## Technical Program at a glance

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Detailed Technical Program

Wednesday, October 11, 2017

13.00-14.00  Registration Open

14.00-15.00  Opening session – Room A1.5

15.00-15.40  Keynote Talk 1 – Room A1.5
Facilitating The Wider Use Of Recycled Aggregates In The Production Of Structural Concrete
Jorge de Brito – Instituto Superior Técnico, Universidade de Lisboa

15.40-16.00  Poster Session / Coffee Break – Entrance Hall

16.00-17.20  Session 1 - Climate Changes and Environmental Protection – Room A1.5
Chair: Jorge de Brito

1.1 The environmental protection in South-American integration process: a Union of South American Nations (UNASUR) perspective
Isabela Battistello Espíndola and Celso Maran de Oliveira

1.2 Renewing Terraces and Drystone Walls of Algarvian Barrocal. Cultural and Touristic Values
Marta Marçal Gonçalves, Gonçalo Prates and Stefan Rosendahl

1.3 Rockfall Risk Assessment Along Clifford Coastlines of Algarve, Portugal
José Viegas, Jean-Pierre Gonçalves and Luís Andrade Pais

1.4 The development of indicators of sustainable mobility associated with an urbanism of proximity. The case of the city of Faro
Manuela Pires Rosa, Catarina Martins and José Rodrigues

16.00-16.40  Keynote Talk 2 – Room A1.4
Optimization of food products: Predictive modelling for safety and quality
Session 2 - Emergent Processes, products and packaging in the food industry – Room A1.4
Chair: Cristina Silva

2.1 Development of New Pastry Products and Jams with Shiitake Mushrooms
Paula M. R. Correia, Jéssica M. Monteiro, Raquel P. F. Guiné

2.2 Estimation of Proximate Composition of Quinoa (Chenopodium quinoa, Willd.) Flour by Near-Infrared Transmission Spectroscopy
Christian Encina-Zelada, Vasco Cadavez, Jorge Pereda, Luz Gómez-Pando, Bettit Salvá-Ruíz, Martha Ibañez, José A. Teixeira, Ursula Gonzales-Barron

Session 3 - Renewable Energy and Energy Efficiency – Room A1.3
Chair: José Oliveira

3.1 Case Studies on Energy Retrofitting
Fátima Farinha and Eurídice Cristo

3.2 Promotion of higher penetration of distributed PV through storage for all (StoRES)

3.3 Comparative analysis of the tracking efficiency of a Maximum-Power Point Tracker based on Maximum-Power Point Resistance Modeling versus a classic P&O
Juan Manuel Enrique Gómez, Antonio Javier Barragán Piña, Eladio Durán Aranda, Juan Ríos Gutiérrez, José Manuel Andújar Márquez, Isménio Martins, Jânio Monteiro and Jorge Semião

3.4 Sustainable Energy Communities: Implementation Study of a Wind Community in Algarve (Portugal)
Francisco Calhau, Pedro Pintassilgo and João Guerreiro

Welcome Reception – Faro Municipal Museum

Thursday, October 12, 2017

Keynote Talk 3 – Room A1.5
Toward the future of housing efficiency: leveraging technology, behavior, education and cost
Andrew Patton McCoy – Virginia Polytechnic Institute & State University

Session 4 - Sustainable Planning and Construction, Maintenance and Rehabilitation – Room A1.5
Chair: Andrew Patton McCoy

4.1 Temporary housing made from recycled paper tubes - A comparative study of housing “Paper Log House” and its adaptations to different contexts
Luana T. Carbonari and Lisiane I. Librelotto

4.2 Sustainable rehabilitation of an old building in Monchique
4.3 Validation of structural reinforcement solutions, in execution phase

Patrícia Barros, Carlos Martins and Jorge Renda

9.40-10.40 Session 5 - Innovative Solutions in Electric and Electronic Systems – Room A1.4
Chair: Luís Oliveira

5.1 An Open Hardware Electronic Controller for Motorized Rotary Injection Valves Used in Flow Injection Analysis.
Jose Ignacio Otero Bueno, Juan Daniel Mozo Llamazares, Eladio Duran Aranda and Jorge Semião
Analysis of Parameters that Affect Service Quality Indicators of a Medium Voltage Feeder Belonging to a Substation Ensemble of the Distributor Energisa Mato Grosso
Arnulfo Barroso de Vasconcellos; Saulo Roberto Sodré dos Reis; Priscila Costa Nascimento; Teresa Irene Ribeiro de Carvalho Malheiro; Reginato Domingos Scremim; Lourival Lippmann Junior; Giancarlo Covolo Heck; Mateus Witter; Savio Ricardo Muniz Aires da Costa; Priscilla Cristina Rodrigues de Lanas

