

JULY 3 - 5, 2019

# SUMMIT RESEARCH

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# Programme

**DAY 1 – July 3rd, 2019** *Auditório Renato Araújo*

- 09:00 Opening Session: Rector and Vice-Rector for Research, Innovation and 3rd Cycle**
- 09:30 Plenary 1 - The Long Road to Autonomy**  
Ashley Nunes, MIT/ Harvard Law School
- 10:10** Energy and sustainability challenges of captivating and transformative mobility paradigms  
Margarida Coelho, TEMA
- 10:25** Devices, from light absorption to light emission  
João Veloso, I3N
- 10:40 Coffee Break**
- 10:55** Sustainable exploitation of Li mineral resources on Montalegre: from ceramics to batteries  
António Silva, GEOBIOTEC
- 11:10** Energy and the challenges of blue and green economy  
Myriam Lopes, CESAM
- 11:25** Research on Education for Sustainable Development: From the Development of Educational Resources to Teacher Education  
Rui M. Vieira e Patrícia Sá, CIDTFF
- 11:40** Smart Green Homes: A collaborative learning approach for fascinating and sustainable home comfort  
Sérgio Salústio, Bosch Termotecnologia
- 11:55 Round Table**
- 12:30 Lunch**
- 14:00 Plenary 2 - Energy Transition and Sustainability: Game Changers, Technology, Innovation and Future Challenges**  
António Costa e Silva, Partex
- 14:40** Energy@CICECO: Gaps between academic research and foreseeable energy scenarios  
Jorge Frade, CICECO
- 14:55** Sustainability in Future Broadband Wireless Communications  
José Carlos Pedro, IT
- 15:10** RISCO contribution to sustainable cities  
Paulo Cachim, RISCO
- 15:25** Energy, Society, and Sustainability Transitions  
Anabela Botelho, GOVCOPP
- 15:40** Sustainability in Higher Education: A review of contributions from Portuguese speaking countries  
Teresa Carvalho e Maria João Rosa, CIPES
- 15:55 Coffee Break**
- 16:15** Driving innovation, enabling quality of life: research on eHealth and wellbeing at DigiMedia  
Ana Margarida Pisco Almeida, DIGIMEDIA
- 16:30** Music and Sustainability: Musical processes as part of an ecosystem  
Maria do Rosário Pestana, Inet-Md
- 16:45** Automation in Ecotoxicology Testing  
Rui Escadas Martins, IEETA
- 17:00** Phthalocyanine-graphene nanomaterials for solar cells  
Leandro Lourenço, QOPNA
- 17:15** Education for Sustainability: Creating Competencies in higher education through Circular Economy  
Ana Afonso, ID+
- 17:30 Pulp and paper mills: forest-based emerging biorefineries**  
Carlos Neto, The NAVIGATOR Company
- 17:50 Round Table**
- 18:30 First day closure**  
Vice-Rector for Research, Innovation and 3rd Cycle

## DAY 2 – July 4rd, 2019 *Rectory Building*

### Auditorium Renato Araújo

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#### 09:00 Opening Session

- 09:05 PDCP+PDPP+PDCEE+PDEGI  
Political Science (PDCP)  
Public Policies (PDPP)  
Business and Economic Sciences (PDCEE)  
Industrial Engineering Management (PDEGI)

#### 11:00 Coffee Break

- 11:15 Ciencia Vitae | FCCN - transversal to all rooms

- 12:15 PDC+PDT  
Accounting (PDC)  
Tourism (PDT)

#### 13:15 Lunch Break

- 14:15 PDT  
Tourism (PDT)

#### 16:15 Coffee Break

- 16:30 PDEM  
Mechanical Engineering (PDEM)

### Acts room

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#### 09:00 Opening Session

- 09:05 PDB  
Biology (PDB)

