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Technical Program at a glance

	Wednesday - 11/Oct.			Thursday - 12/Oct.			Friday - 13/Oct.														
8.30				Registration Open			Registration Open														
9.00-9.20				Keynote Talk 3 - Room A1.5			Keynote Talk 6 - Room A1.5														
09.20-09.40				Session 4 - Room A1.5			Session 5 - Room A1.4	Session 6 - Room A1.3	Session 11 - Room A1.5	Session 12 - Room A1.4	Session 13 - Room A1.3										
09.40-10.00				Coffee Break / Posters Session - Entrance Hall			Coffee Break / Posters Session - Entrance Hall														
10.00-10.20				Keynote Talk 4 - Room A1.5			Keynote Talk 7 - Room A1.5														
10.20-10.40				Session 7 - Technical Exhibition - Room A1.5			Session 14 - Room A1.5	Session 15 - Room A1.4	Session 16 - Room A1.3	Session 17 - IFA Workshop - Room A0.6											
10.40-11.00				Registration open			Lunch			Lunch											
11.00-11.20														Open ceremony - Room A1.5			Keynote Talk 5 - Room A1.5			Panel Discussion - Room A1.5	
11.20-11.40														Keynote Talk 1 - Room A1.5			Session 8 - Room A1.5	Session 9 - Room A1.4	Session 10 - Room A1.3	Closing session	
11.40-12.00				Coffee Break / Posters Session - Entrance Hall			Coffee Break / Posters Session - Entrance Hall														
12.00-12.20				Session 1 - Room A1.5	Keynote Talk 2 - Room A1.4	Session 3 - Room A1.3	Coffee Break / Posters Session - Entrance Hall														
12.20-12.40				Session 2 - Room A1.4																	
12.40-13.00																					
13.00-13.20																					
13.20-13.40	Welcome reception - Faro Municipal Museum			City tour - Faro Municipal Museum																	
13.40-14.00											Conference Dinner - Tertúlia Algarvia Restaurant										
14.00-14.20																					
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17.20-18.30																					
18.30-20.00																					
20.00-21.00																					
21.00-23.00																					



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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 Cluffed 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

16.40-17.20 **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

16.00-17.20 **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)
S. Afxentis, M. Florides, C. Yianni, V. Efthymiou, I. Papageorgiou, G. Partasides, G. Papagiannis, G. Christoforidis, S. Mocci, A. Rubiu, J. Oliveira, J. Sancho, N. Poize, T. Pristovnik and G. E. Georghiou
Comparative analysis of the tracking efficiency of a Maximum-Power Point
- 3.3 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

18.30-21.30 **Welcome Reception – Faro Municipal Museum**

Thursday, October 12, 2017

9.00-9.40 **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

9.40-10.40 **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

Alexander Silva, António André and Mónica Moreira

- 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
- 5.2 Voltage Feeder Belonging to a Substation Ensemble of the Distributor Energisa Mato Grosso
Arnulfo Barroso de Vasconcellos; Saulo Roberto Sodr  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, Jos  Mateus Rondina, Willian 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: C lia 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 Gonalves and Carlos Brand o
- 6.2 Flavonoid profiles of *Arbutus unedo* L. pomaces
Maria Ant nia Rodrigues, Ludovina Galego and Jos  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 Rodr guez-Solana, 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 Exhibition – Room A1.5**

Chair: Paulo Santos

- 7.1 CRIA - Divis o de Empreendedorismo e Transfer ncia 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,
 10.2 Economic Benefits and Climate Change Mitigation — A Bangladesh Case
 Study
Bishwajit Roy, Md. Habibur Rahman and Palash Sarker
- 10.3 Culture strategies for lipid production using low-cost carbon sources by
 Rhodosporidium toruloides
Valdemira Afonso, Laura Tangerino, Daiana Oliveira and Sara Raposo
- 10.4 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**

Sparking 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 Daltra

12.2 Damage evaluation of rammed earth walls subjected to offshore
 earthquakes

João Estêvão 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

09.40-10.40 **Session 13 - Innovative Solutions for Tourism in Electronic and Computer
 Systems – Room A1.3**

