: INETI/CREMINER-FCUL (N. Rosa), ITN coordinator: L.C. Alves</i>	---
<i>POLIFILM - Multifunctional films for flexible and plastic material applications, FCT, PTDC/CTM/69362/2006, 2007-2009, Total budget: 108 000 €, ITN budget: 18 166 € Prime Contractor: Univ. do Minho (F. Vaz), ITN Coordinator: E. Alves</i>	---
<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 FCT, POCI/CTE-GEX/61700/2004, 2006-2007, Total budget: 53 400 €, ITN budget: 10 113 € Prime contractor: FCUL/Dep. of Geology (J. Figueiras), ITN coordinator (J.C. Waerenborgh)</i>	---
<i>Physics and technology of ultra-fast memories based on $Si_{1-x}Ge_x$ nanocrystals with dielectric tunneling layers, FCT, Research Contract PTDC/FIS/70194/06, 2007-2009, ITN budget 25 560 €, Prime Contractor: Univ. do Minho (Maria de Jesus), ITN Coordinator: E. Alves</i>	---
<i>Medida da secção eficaz de dispersão elástica de protões para elementos leves – validação de um método utilizando amostras bulk, IAEA 13273/R0/Regular Budget Fund (2ª renovação) 2007-2008, Total budget: 4 000 €, Prime contractor: ITN, Coordinator: A.R. Ramos</i>	4 000,00
Closed projects and Services	21 552,99
Total budget	232 328,3

Materials Characterization with Radioactive Nuclear Techniques

Current Projects

	2007 ITN budget in €
<i>Perturbed Angular Correlations and Emission Channelling Experiments at ISOLDE-CERN FCT, POCI/FP/63435/2005, 2006-2007, Total budget: 45 000 €, ITN budget: 39 000 €, FUL (CFNUL) budget: 6 000 €, Prime Contractor: ITN, Coordinator: J.G. Correia et al.</i>	29 225,56
<i>POCT/FP/63911/05</i>	13 000,00
<i>POCI/FP/81921/07</i>	13 000,00
Total budget	55 225,56

Nuclear Reactions

Current Projects

	2007 ITN budget in €
<i>Transfer reactions in Li-α key to the primordial universe, FCT, POCTI/FNU/45092/2002, 2004-2007, Total Budget: 54 000 €, Prime contractor: CFNUL, Coordinator: A.P. Jesus</i>	---
Total budget	---

Condensed Matter Physics

Current Projects

2007 ITN budget in €

<i>Hybrid Materials Prepared by Irradiation</i> , FCT, POCTI/CTM/44150/2002, 2004-2007	
Total budget 87 000 €, ITN budget 78 125 €, Prime contractor: ITN, Coordinator: F.M. Margaça	17 400,00
Total budget	17 400,00