#### 11:00 Coffee Break

- 11:15 Ciencia Vitae | FCCN - transversal to all rooms

- 12:15 PDB+PDCEA+PDCTGM  
Biology (PDB)  
Environmental Sciences and Engineering  
(PDCEA)  
Marine Science, Technology and Management  
(PDCTGM)

#### 13:15 Lunch Break

- 14:15 PDCGTM+PDBEAG  
Marine Science, Technology and Management  
(PDCTGM)  
Biology and Ecology of Global Change  
(PDBEAG)

#### 16:15 Coffee Break

- 16:30 PDBiot+PDME  
Biotechnology (PDBiot)  
Strategy and marketing (PDME)

### Senate room

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#### 09:00 Opening Session

- 09:05 PDSEAC+PDBM+PDP+PDGG  
Energy Systems and Climate Change  
(PDSEAC)  
Biomedicine (PDBM)  
Psychology (PDP)  
Gerontology and Geriatrics (PDGG)

#### 11:00 Coffee Break

- 11:15 Ciencia Vitae | FCCN - transversal to all rooms

- 12:15 PDMEdu  
Multimedia in Education (PDMEdu)

#### 13:15 Lunch Break

- 14:15 PDD+PDICPD +PDE  
Design (PDD)  
Information and Communication in Digital  
Platforms (PDICPD)  
Education (PDE)

#### 16:15 Coffee Break

- 16:30 PDE  
Education (PDE)

## DAY 3 – July 5rd, 2019 *Rectory Building*

### Auditorium Renato Araújo

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#### 09:15 Opening Session

09:20 PDEE  
Electrical Engineering (PDEE)

#### 11:00 Coffee Break

11:20 MAP-Tele+PDEI+MAP-i  
Telecommunications (MAP-Tele)  
Computer Engineering Engineering (PDEI)  
Computer Science (MAP-i)

#### 13:15 Lunch

14:15 DBI - Thesis Project defense  
Doctorate in Business innovation

### Acts room

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#### 09:00 Opening Session

09:05 PDEQ+PDQ  
Chemical Engineering (PDEQ)  
Chemistry (PDQ)

#### 11:00 Coffee Break

11:15 PDQS  
Sustainable Chemistry (PDQS)

#### 13:15 Lunch

14:15 DBI - Thesis Project defense  
Doctorate in Business innovation

### Senate room

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#### 09:15 Opening Session

09:20 PDNN+PDMPA+PDCEM+PDHCEC  
Nanosciences Nanotechnology (PDNN)  
Materials and advanced processes (PDMPA)  
Materials Science and Engineering (PDCEM)  
History of Science and Scientific Education (PDHCEC)

#### 11:00 Coffee Break

11:15 PDEF+MAP-Fis+PDG+PDEC+PDM+PDMA  
Physics Engineering (PDEF)  
Physics (MAP-Fis)  
Geosciences (PDG)  
Civil Engineering (PDEC)  
Mathematics (PDM)  
Applied Mathematics (MAP-PDMA)

#### 13:15 Lunch

14:15 DBI - Thesis Project defense  
Doctorate in Business innovation

### Translations room

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#### 09:15 Opening Session

09:20 PDBQ+PDBR  
Biochemistry (PDBQ)  
Biorefineries (PDBR)

#### 11:00 Coffee Break

11:15 PDCTAN+PDMu  
Food Science and Technology and Nutrition (PDCTAN)  
Music (PDMu)

#### 13:15 Lunch

## List of Pitches

### Accounting (PDC)

Aida Martins	Corporate Financing Cost's Determinants
Ana Brites	Taxation costs in digital age: empirical evidence in Portugal
Armando Diogo	Determinants of effective tax rate
Maria Nogueira	The influence of inventory management on the quality of accounting information in commercial sector companies
Zuley Betancourt	Estudo bibliométrico em contabilidade e accountability no setor público: período de 2002-2017

### Advanced Materials and Processing (ADVAMTECH)

Ana Neto	Porous calcium phosphate bone graft scaffolds for advanced therapies
Daniel Vieira	Magnetic-field-assisted of multi-functional layered double hydroxides
Ricardo Serrazina	FLASH sintering of lead-free piezoelectrics