Chair: João Rodrigues

- 13.1 Portable Device for Touch, Taste and Smell Sensations in Augmented Reality Experiences
J. D. P. Sardo, J. Semião, J. M. Monteiro, J. A. R. Pereira, M. Freitas, E. Esteves, João M. F. Rodrigues
- 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-María 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 involucreatus*: 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

11.40-13.00 **Session 15 - Innovative Solutions in Power Electronic Systems – Room A1.4**

Chair: Isménio Martins

- 15.1 An application of Interleaved Zeta-Buck-Boost Combination Converter in Distributed Generation
E. Durán, M.B. Ferrera, S.P. Litrán A.J. Barragán, J.M. Enrique, J.M. Andújar, J. Semião, J. Monteiro, I. Martins
- 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 Chícharo – 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, Charles Mendes Rodrigues, Priscila Costa Nascimento, Mateus Witter, Teresa Irene Ribeiro De Carvalho Malheiro, Reginato Domingos Scremim, 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 Inocência 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 Inocência de Sousa, Eduardo Esteves and Ana Cristina Figueira
- P04 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
- P05 Education as a Tool to Reduce the Water Footprint of Young People
Milda Venckute, Manuela Moreira Da Silva and Mauro Figueiredo
- P06 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
- P07 Economy as the Inducer Factor of the Number of Scientific Publications in the Field of Air Pollution
Felipe Francisco De Castro Passos and Emiliano Lôbo De Godoi
- P08 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
- P09 Optimization of an Aeration System in a Wastewater Treatment Plant - Albufeira, Portugal
Luís Cristóvão, Duarte Marinho, António Martins, Eduardo Esteves, Gil Fraqueza and Manuela M. Silva
- P10 Biodegradation of a Packaging Film from Plant Origin
Afroditi Drizou, Rui Cruz and Margarida Vieira
- P11 Characterisation of oil extracted from melon seeds (*Cucumis melo* var. *reticulatus*)
Raquel Carmo and Patrícia Nunes
- P12 Effects of spoilage on nitrogen and carbon stable isotopes signatures of the clam *Ruditapes decussatus*
Jaime Aníbal, Cristina Veiga-Pires and Eduardo Esteves
- P13 Microbiological quality of seeds sold at supermarkets in Southern Portugal
Daniela Silva, Marcela Oliveira and Célia Quintas
- P14 Mathematical Modelling of Cholera Outbreaks
Davide Santos and Jorge Isidoro
- P15 A prototype of sustainable residential automation
Flávio Vitorino Queiroz, Denis Rogério Da Silva, Murilo Miceno Frigo and Eduardo Hiroshi Nakamura
- P16 Preliminary results of the pilot floating beds for eco-rehabilitation of contaminated water course
Cátia Rocha, A. Durão, T. Borralho and Adelaide Almeida
- P17 Production of baker's yeast (*Saccharomyces cerevisiae*) from prickly pear fruit juice
Aicha Nancib, Nabil Nancib, Soumeiya Kanouni, Sara Maouche and Joseph Boudrant

- P18 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
- P19 Establishment of a network for the development of innovative products with microALGAs: ALGARED +
León R, Vigara J, Giraldez I, Morales E, Vila M, Cañavate JP, Fernández-Díaz C, Manchado M, Fernandez E, Galván A, Llamas A, Gonzalez-Ballester D, Dubini A, Raposo S, Barros R, Varela J, Barreira L, Cancela L, Simes DC, Link W, Cabrita E, Pereira H, Pousão-Ferreira P, Bandarra NM, Agraso MM, Retamero M, Vélez J, Leitao N, Lima P, Vilas-Boas F, Moreno-Garrido I, Lubian L, Navalho J, del Pino V.
- P20 A review of using alternative materials to improve the green roofs sustainability
Mônica Ciriaco-Dias, María Martín-Morales, María Isabel Rodríguez-Rojas and Montserrat Zamorano