

Program - Timetable

30 th Oct.		31 st Oct.		1 st Nov.		2 nd Nov.	
		08h30	Conference Registration	08h30	Conference Registration		
		09h00	Opening Session	09h00	Plenary session 2		
		09h30	Plenary session 1 Keynote Presentation A Prof. Sebastião Foyo de Azevedo Keynote Presentation B Prof. Sérgio Machado dos Santos		Keynote Presentation C Eng^o José Amaro Marques Nunes Keynote Presentation D Dr. Vasco Trigo		
		10h30	Coffee Break	10h30	Coffee Break		
		11h00	Sessions A	11h00	Sessions D		
		12h30	Lunch	12h45	Lunch		
13h30	Workshop Registration					10h00	Post-Conference Social Program
14h00	Pre-Conference Workshop (1st period)	14h00	Sessions B	14h00	Session E		
15h30	Coffee Break	15h30	Coffee Break	15h30	Poster Session and Coffee Break	Gaviota Project	
15h50	PCW (2nd period)	16h00	Sessions C				
17h20	Coffee Break			17h00	Closing Session Awards Presentation		
17h40	PCW (Wrap up)						
19h00	Welcome Cocktail	20h00	Conference Dinner				

Detailed Program

Wednesday, October 30, 2013

Workshop registration

13:30 - 14:00 - Registration desk at *Sala de Eventos* (A202)

Workshop

14:00 - 18:30 - Room I204

Essentials of Learner-Centered Teaching - Stephanie Farrell, Rowan University, US

Conference registration

15:30 - 18:30 - Registration desk (E206)

Social event - Welcome Cocktail

19:00 - 20:00 - Casa do Infante

(Meeting at ISEP at 18:30 for transportation to the Welcome Cocktail venue)

Thursday, October 31, 2013

Conference registration

8:30 - 17:30 - Registration desk (E206)

Opening session

9:00 - 9:30 - *Auditório E* (E207)

Plenary session 1

9:30 - 10:30 - *Auditório E* (E207)

Chair: Gustavo Alves

Educational quality in engineering, Invited speaker: Sebastião Feyeo, University of Porto, PT

Accreditation in Engineering Courses, Invited speaker: Sérgio Santos, University of Minho, PT

Break

10:30 - 11:00 - *Auditório E* (E207) lobby

Session A1- Designing Courses for Higher Order Thinking

11:00 - 12:30 - *Auditório E* (E207)

Chair: Ana Pavani

Co-Chair: Carlos Felgueiras

#4 - Lean learning academy: an international project for the development of an innovative framework for training of engineers on Lean Manufacturing - Carlos Carvalho, Manuel Lopes, Galvão Ramos, Paulo Ávila, Luis Fonseca, João Bastos and Ignace Martens

#9 - Engineering the future: A global Endeavor - An online course for transnational learning experiences with German and US students - Dominik May and Stephanie L. Moore

#45 - The European Project Semester at ISEP: Learning to Learn Engineering - Benedita Malheiro, Manuel Silva, Maria Ribeiro, Pedro Guedes and Paulo Ferreira

#65 - A joint academy-industry initiative for the development of an engineering program - João Cunha, Pedro Amaro and Luís Marques

#69 - Promoting problem solving skills and high order thinking in Geotechnical courses - Margarida Pinho-Lopes and Joaquim Macedo

Session A2 - Role of Engineers and Engineering Education in Society

11:00 - 12:30 - *Sala de atos* (E208)

Chair: José Couto Marques

Co-Chair: Maria Clara Viegas

#1 - Materials Scientists, Engineers and Product Designers: not so different after all -

Arlindo Silva, Hannah Melia and Philippe Radlovic

#17 - Challenges of Engineering Education in a Global World - Isabel C. Teixeira and João Paulo Teixeira

#38 - Conceiving Modern Engineers within the Framework of the Sustainability Action Plan (PASUS) of ISEP: Sustainability Matters! - Nidia Caetano, Ana Meira, Luís Castanheira, Marílio Cardoso, António Silva and João Rocha

#44 - Portuguese engineering practice: Two empirical studies and a 15th century perspective - Bill Williams and José Figueiredo

#59 - Ethics and academic fraud among higher education engineering students in Portugal - Paulo Gama, Filipe Almeida, Ana Seixas, Paulo Peixoto and Denise Esteves

Lunch

12:30 - 14:00 - Restaurante & Bar (F227)

Session B1 - Computers and Mobile Devices in Engineering Education

14:00 - 15:30 - *Auditório E* (E207)

Chair: Dominik May

Co-Chair: Maria Arcelina Marques

#18 - Application of a Mobile Personal Learning Environment to a Computer Science subject - Miguel Conde and Francisco Peñalvo

#24 - Tool to Support Computer Architecture Teaching and Learning - Bruno Nova, António Araújo and João Ferreira

#29 - Remote Experimentation Using Mobile Devices - André Fidalgo, Willian Rochadel and Juarez Silva

#71 - Interactive simulators: a contribution to link theory and applications in the teaching of chemical processes - Maria Rasteiro