### Applied Mathematics (MAP-PDMA)

Ana Paião	Optimal Control and Mathematical Models in Epidemiology
Daniel Figueiredo	Logic foundations and computational tools for synthetic biology
Rita Guerra	New convolutions associated with new integral transforms of Fourier type

### Biochemistry (PDBQ)

Ana Dias	Metabolic Reprogramming of Tumor-Associated Macrophages: from Deeper Insights to Novel Therapeutic Approaches in Triple Negative Breast Cancer
Daniela Couto	Lipidomics of microalgae: unravelling their lipid signature and bioprospecting bioactive phytochemicals
Diana Lopes	Valorization and traceability of cultured macroalgae using elemental and lipid signatures
Dmitry Evtugin	Bioactive compounds from sulphite pulp production streams for applications in functional food and cosmeceutical industries
Élia Maricato	Valuation of marine microalgae polysaccharides
Joana Lopes	BioBlisterPack – Agrofood byproducts for biodegradable blister packaging
José Pereira	How to design proteins from scratch
Mariana Mesquita	Photodynamic therapy in prostate cancer and metastatic malignant melanoma using chlorin photosensitizers
Mariana Raposo	Bioelectronic tongue for the detection of paralytic shellfish toxins
Sara Nadine	Dynamic microfactories encapsulating cells for bone tissue engineering
Sónia Pedro	Deep eutectic solvents comprising active pharmaceutical ingredients for incorporation in biopolymer-based drug delivery systems
Tatiana Silva	Toxicometabolomics of graphene based nanomaterials (GBNs): towards mechanistic insights and new biomarkers

### Biology (PDB)

Ana Pires	Comparison of bacterial communities in sponge, sediment and water biotopes in the Indo-Pacific region
Bruno Ferreira	Effects of sewage outfalls on marine protected species
Carlos Ortiz	Trace geographic origin of clams ( <i>Ruditapes decussatus</i> and <i>Ruditapes philippinarum</i> ) using elemental fingerprinting tools
Carlos Pinheiro	Wastewater-borne nanoparticles in aquatic ecosystems: from individuals to community responses

Carlos Silva	Ecotoxicological Effects of Emerging Contaminants in Lentic and Lotic Environments
Cláudio Brandão	Mechanistic and functional studies on a novel Symbiodinium-driven calcification process under current and future climatic conditions
Diana Dias	Wild mammals in Portugal: their enteric flora as a source of pathogenic bacteria and antibacterial resistance
Fátima Santos	pErCEPT- Quantification of ConcEntration and time resolved Effects: towards an Adverse Outcome PaThway
Guilherme Jeremias	Developing epigenetic biomarkers of metal exposure in Daphnia
Inês Macário	Application of the biorefinery concept in cyanobacterial blooms valuation
Joana Santos	Effects of drought and contamination on freshwater macroinvertebrates
João Puga	WILDRECO – Immediate and short-term effects of wildfires on population dynamics of sentinel faunal communities on post-fire recovery of pine and eucalypt ecosystems
Leide Pureza	Aquaculture's microbiomes in fish health
Lúcia Marciel	Photodynamic inactivation for blood disinfection by immobilized photosensitizers
Maria Bartolomeu	Photodynamic inactivation of microorganisms and phototransformation of micropollutants in wastewater: an effective approach with low environmental impact
Mariana Rodrigues	Molecular and biochemical responses of freshwater species to the single and mixed effects of microplastics and adsorbed contaminants
Marina Ferreira	Assessing the ecology and function of plasmid assemblages in microbial symbionts of giant barrel sponge Xestospongia testudinaria
Micael Gonçalves	Marine Fungi: Diversity And Biotechnological Potential
Natália Rodrigues	iNNER: Mechanistic approach to assess effects of NaNomaterials in the EnviRnment
Niedja Santos	The role of emerging contaminants and environmental factors on fish personality
Nuno Costa	Determining the Suitability of Nanopesticides for Sustainable Agriculture
Raquel Lopes	Monumental Trees of Portugal: from public understanding to scientific literacy
Rita Bicho	longINg_nano: long term and multigeNerational effects of nanomaterials in terrestrial invertebrates
Sandra Hilário	The genus Diaporthe on blueberry plants in Portugal: from species diversity to pathogenicity
Silja Frankenbach	Estuaries as carbon sinks: Photosyntetic activity, photoinhibitory stress and resilience mechanisms in Pelagic-Benthic primary productivity
Vanessa Ferreira	Development and Assessment of Ecological Indicators for the Management of an Endangered Migratory Fish Species ( <i>Anguilla anguilla</i> )