5.3 The Influence of Electric Loads Switching on the Reactive Flow of a Voltage Bus
Arnulfo Barroso de Vasconcellos, Fabricio Parra Santilio, José Mateus Rondina, William Gustavo dos Santos, Gabriela Nunes Lopes, Gabriela Pessoa Campos, Igor Rossini Smerecki, and Teresa Irene Ribeiro de Carvalho Malheiro

9.40-10.40 Session 6 - Healthy Food & Mediterranean Diet – Room A1.3
Chair: Célia Quintas

6.1 Formulating snacks to increase pulses intake by children and the elderly
Manuela Guerra, Alice Pires, Andreia Nunes, Ariana Fernandes, Ana Lopes, Joana Costa, Olga Gonçalves and Carlos Brandão

6.2 Flavonoid profiles of Arbutus unedo L. pomaces
Maria Antónia Rodrigues, Ludovina Galego and José Paulo Da Silva

6.3 Influence of carob pod (Ceratonia siliqua L.) variety and processing on the antioxidant capacity and total phenolic content of carob liquors
Raquel Rodriguez-Solano, Miguel Dantas and Anabela Romano

10.40-11.00 Poster Session / Coffee Break – Entrance Hall

11.20-11.40 Keynote Talk 4 – Room A1.5
How Machine Learning is Affecting the Technical Development in the Automotive Industry
Marc Hilbert – Volkswagen AG

11.40-13.00 Session 7 - Technical Exibition – Room A1.5
Chair: Paulo Santos

7.1 CRIA - Divisão de Empreendedorismo e Transferência de Tecnologia da Universidade do Algarve
Hugo Barros
7.2 AREAL - Agência Regional de Energia e Ambiente do Algarve  
Paulo Martins

7.3 ITELMATIS Control Systems  
Jorge Luz

7.4 ANA – Faro Airport  
João Jesus

13.00-14.20 Lunch Break

14.20-15.00 Keynote Talk 5 – Room A1.5  
The Role of Reliability for Sustainability  
Marco Ottavi – University of Rome Tor Vergata

15.00-16.20 Session 8 - Innovative Solutions in Electronic and Computer Systems – Room A1.5  
Chair: Marco Ottavi

8.1 Power-Delay Analysis For Subthreshold Voltage Operation  
Hugo Cavalaria, Ruben Cabral, Jorge Semião, Marcelino Santos, Isabel Teixeira and Paulo Teixeira

8.2 Development of a measurement system for assessment of bubble production of seagrass  
J. Parente Silva, D. Nunes, P. Santos, P. Felisberto, and A.J. Silva

8.3 Performance Sensor For Subthreshold Voltage Operation  
Ruben Cabral, Hugo Cavalaria, Jorge Semião, Marcelino Santos, Isabel Teixeira and Paulo Teixeira

8.4 A non-intrusive IoT system for the Detection of Faults in Internal Combustion Engines  
Sergey Nogin, Jorge Semião and Jânio Monteiro

15.00-16.20 Session 9 - Water for Ecosystems and Society – Room A1.4  
Chair: José Monteiro

9.1 Public participation: a tool for water conservation and environmental management  
Albertina Raposo, A. Durão, M.M. Morais and Lia Vasconcelos

9.2 Conceptual approach for the modernization of sanitation systems in peri-urban slums and its application in Maputo city, Mozambique  
Miguel Subtil, José Saldanha Matos and Rui Ferreira Santos

9.3 Treatment Optimization of a Landfill Leachate Testing a Flotation Process Before the RO  
Tiago Barradas, Sanae Ajbar El Gueriri, Nuno Gomes, Miguel Nunes, Conceição Ribeiro and Manuela Moreira Da Silva

9.4 Almadrava: Men and sea. Social relationship in a short-term community  
Nuno Batista and Marta Marçal Gonçalves

15.00-16.20 Session 10 - Climate Changes and Environmental Protection – Room A1.3  
Chair: Mariana Golumbeanu

10.1 Low-Emission Rural Development in the Amazon
Fronika Claziena Agatha de Wit
The Importance of Improved Cooking Stove for Forest Conservation,
Economic Benefits and Climate Change Mitigation — A Bangladesh Case Study
Bishwajit Roy, Md. Habibur Rahman and Palash Sarker
Culture strategies for lipid production using low-cost carbon sources by Rhodosporidium toruloides
Valdemira Afonso, Laura Tangerino, Daiana Oliveira and Sara Raposo
Bioclimatic Analysis of Public Roads in the City of Manaus through Computational Simulation.
Larissa Galvão

17.20-20.00  City Tour – Faro Municipal Museum

20.00-23.00  Conference Dinner – Tertúlia Algarvia Restaurant

Friday, October 13, 2017

09.00-09.40  Keynote Talk 6 – Room A1.5
Sparkling New Life into Food Safety Research
Katherine Mary Flynn – The European Association for Food Safety – SAFE consortium