Solid State

Current Projects

2007 ITN budget in €

<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>	332,82
POCI/CTE-GEX/61700/2004, 2006 - July 2008, Total budget 53 400 €, ITN budget 10 111 €, Prime contractor: Fundação FCUL, Coordinator: J. Figueiras, Partners: ITN, J.C. Waerenborgh	
<i>Synthesis and characterization of new U and Fe compounds with Ge, Ga and Sb</i> , PTDC/QUI/65369/2006. Oct. 2007-Oct. 2009, Total budget € 28 440, ITN budget € 28 440, Prime contractor: ITN; Coordinator: A.P. Gonçalves, Partners: IST (P.A. Carvalho)	---
<i>Thiophenic Dithiolates as building blocks in molecular materials: Physical properties – Crystal structure correlation</i> , POCTI/QUI/45108/2002. Sep.2003-March2007, Total budget € 88 045, ITN budget € 88 045, Prime contractor: ITN Coordinator: I.C. Santos	---
<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 Coordinator: M. Almeida	122 938,89
<i>EXTADITIOL Novel highly extended transition metal bisdithiolene complexes</i> , POCTI/QUI/57528/2004, 2005 - 2007, Total budget € 63500, ITN Coordinator: M. Almeida	18 413,48
<i>Brownmillerite compounds containing Iron (IV): new materials for SOFCs</i> , POCI/QUI/58915/2004, Sep.2005-Aug.2007, Total budget 58 000 €, ITN budget 9 600 €, Prime contractor: Fundação FCUL, Coordinator: M. Deus Carvalho, Partners: ITN, J.C. Waerenborgh	3 881,51
<i>Structural and Magnetic Study of Low-dimensional Coordination Compounds</i> , POCI/FIS/57876/2004, Mar.2005-Feb.2007, Total budget € 80 000, ITN budget € 12 500, Prime contractor: Coimbra Univ., Coordinator: M.R. Marques da Silva, ITN Coordinator L.C.J. Pereira	5 000,00
<i>Unidade de Caracterização Magnética</i> , FCT, REEQ/322/QUI//2005 Total budget € 350 000, ITN Coordinator: M. Almeida	14 093,14
<i>Electrochemical synthesis of actinide intermetallic compounds</i> , ACTINET 07-09, Nov.2007–Dec. 2008, Total budget 58 000 €, ITN budget 9 600 €, Prime contractor: EC, JRC,ITU, Karlsruhe, Germany; Coordinator: F. Wastin, ITN Coordinator A.P. Gonçalves	---
<i>Molecule magnets based on decamethylmetallocenes and DCNQI derivative planar acceptors</i> , POCTI/39601/QUI/2001, April 2002-April 2006, Total budget € 71 400, ITN budget € 60 300, Prime contractor: ITN Coordinator: V. Gama	---
<i>PAC-ATD</i> , AdI Consortium, <i>Development of a multipurpose high temp. furnace</i> , 2006 - 2007 ITN budget 52 000€, Prime contractor: Termolab; ITN Coordinator: A.P. Gonçalves	---

RESEARCH PROJECTS

CERCA, Consortium, <i>Development of techniques for processing uranium alloys as foils</i> , 2006 – 2007, Total budget 37 500€, Prime contractor: ITN; Coordinator: A.P. Gonçalves	22 500,00
<i>Low temperature properties of new intermetallic compounds containing uranium and rare earths</i> , Projecto de Acções Integradas de Cooperação Científica e Técnica Luso-Francesas, Programa Pessoa (acordo GRICES/EGIDE), 2007/2008, Total budget € 2.000, ITN budget € 2.000, Prime contractor: ITN Coordinator: A.P. Gonçalves	2.000
<i>New materials for thermoelectric applications</i> , Projecto de Cooperação Científica e Técnica Luso-Francesas ao abrigo do Convénio GRICES/CNRS, 2007-2008, Total budget € 2.000, ITN budget € 2.000, Prime contractor: ITN Coordinator: A.P. Gonçalves	2.000
<i>Study of new strongly correlated systems</i> , ICCTI/ASCR (Academia das Ciências da Rep. Checa) 2007, Total budget €1900, ITN budget €1900, Prime contractor: ITN Coordinator: A.P. Gonçalves	1.460
<i>New transition metal bisdithiolene complexes for conducting and magnetic materials</i> , Projecto de acções integradas de cooperação científica e técnica Luso-Francesa, GRICES/CNRS, 2007. Total budget € 2000, ITN budget € 2000, Prime contractor: ITN Coordinator: M. Almeida	2.000
<i>37^{èmes} Journées des Actinides 2007</i> Organizing Committee: A.P. Gonçalves (Chairman), J.C. Waerenborgh, L.C.J. Pereira, M. Almeida, J.A. Paixão (FCTUC), M. Godinho (FCUL).	74.030,79
<i>VELAN- Testes de válvulas criogénicas</i> ITN Coordinator: M. Almeida	7.036,50
<i>Other Projects (closing of older projects).</i> ITN Coordinator: M. Almeida	2.750
Total budget	278 437,13