### Biology and Ecology of Global Change (PDBeAG)

Ana Costa	Corals as therapeutic alternatives for fish farms in a climate changing world
Ana Almeida	The effects of long-term exposure to oxytetracycline in zebrafish
Ângela Almeida	Pharmaceutical drugs under present and future climatic scenarios: what are the toxicological consequences to marine invertebrate species?
Carlos Silva	Ecological effects of microplastics in freshwaters
Eduardo Batista	Project MDR - Map, Detect and Research Botriosphaeriaceae species in Portugal
Évila Damasceno	Anticancer drugs in the environment
Fátima Simão	Ecotoxicological assessment of PAHs using the freshwater planarian <i>Dugesia tigrina</i>
Joana Neves	Hazard assessment of nano agrochemicals in soils
Joana Prata	Microplastics: methodologies, sampling and ecotoxicity
Patrícia Silva	Toxicokinetics of nanoparticles across aquatic food chains
Pedro Teixeira	Enterobacteriaceae as mediators for carbapenem resistance transfer between environmental and human settings

Ricardo Pinto	Influence of temperature on plant growth promotion induced by rhizobacteria
Sara Peixoto	Assessment of Cu(OH) <sub>2</sub> nanopesticide applications on soil microbiota - an agroecosystem perspective

### Biomedicine (PDBM)

Ana Guimarães	Recoding the <i>Saccharomyces cerevisiae</i> genome through codon ambiguity
André Nadaís	The role of Metal Induced Protein phosphorylation in neuropathology related protein aggregation
Carla Oliveira	The role of protein mistranslation in fungal pathogenesis
Diogo Neves	The role of NAD in neuronal differentiation
Fábio Trindade	Pursuing complete myocardial reverse remodeling after aortic valve replacement: will phosphoproteomics lend a hand?
Fátima Monteiro	Effects of the SET7/9 methyltransferase inhibitor (R)-PFI-2 on mammary epithelial cells
Inês Direito	Breast and prostate cancer endocrine resistance is associated to a dysregulation of protein quality control
Inês Sousa	Unravelling the roles of proteotoxic stress on genome diversification and disease
Margarida Ferreira	Gene expression variation across the lifespan in mice
Maria Cachide	BIN1 molecular studies in a primary care-based Cohort
Rosa Andias	Chronic idiopathic neck pain in high school students: characterization of functional changes and effectiveness of an intervention based on exercise and pain neurophysiology education
Sandra Magalhães	Aging: a spect(r)acular approach
Soraia da Silva	Use of <i>Drosophila melanogaster</i> to screen for novel druggable targets for breast cancer therapies

### Biorefineries (PDBR)

Inês Rocha	Shedding light on black liquor: a complex problem, a simple approach
Vitor Rodrigues	Technology for the valorization of agro-forestry residues

### Biotechnology (PDBiot)

Andreia Silva	Development of functional food targeting cardiometabolic risk
Lúcia Santos	Magnetic-responsive platforms to control cell behavior for tissue engineering applications
Luís Ferreira	Novel Spherical dECM-Based in vitro 3D Tumor Models
Ricardo Ferreira	Valorisation of <i>Opuntia ficus-indica</i> L. through an integrated production of high value products