09.40-10.40  Session 11 - Food Safety – Room A1.5
Chair: Katherine Mary Flynn
11.1  Arbutus unedo L. fruit distillate from tradition to innovation
Ludovina Galego, Vera Francisco and Isabel Ratão
11.2  Arbutus unedo L. spirit: does the water addition before fermentation matters?
Ilda Caldeira, Filomena Gomes and Goreti Botelho
11.3  Assessment of the microbiological quality of dried aromatic herbs commercialized in the Algarve
Marcela Oliveira, Daniela Silva and Célia Quintas

09.40-10.40  Session 12 - Sustainable Planning and Construction, Maintenance and Rehabilitation – Room A1.4
Chair: António André
12.1  Light Steel Framing Social Housing as a Sustainable Construction Proposal
Daiane Duarte and Adnauer Daltro
12.2  Damage evaluation of rammed earth walls subjected to offshore earthquakes
João Estévão and Alfredo Braga
12.3  Earth construction in the Algarve - Past and future
Alfredo Manuel Braga, Miguel José Oliveira, Elisa M. J. Silva, and Luís Filipe Viana

Chair: João Rodrigues

13.1 Portable Device for Touch, Taste and Smell Sensations in Augmented Reality Experiences

13.2 MIRAR: Mobile Image Recognition based Augmented Reality Framework
João A.R. Pereira, Ricardo Veiga, Marco Freitas, João D.P. Sardo, Pedro J.S. Cardoso, and João M.F. Rodrigues

13.3 Managing Intangibles Relational Capital for the sustainability of the Energy Sector in the Social Media.
Ana-Maria Casado-Molina, Francisco Cabrera and Célia M.Q. Ramos

10.40-11.00 Poster Session / Coffee Break – Entrance Hall

11.00-11.40 Keynote Talk 7 – Room A1.5
Integrated Coastal Zone Management: a Sustainable Policy Tool for the Romanian Black Sea Region
Mariana Golumbeanu – Balkan Environmental Association (BENA)

11.40-13.00 Session 14 - Water for Ecosystems and Society – Room A1.5
Chair: Flávio Martins

14.1 Exploration of Constructed Wetlands WWTPs: Seven Years of Águas do Algarve Experience
Ana Pereira, Rui Fernandes, António Martins and Joaquim Freire

14.2 Nickel and nitrogen phytoremediation by Cyperus involucratus: nickel impairs biomass production and nitrogen removal
Manuela Moreira Da Silva and José A. Monteiro

14.3 The Best Destination to an Urban Treated Effluent in Algarve: Aquifer Recharge or an Ecohydrological Solution?
Noémia Bento, Yasmina Ben Abdessadak, Joaquim Freire, Elisa M. J. Da Silva and Manuela Moreira Da Silva

Chair: Isménio Martins

15.1 An application of Interleaved Zeta-Buck-Boost Combination Converter in Distributed Generation

15.2 Analysis of the Influence of Water Trees Geometrics’ Shapes in the Level of Degradation of the Power Cable’s Insulation
F. N. Lima, M. T. Sá, I. R. Smerecki, B. C. Carvalho, A.P. Finazzi

15.3 Evaluation of Predictive based Electric Vehicle’s Charge Scheduling Algorithms in Self-Consumption Scenarios
Dario Cruz and Jânio Monteiro

11.40-13.00 Session 16 - Sustainable Planning and Construction, Maintenance and Rehabilitation – Room A1.3
Chair: Jorge Isidoro

16.1 New Modular Bridges Solutions – A sustainable solution to connect people
António André, José Fernandes, Igor Soares and Pedro Pacheco

16.2 Numerical comparative analysis of second order effects of recycled aggregate concrete columns
   João Estêvão and Vitor Barreto

16.3 Green facades and living walls: the Portuguese experience
   Andreia Cortês, João Almeida, Myriam Kanoun-Boulé and António Tadeu

16.4 Impact of density on thermal conductivity of an insulation layer composed of rice by-products
   Beatriz Marques, João Almeida, Jorge De Brito and António Tadeu

11.40-13.00 Session 17 – IFA Workshop – Room A0.6
   Chair: Margarida Vieira

   17.1 IFA (ISEKI Food Association) - an European Association for Integrating Food Science and Engineering Knowledge Into the Food Chain
   Margarida Cortez Vieira (IFA National Representative- Portugal)

   17.2 The Open Innovation Network of Food Waste Recovery
   Charis Galanakis (Chair of the "Food Waste Recovery" IFA Special Interest Group)