Atmospheric Elemental Dispersion

Current Projects

	2007 ITN budget in €
<i>Impacto do aerossol atmosférico na saúde humana</i> , PPCDT/AMB/55878/2004, 2005 - 2008, Total budget € 78205, ITN budget € 51313, Prime contractor: ITN, Coordinator: M. C. Freitas	10 752,00
<i>Implementation of Compton suppression spectrometry for air pollution monitoring</i> , IAEA TC POR/6/004, Jan.2005-Dec.2007, Total budget € 59612, ITN budget € 59612, Prime contractor: ITN, Coordinator: M.C. Freitas	---
<i>Optimization of neutron activation technique in the Portuguese Research Reactor. Application to studies on environment, nutrition and health</i> , REEQ/1075/FIS/2001, Jan.2005-Dec.2007 Total budget € 220000, ITN budget € 220000, Prime contractor: ITN, Coordinator: M.C. Freitas	9 082,52
Total budget	19 834,52

Elemental Characterization and Speciation

	2007 ITN budget in €
<i>Laboratório de Caracterização e Especificação de Aerossóis - LCEA</i> , FCT, REEQ/377/FIS/2005, 2005-2007, Total budget: 700 000 €, ITN budget: 700 000 € Prime contractor: ITN, Coordinator: M. A. Reis	63 000,00
<i>Mecenato com a ValorSul</i> , 2006-2008, Total budget € 12000, ITN budget € 12000 Prime contractor: ITN, Coordinator: M.A. Reis	4 000,00
Total budget	67 000,00

Environment and Analytical Chemistry

Current Projects

	2007 ITN budget in €
<i>Centre for isotopes and trace elements research</i> , CISTER, 2005–2008, Total budget:183 700 €, Prime contractor: ITN, Coordinator: M.F. Araújo	9 200,00
<i>Dissolved gases in subsurface hydrology–CO₂-rich thermomineral waters (N-Portugal)</i> , POCTI/CTA/45159/2002, 2005 – 2007, Total budget: 50 000 €, ITN budget: 35 800 € Prime contractor: ITN, Coordinator: P.M. Carreira	10 000,00
<i>Carbonate Dunes as Palaeoclimatic Records in the Littoral of Portugal</i> POCTI/CTE-GEX/59643/2004, 2005 – 2007, Total budget: 41 000 €, ITN budget: 4 320 € Prime contractor: FUL, ITN coordinator: A.M.M. Soares	2 382,00
<i>Assessing the impacts of agriculture on groundwater quality using nitrogen isotopes</i> POCTI/AGG/47223/2002, 2004 – 2007, Total budget: 105 000 €, ITN budget 28 000 € Prime contractor: Instituto Superior Técnico, ITN coordinator: P.M. Carreira	7 245,00
<i>Metallurgy and society in central Portugal Late Bronze Age</i> , POCTI/HAR/58678/2004, 2005-2008, Total budget: 52 150 €, ITN budget: 27 535 €, Prime contractor: Faculdade de Letras, ITN coordinator: M.F. Araújo	7 475,00
<i>Microecology and littoral dynamics: definition of multi-proxies applicable to quaternary paleogeographical and paleoclimatic reconstruction</i> , POCTI/CTA/45185/2002, 2005 – 2008,	3 846,00