#74 - Using games to teach programming - Karel Perutka, Petr Hrubos and Tomas Sedlak

Session B2 - Problem solving and creativity

14:00 - 15:30 - *Sala de atos* (E208)

Chair: Stephanie Farrell

Co-Chair: João Paulo Teixeira

#16 - Creative Thinking in Chemical Product and Process Design Education - Isabel João and João Silva

#33 - Unblinding a Braille machine - a case study of reverse problem-based learning - Ricardo Silva, Ricardo Moreira, Luis Gouveia and Manuel Felgueiras

#36 - More activity, less lectures: a technology stewardship approach applied to undergraduate engineering learning - Pedro Neto and Bill Williams

#55 Teaching and learning mathematical modelling and problem solving: a case study - Dag Wedelin, Tabassum Jahan, Tom Adawi and Sven Andersson

#70 - 2,4,6-trichloroanisole evolution during cork stabilization: The contribution of a Masters' student internship to the resolution of an industrial problem - Diva Correia, Maria Pinto, Luis Castro and Maria Pinheiro

Break

15:30 - 16:00 - *Auditório E* (E207) lobby

Session C1 - Using Online Tools to Facilitate Learning

16:00 - 17:30 - *Auditório E* (E207)

Chair: Carlos Sá da Costa

Co-Chair: Celina Pinto Leão

#23 - WIDE an Interactive Web Integrated Development Environment to Practice C Programming in Distance Education - [Mohammed Serrhini](#) and Abdelazziz Ait Moussa

#37 - A Mobile Platform for Open Learning based on Serious Games and Remote Laboratories - Iñigo Iturrate, Gustavo Martín, Javier García-Zubia, Ignacio Angulo, Pablo Orduña, Olga Dziabenko, Gustavo Alves and [André Fidalgo](#)

#41 - Visualization of electric field lines in an engineering education context - Renato Sousa, [Paulo Garcia](#), Vítor Marinho and Ana Mouraz

#63 - Ethic in Massively Multiplayer Online Role-Playing Games - [Veronika Abramova](#) and Jorge Bernardino

#78 - Insights on web-based peer review: a case study with energy engineering students - [Caroline Dominguez](#), Ana Maia, Daniela Pedrosa, Maria Nascimento

Session C2 - Mathematical Competences and Computational Tools for Teaching Mathematics in Engineering

16:00 - 17:30 - *Sala de atos* (E208)

Chair: Eduarda Pinto Ferreira

Co-Chair: João Paulo Barros

#10 - Teaching linear algebra in Portugal: patterns in the use of technology in engineering courses - [Ricardo Gonçalves](#) and Cecília Costa

#14 - Learning "Power Series" in the context of mathematical software and informatics environments - [José Magalhães](#), Floriano Viseu and Paula Martins

#15 - An Innovative Degree in Mathematical Engineering in the Portuguese Education System - Submission Process and Evaluation - [Jorge Santos](#), José Matos, Teresa Araújo, Manuel Cruz, Sandra Ramos and Ana Moura

#47 - Math diagnostic test in engineering: Dublin Institute of Technology and Coimbra Institute of Engineering - Carla Fidalgo, Emília Bigotte, João Branco, Vanda Santos and [Michael Carr](#)

#61 - The teaching of mathematics in engineering degrees: ACAM-Assessment of competences/improvement actions - Maria Emília Bigotte de Almeida and [Carla Fidalgo](#)

Social event - Conference dinner

20:00 - 23:00 - Burmester Port wine cellars

(Meeting at ISEP at 19:30 for transportation to the dinner venue)

Friday, November 1, 2013

Conference registration

8:30 - 12:00 - Registration desk (E206)

Plenary session 2

9:00 - 10:30 - *Auditório E* (E207)

Chair: Teresa Restivo

Industry-Academia cooperation as a driving force for wealth and jobs creation, Invited speaker: José Nunes, Petrochemical, Chemical and Refining Industries Association, PT

Promoting and disseminating science & engineering to society - Invited speaker: Vasco Trigo, Autonomous Univ. of Lisbon, PT

Break

10:30 - 11:00 - *Auditório E* (E207) lobby

Session D1- Research Aspects in Engineering Education

11:00 - 12:45 - *Auditório E* (E207)

Chair: Francisco García-Peñalvo

Co-Chair: Maria Benedita Malheiro

#26 - Engineering Education Research in Portugal: an emergent field of study - Natascha Hattum, José Oliveira and [Bill Williams](#)

#39 - Peer Observation of Teaching at U.Porto: A multidisciplinary approach to peer observation of teaching - [João Pêgo](#), José Ferreira, Ana Mouraz and Amélia Lopes

#42 - Shedding light on important mentorship relationships issues in advanced engineering education - [Celina Leão](#) and Ana Ferreira

#46 - Learner Autonomy in Higher Education: towards a validation of the PRO-SDLS scale to Portuguese engineering students - [Marina Duarte](#)

#56 - Managing Informal Learning in Engineering Contexts - [Clara Viegas](#), Maria Marques, Gustavo Alves, Nikolas Galanis and Francisco Peñalvo.