### Business and Economic Sciences (PDCEE)

Vera Magalhães	Essays on the Active Ageing Index and their determinants: an economic, social and environmental approach in the EU-28 and Portugal
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### Chemical Engineering (PDEQ)

Belinda Soares	Development of Eutectic Solvents for the fractionation of wood
Eduarda Moraes	Boosting Biorefinery: Eutectic mixtures as alternative solvents in the extraction and processing of polysaccharides
Emanuel Capela	Towards the development of effective downstream processes for monoclonal antibodies
Ivo Azenha	Separation of Triterpenic Acids by Simulated Moving Bed Chromatography
Luiza Lima	Nanoparticles in the development of thermoplastic nanocomposites
Margarida Martins	From salty water To salty water: problems with colorful solutions
Rodrigo Neto	Extraction of tannins from wine by-products using eutectic solvents

Sandra Magina	New polymeric formulations from lignosulphonates
Sofia Rebola	Potential of Bleached Eucalypt Kraft Pulp for New Non-Papermaking Applications
Teresa Dinis	Towards the manufacturing of low-cost and high quality nucleic-acid-based biopharmaceuticals

### Chemistry (PDQ)

Guilaine Jaria	Valorization of industrial waste as adsorbents for remediation of contaminated water with pharmaceuticals: chemical activation and modification
Joana Lopes	Magnetic carbon nanostructures for the photodegradation of pollutants in water
Maria Martins	Hybrid nanostructures of graphene materials and polyoxometalate clusters for photodriven applications
Patrícia Vaz	Small organic fluorophores
Rui Monteiro	Titanium in marine environment Physicochemical aspects and effects on organisms
Sara Tomé	Synthesis of flavonoid-type compounds and phenolic pseudo-C-glycosides of pharmacological importance
Soraia Fernandes	High-Quality Covalent Organic Frameworks to Capture Hazardous Compounds from Water

### Civil Engineering (PDEC)

André Guimarães	Artificial Beach Nourishments in the Presence of Coastal Structures: Suitability Classification
Eduardo Roque	Energy performance and thermal comfort of residential Lightweight Steel-Framed buildings (LSF): challenges and enhancement strategies
Élio Maia	Fire design of tapered steel members
Fábio Simões	Circular economy approach to construction materials incorporating paper & pulp industry wastes
Gonçalo Lopes	Seismic vulnerability assessment of mixed masonry-concrete buildings

### Computer Engineering (PDEI)

Bernardo Marques	Remote Collaboration using Augmented Reality
Carlos Ferreira	Autonomic and Cooperative Decision Model for Network Agents in Self-Management Networks
Nuno Martins	Context mixed reality for situated visualization
Ricardo Dias	World Model Integration for Cooperative Robotic Teams
Vitor Cunha	Dynamic Security Mechanisms for Softwarized and Virtualized Networks

### Computer Science (MAP-i)

Arnaldo Pereira	Querying and Visualization of Semantic Data
João Silva	Multimodal Content Fusion For Modelling Patient Trajectories

### Design (PDD)

Diogo Riobom	Can aesthetics instigate the reintegration of waste into new products promoting a circular economy?
Filipe Bento	Firefighters Personal Protective Equipment. Performance/Comfort dichotomy: an answer through Design
Ivo Fonseca	The panorama of allergen representation on food labels
José Cardoso	Maps "taylor made" to the body of places: Design Strategies Against the Indifference of Representation
Lígia Afreixo	Drawing of food flying in container based on vegetables and fruit
Marlene Ribeiro	Design for the territory: a collaborative model of place branding