RESEARCH PROJECTS

Total budget: 100 000€, ITN budget: 20 000€, Prime contractor: FCUL, ITN coordinator: M.F. Araújo		
<i>Role of high mountain areas in catchments water resources – Northern/Central Portugal</i>		
POCTI/CTA/44235/2002, 2005 – 2007, Total budget: 100 000 €, ITN budget: 15 540 €		---
Prime contractor: Instituto Superior Técnico, ITN coordinator: P.M. Carreira		
<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 – 2007, Total budget: 61 500 €, ITN budget: 15 000 €		1 924,09
Prime contractor: Instituto das Ciências da Terra e do Espaço, ITN coordinator: P.M. Carreira		
<i>Urban groundwater and environmental management in the Northwest Portugal</i>		
POCI/CTE-GEX/59081/2004, 2005 – 2007, Total budget: 58 000 €, ITN budget: 7 100 €		804,36
Prime contractor: Universidade de Aveiro, ITN coordinator: P.M. Carreira		
<i>Evaluation, management and protection of hydric resources in semi-arid zones. Application of hydrodynamic, hydrochemical and isotopic methods in Essaouira Basin, Morocco</i>		
GRICES/3274, 2006 – 2007, Total budget: 2 100 €, Prime contractor: ITN, Coordinator: P.M. Carreira		---
<i>Identification of interaction processes between surface waters and shallow groundwaters within Sado hydrographical basin – SW Portugal, RA12957/RO, 2004 – 2007, Total budget: 4 500 €, Prime contractor: ITN, Coordinator: P.M. Carreira</i>		
500 €, Prime contractor: ITN, Coordinator: P.M. Carreira		
<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 €,		6 336,00
Prime contractor: Fundação da Faculdade de Ciências, ITN coordinator: M.F. Araújo		
<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, 2006 – 2008, Total budget: 90 000 €, ITN budget: 13 700 €		---
Prime contractor: Universidade dos Açores, ITN coordinator: P.M. Carreira		
Total budget		49 212,45
Closed projects and Services		
<i>Consequences of river discharge modifications on coastal zone and continental shelf</i>		
PLE/8/00, 2001 – 2006, Total budget: 623 497 €, ITN budget: 242 133 €		98 470,00
Prime contractor: ITN, Coordinator: M.F. Araújo		
<i>Services</i>		
		4 486,02
Total budget		102 956,02

Environmental and Health Sciences

Biomedical Studies

Current Projects

2007 ITN budget in €

<i>A pele como órgão de monitorização da acumulação de ferro na hemocromatose</i> , SPDV (Soc. Port. de Dermatologia e Venereologia), 2004-2007, Total budget: 12 000 €, Prime contractor: Hosp. Sta. Maria, Coordinator: R. Silva; ITN Coordinator: T. Pinheiro	---
<i>Nuclear microprobe analysis of human skin applied to the study of haemochromatosis</i> IAEA, RC 302-F1.20.19-POR-13262, 2006-2007, Total budget: 4 500 €, ITN budget: 4 500 €, Prime contractor: ITN, Coordinator: T. Pinheiro	4 000,00
<i>T-cell subsets modulation in psoriatic lesions by photo(chemo)therapy and systemic biological agents</i> Serono (Prize Clinical Research in Psoriasis), Fundacion Salud 2000, 2006-2008, Total budget: 20000 €, Prime contractor: Hosp. S ^{ta} Maria, Coordinator: P. Filipe, ITN Coordinator: T. Pinheiro	---
<i>Systemic markers evaluation of oxidative stress in cardiac failure</i> , 2005-2007, Total budget: 6000 €, Prime contractor: Hosp. S ^{ta} Marta, Coordinator: R. Cruz Ferreira, ITN Coordinator: T. Pinheiro	---
Evaluation of cell activation and systemic markers in the acute myocardial infarction, 2005-2007, Total budget: 32 000 €, Prime contractor: Hosp. Sta. Marta, Coordinator: R. Cruz Ferreira, ITN Coordinator: T. Pinheiro	---
<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> , 2006-2008, Total budget € 24 000, Prime contractor: Hosp. Sta Marta, Coordinator: R. Cruz Ferreira, ITN Coordinator: T. Pinheiro	---
<i>Exhaled breath condensate: a tool for non-invasive evaluation of pollutant exposition</i> , FCT, PTDC/AMB/65828/2007, Total budget: 199 366 €, Prime contractor: Instituto de Soldadura e Qualidade Coordinator: S.M.L. Almeida, ITN Coordinator: T. Pinheiro	---
<i>The relationship of circulating biomarkers of apoptosis and endothelial function with the plaque composition using VH IVUS</i> , FCT, PIC/IC/82734/2007, Total budget: 162 480 €; ITN budget: 115 400 €, Prime contractor: ITN, Coordinator: T. Pinheiro.	---