   17.3 Traditional Foods @ 21st Century
   Dimitris Tsaltas (Chair of the "Traditional Food" IFA Special Interest Group)

   17.4 International Journal of Food Studies – An e-journal with a challenge story
   Cristina L.M. Silva – ESB/Universidade Católica Portuguesa & International Journal of Food Studies

13.00-14.20 Lunch Break

14.20-15.20 Panel Discussion – Room A1.5
   Moderator: Manuela Moreira da Silva
   José Rui Felizardo – CEIIA
   Luís Chicharo – ICCE-UNESCO
   Margarida Vieira – ISE/UAlg & ISEKI Food Association
   Marc Rechter – ENERCOUTIM

15.20-16.00 Closing session – Room A1.5

During all Coffee Breaks

Poster Sessions – Entrance Hall

Chair: Jaime Aníbal

P01 Analysis of Radio Signal Coverage in the Area of a Medium Voltage Feeder Using Radio Mobile Software
   Arnulfo Barroso de Vasconcellos, Saulo Roberto Sodré Dos Reis, Sharles Mendes Rodrigues, Priscila Costa Nascimento, Mateus Witter, Teresa Irene Ribeiro De Carvalho Malheiro, Reginato Domingos Scremin, Lourival Lippmann Junior and Giordano Bruno Wolaniuk

P02 Freshness and nutritional composition of several species of chilled seafood marketed in Luanda (Angola) and in Faro (Portugal)
Mirian Inocêncio de Sousa, Eduardo António Panguila, Ana Cristina Figueira and Eduardo Esteves

Evaluation of the freshness and shelf-life of fresh and chilled mackerel (Scomber spp.) and horse mackerel (Trachurus spp.), marketed in Luanda (Angola) and in Faro (Portugal)

Eduardo António Panguila, Mirian Inocêncio de Sousa, Eduardo Esteves and Ana Cristina Figueira

Assessment of freshness and quality of deep-water pink shrimp, Parapenaeus longirostris, stored in ice using physicochemical, microbiological and sensorial parameters

Jaime Aníbal, João Lagartinho and Eduardo Esteves

Education as a Tool to Reduce the Water Footprint of Young People

Milda Venckute, Manuela Moreira Da Silva and Mauro Figueiredo

Healthy, tasty and sustainable Mediterranean Food. UMAMI taste and polyphenols of twiggy glasswort (Salicornia ramosissima)

Abílio Guerreiro, Carimo Rassal, Carlos M. Afonso, Ludovina Galego, Manuel Serra, Maria A. Rodrigues

Economy as the Inducer Factor of the Number of Scientific Publications in the Field of Air Pollution

Felipe Francisco De Castro Passos and Emiliano Lôba De Godoi

Performance in soil erosion control of low-cost measures applied in burnt areas of NE Portugal: a USLE-based assessment

Tomás Figueiredo, Edson Lima, Felícia Fonseca, Luciano Fleischfresser and Zulimar Hernandez

Optimization of an Aeration System in a Wastewater Treatment Plant - Albufeira, Portugal

Lucas Cristóvão, Duarte Marinho, António Martins, Eduardo Esteves, Gil Fraqueza and Manuela M. Silva

Biodegradation of a Packaging Film from Plant Origin

Afroditi Drizou, Rui Cruz and Margarida Vieira

Characterisation of oil extracted from melon seeds (Cucumis melo var. reticulatus)

Raquel Carmo and Patricia Nunes

Effects of spoilage on nitrogen and carbon stable isotopes signatures of the clam Ruditapes decussatus

Jaime Aníbal, Cristina Veiga-Pires and Eduardo Esteves

Microbiological quality of seeds sold at supermarkets in Southern Portugal

Daniela Silva, Marcela Oliveira and Célia Quintas

Mathematical Modelling of Cholera Outbreaks

Davide Santos and Jorge Isidoro

A prototype of sustainable residential automation

Flávio Vitorino Queiroz, Denis Rogério Da Silva, Murilo Miceno Frigo and Eduardo Hiroshi Nakamura

Preliminary results of the pilot floating beds for eco-rehabilitation of contaminated water course

Cátia Rocha, A. Durão, T. Borralho and Adelaide Almeida

Production of baker’s yeast (Saccharomyces cerevisiae) from prickly pear fruit juice

Aicha Nancib, Nabil Nancib, Soumeya Kanouni, Sara Maouche and Joseph Boudrant
Residual yoghurt whey as a raw material for production of lactic acid by Lactococcus lactis subsp. lactis

Aicha Nancib, Nabil Nancib, Rania Boussekine, Sarra Benferhat and Joseph Boudrant

Establishment of a network for the development of innovative products with microALGAs: ALGARED +


A review of using alternative materials to improve the green roofs sustainability

Mônica Ciriac-Dias, Maria Martin-Morales, Maria Isabel Rodriguez-Rojas and Montserrat Zamorano