#60 - Curricular Unit Specification for Programme Assessment -- Fostering teacher reflection, while improving course catalogues - [João Barros](#)

Session D2 - Case Studies in Engineering Education

11:00 - 12:45 - *Sala de atos* (E208)

Chair: Caroline Dominguez

Co-Chair: João Cunha

#25 - A Simulation Platform for Automation Teaching - [Nuno Canadas](#), Carlos Barros, Jose Machado and Filomena Soares

#43 - Students' perspectives on Remote Physiological Signals Acquisition Experiments - Carla Barros, [Celina Leao](#), Filomena Soares, Graça Minas and José Machado

#48 - Concept Maps and Learning Objects: Part 2 - [Ana Pavani](#)

#73 - Modelling and Kinematic Simulation of Mechanical Toys - Pedro Vasconcelos and [Jorge Lino](#)

#77 - Training - Examples of multimedia content for distance learning - Maria Rasteiro, [Alberto Cardoso](#), Rita Gomes and Tiago Santos

#79 - An Industrial Robotics Course Based on a Graphical Simulation Package - [Manuel Silva](#)

Lunch

12:45 - 14:00 - Restaurante & Bar (F227)

Project GAVIOTA Technological Fair (Parallel event)

14:00 - 17:00 - Room A202

Session E (all papers are in Portuguese) - Ethics and General Perspectives in Engineering Education

14:00 - 15:30 - Room H202

Chair: Alberto Cardoso

Co-Chair: Raul Cordeiro

#32 - Relacionamento entre Disciplinas Integradoras e Competências e Habilidades Necessárias para a Formação do Engenheiro - [Fabiana Mendes](#), David Marinho, Tainara Reis, Eduardo Xavier, Ana Ferreira and Daniel Arboleda

#64 - De Estudante em Engenharia a Engenheiro de I&D - [Tiago Andrade](#)

#72 - Gestão Estratégica do Conhecimento: uma proposta de formação profissional - [Ana Sohn](#), Casarotto Filho, Filipa Vieira and João Artur De Souza

#76 - Ética no Registo de Patentes - [Carlos Peixoto](#) and Jorge Bernardino

#80 - Qualificação Pedagógica de Docentes do Ensino Superior - A Terceira Vaga - [José Marques](#)

Poster session

15:30 - 17:00 - Room A202

Chair: Jorge Lino

Co-Chair: Manuel Silva

#7 - pico-EV Eco Challenge in Japan: Administration - Yoshihiko Takahashi and Kazufumi Uda

#8 - Tools to Develop Quality of Life for Technical Thinkers in Various Generation Periods - Věra Strnadová and Petr Voborník

#12 - On Some Motivational Aspects of Study Performance - Dana Dobrovská and Pavel Andres

#13 - Scilab na Álgebra Linear - Paula Catarino and Paulo Vasco

#19 - Teamwork analysis - Florinda Martins and Eduarda Pinto Ferreira

#20 - Haptic Physics Learning - Luciano Santos and Carlos Vaz De Carvalho

#21 - Educação em Engenharia: Apontamentos sobre uma proposta de formação docente - Marinez Cargnin-Stieler, Marcelo C. M. Teixeira and Edvaldo Assunção

#31 - Ética na Robótica: que futuro estamos a construir? - Hugo Silva and Jorge Bernardino

#40 - Lean Engineering Education: bridging-the-gap between academy and industry -

Anabela Alves, Franz-Josef Kahlen, Shannon Flumerfelt and Anna-Bella Siriban-Manalang

#49 - Level Monitoring System for Waste Oil Containers: An EPS@ISEP Project - Marcos Moura, Mihkel Tasa, Olga Olejniczak, Naeem Ahmad, Benedita Malheiro, António Ferreira Da Silva, Manuel Santos Silva, Maria Cristina Ribeiro, Nídia Sá Caetano, Paulo Ferreira and Pedro Guedes

#51 - Jogos Sérios para Investigação na Área do Comportamento Humano - Helder Costa, Carlos Vaz de Carvalho and Leonor Vaz de Carvalho

#53 - Interactive Light and Sound Table: An EPS@ISEP Project - Aare Reimus, Izabela Miklaszewska, María Ricondo, Toma Jurjonaite, Benedita Malheiro, António Ferreira Da Silva, Manuel Santos Silva, Maria Cristina Ribeiro, Nídia Sá Caetano, Paulo Ferreira and Pedro Guedes

#66 Verticalização do Ensino Profissionalizante como Ferramenta contra Reprovações - Thiago C. Grilli, Henrique B. Rezende, Mathaus F. Silva, Carlos Wagner Moura and João Paulo P. N. Flauzino

#67 - Bringing Awareness to Hygiene and Safety Issues to the Young Stratum of Society - Susana Costa, Isabel F. Loureiro and Celina P. Leão

Closing session and awards presentation

17:00 - 17:40 - Room H202

Saturday , November 2, 2013

Social event - Post-conference social program

10:00 - 14:00 - Porto Ribeira (Douro Cruise + Gastronomic Lunch)