Total budget 4 000,00

Inorganic Chemistry, Radiochemistry and Radiopharmacy

Inorganic and Organometallic Chemistry

Current Projects

2007 ITN budget in €

Mass Spectrometry Network - Instituto Tecnológico e Nuclear, REEQ/1503/REM/2005, 2005-2007, Total budget 175 615€, ITN budget 175615€, Prime contractor: ITN Coordinator: J. Marçalo 15 457,11

Thermochemistry Studies of Actinide Species in the Gas Phase by FTICR/MS POCI/QUI/58222/2004, Jul 2005 - Jun 2008, Total budget 58 000 €, ITN budget 58 000 € 32 343,84
Prime contractor: ITN; Coordinator: J. Marçalo

Research Unit "Vidro e Cerâmica para as Artes", FCT/UNL, Supported by FCT/MCTES, 2007
Total budget 24 000€, ITN Coordinator: A. Pires de Matos ---

Provenance Studies of Portuguese Glasses, 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 3 248,00

Glass in Art: Light and Colour, 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 ---

Glass Art and 2D and 3D Printing, 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 ---

Programa de Aquisição de Competências em Construção de Aparelhos de Análise Térmica Diferencial (PAC-ATD), IDEIA, 2006 – 2007, Total budget 55 300€, ITN budget 14 500€ ---
Prime contractor: Termolab; Coordinator: F. Simões, ITN coordinator: A. Gonçalves, J. P. Leal, J. Branco, R. Silva

Energetics and Structure of Apatites, GRICES/DAAD, 2006 – 2007, Total budget 3 000€ ---
Prime contractor: FFC-UL; Coordinator: M. E. Minas da Piedade, ITN Coordinator: J. P. Leal

Implementation of Wastewater Treatment by Radiation in Portugal, IAEA POR/8/010, 2003 -
Total budget 152 088€, ITN budget 33500€, Prime contractor: ITN; Coordinator: M. L. Botelho ---

Upgrading of Radiation Technology Unit, REEQ/996/2001, 2005–2008, Total budget 1 430 000 €, ITN budget 1 300 000€, Prime contractor: ITN; Coordinator: M.L. Botelho ---

Services 691,00

Total budget 51 739,95

Inorganic and Radiopharmaceutical Chemistry

2007 ITN budget in €

Virtual Radiopharmacy: A mindful Learning Environment: V Framework Programme Programme, EC Shared COST RTD ACTION: IST-2001-32291, Jan. 2002-February 2005 ---
Total budget 2992787 €, ITN budget 80167 €; Prime contractor: St. Bartholomew's Hospital.
Coordinator: S. MATHER; ITN Coordinator: L. Gano

RESEARCH PROJECTS

<i>Co-Ordination Action on Education and Training in Radiation Protection and Radioactive Waste Management, VI Framework Programme: FP6/508835, Mar.2004-Jun.2005, Total budget 297600 €, ITN budget 10000 €. Prime contractor: GRC, UK, ITN Coordinator: I. Santos</i>	---
<i>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 73 000€, ITN budget 73000€; Prime contractor: ITN Coordinator: I. Santos</i>	27 838,63
<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 Coordinator: I. Santos</i>	112 496,85
<i>Novel Radioactive Probes for Molecular Imaging of Sigma Receptors, POCI/QUI/59588/2004, Oct.2005- Apr.2009, Total budget € 45000, ITN budget € 45000; Prime contractor: ITN, Coordinator: A. Paulo</i>	13 988,00
<i>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 Coordinator: A. Paulo</i>	20 572,63
<i>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 Coordinator: M. C. Melo e Silva</i>	---
<i>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-FCF/58855/2004, Jan.2005-June 2009; Total budget 80000€, ITN budget 79000€; Prime contractor : ITN Coordinator: J. D. G. Correia</i>	13 123,73
<i>Lanthanide Complexes as Potential Therapeutic Agents: Chemistry, Radiochemistry and Biological Studies. Bilateral Project GRICES/Academy of Sciences of Czech Rep. 2006/2007; Total budget 1570€, ITN budget 1570 €; Prime contractor : ITN Coordinator: I. Santos</i>	---
<i>Novel Drugs to Target Bio-Receptors Aimed at Pharmacological Applications. PDCT/QUI/56985/2004, Sept 2006-Sept 2009. Total budget 59000€, ITN budget 4800 € Prime contractor: IST, M.A. Santos, ITN Coordinator: L. Gano</i>	---
<i>Co-ordinated Research Project On Development of ^{99m}Tc radiopharmaceuticals for sentinel node detection and cancer diagnosis, IAEA, 2007-2010, Participation of ITN as CRP Holder</i>	---
<i>Services and Training</i>	8 800,00
Total budget	196 819,84

Cultural Heritage and Sciences

Cultural Heritage and Sciences

Current Projects

2007 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, Coordinator: M.I. Prudêncio	29 115,00
<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 € Prime contractor: UE, A. Martins, ITN Coordinator: M.I. Dias	714,07
<i>Datação, origem e autenticação de cerâmicas arqueológicas</i> , Convénio GRICES-CSIC 00630 ITN budget: 1396,64 €, ITN Coordinator: M. I. Dias	698,32
<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 € , Prime contractor: U. Lisboa, C. Fabião, ITN Coordinator: M. I. Dias	---
<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, ITN Coordinator: M. I. Dias	---
<i>Transition landscapes: Settlement, technology and chrono-stratigraphy of the transition to farming, in Central Portugal</i> , PTDC/HAH/71361/2006, Total budget 199.740 €; ITN budget: 32.400 €, Prime contractor: I.P.Tomar, L. OOSTERBECK, ITN Coordinator: M. I. Dias	---
Total budget	30 527,39

Contracts / Services

ITN budget in €

Luminescence (TL-OSL) absolute dating	8632,23
Chemical and mineralogical characterization of ceramics and clay materials	1652,89
Total budget	40812,51

Radiation Technologies: Processes and Products

Current Projects

2007 ITN budget in €

<i>Impact of e-beam and γ radiation on the wastewater treatment: comparative studies</i> , IAEA, 302-F2-POR-12017 B5-POR- 30739, 2002-2005, Total budget: 10 500 US\$, ITN budget: 10 500 US\$, Prime contractor: ITN, Coordinator: M.L. Botelho	1 496,84
<i>Control environment in surgical rooms at the army hospitals and its impact on incidence of cross infections</i> , Research Contract LPM/MDN PIDDAC, 2003-2007, ITN budget: 50 000 € Prime contractor: H. Militar, Coordinator: Pet Mazarello, ITN Coordinator: M.L. Botelho (Budget corresponding to equipment and materials)	10 500,00
<i>Implementation of wastewater treatment by radiation in Portugal</i> , IAEA POR/8/010, 2003-2007, Total budget: 152 088 €, ITN budget: 33 500 € Prime contractor: ITN Coordinator: M.L. Botelho	---
<i>Upgrading of Radiation Technology unit</i> , FCT CONC-REQ/996/2005, 2005-2007 Total budget: 1 430 000€, ITN budget: 1 300 000 €, Prime contractor: ITN, Coordinator: M.L. Botelho	515 211,17
<i>Radiation Technologies: Processes and Products</i> , Training program IAEA – Student Fellowship, Jan.-Jul. 2007, ITN budget: 6 000 €, Prime contractor: ITN, Coordinator: M.L. Botelho	6 000,00

Contracts / Services

ITN budget in €

Laboratory training in “Microbiota inactivation by gamma radiation”. Service requested by University of Coimbra	1 280,99
Scientific advisor in Project “MYCOARCHIVE”, ref. III/AMB/12/Project. Service requested by University of Coimbra	1 033,06

Total budget 535 522,06