### Doctorate in Business Innovation (DBI)

Acácio Coelho	Estudo do desempenho de feltros planos, produzidos por diferentes métodos de consolidação
Alexandre Paulo	Leveraging Smart Factories: a digital transformation on the shop floor of a Felt Hat Bodies Industry
Americo Santos	Open innovation and performance: trends in the digital era
Ana Alves	Additive manufacturing for smart plastics (Public presentation, Private Defense)
Bruno Bessa	Performance Drivers of Family SMEs
João Vieira	Metal AM by SLM applied to mold inserts for plastic injection
Ricardo Antunes	Framework to optimize IoT infrastructure in order to increase the value of industrial data by applying advanced data analytics
Rui Oliveira	Análise e Cálculo Estrutural de Estantes Metálicas em Chapa Fina
Silvia Gavinho	Multifunctional Materials for costumized prothesis (Private presentation)

### Education (PDE)

Agenor Carvalho	Formação de Professores de Língua Portuguesa Para o Acolhimento de Refugiados
Ana Gorgulho	The Evaluation of Portuguese Language Learning - For an International Cooperation for Development in Teacher Education
Ana Sousa	Science teachers' in-service education to enhance students' Critical and Creative Thinking
Ângela Espinha	The best way to learn languages is...to use them
Ângelo Ferreira	School, identity and resistance in Timor. The case of Externato de São José during the indonesian occupation
Caio Alcântara	Avaliação como aprendizagem e docência no ensino superior: proposta de um modelo para formação de professores em regime de blended learning
Custódio Soares	The supervision process in nursing clinical teaching: organization of the supervisor work
Davys Moreno	Inclusion of children with special needs in Arts education programs: from research to action
Dulce Vaz	Recursos didáticos sobre mecânica de apoio a práticas docentes no 1.º ciclo do ensino básico
Evelyn Santos	Potenciar a transição e a inclusão para o ensino superior: a experiência de estudantes om NEE e seus familiares
José Zacarias	Administração Local da Educação em Angola: A intervenção dos municípios em contexto centralizado de administração educativa
Lauro Filho	Avaliação das instituições de ensino superior do nordeste brasileiro: um instrumento indutor de desenvolvimento organizacional?
Maria Gomes	Assessment of Competencies of Occupational Therapy Undergraduate Students in Clinical Practice Context: challenges to change
Marisa Machado	Personal and socio-professional development of young adults with intellectual and developmental disabilities in Higher Education
Maurício Júlio	Motivações e expetativas de alunos no ensino técnico profissional: um estudo numa escola no Lubango-Angola
Rangel Domingos	The academic and professional qualification of Angolan higher education teachers in the institutional development plans (IDP)
Raquel Carinhas	Plurilingualism: a project with Museums, Families and a School
Rosana Medeiros	Active Teaching Status in the Promotion of Critical Thinking: Teaching Learning in online Contexts
Simone Carvalho	piBook: a social and digital inclusion resource for hospitalized children with cancer
Vanessa Souza	Teachers' pedagogical practices in integrated contexts of education: the case of school visits to science museums
Vita Emanuel	A Disciplina de História no Ensino Primário em Angola – do currículo instituído ao implementado a propostas de melhoria da qualidade.

### Electrical Engineering (PDEE)

Ana Tavares	Packaging of Photonic Integrated Circuits
Beatriz Oliveira	Coherent Communications for Access Networks
Carolina Gouveia	Bio-radar: Non-contact system for vital signals acquisition
Daniel Pereira	Inter-Symbol-Interference in Continuous Variables Quantum Communications
Fábio Barbosa	Disaster-resilient network design and resource management of elastic optical networks
Gustavo Anjos	Physical Layer Security for Wireless Networks with Help of Jamming
Joana Pereira	Performance Enhancement of 5G MIMO Transmitters
Jorge Silva	Patient Diagnosis Prediction in Multimodal Medical Information
Kyatam Shusmitha	Thermal management of high power electronic devices using diamond
Luís Duarte	VLC heterogeneous networks for future wireless systems
Mariana Ramos	Fast and secure multiparty computation enabled by quantum communications technologies
Marina Jordão	Over-The-Air Characterization of 5G MIMO Systems
Neya Chaudhary	Visible Light Communication based Indoor Localisation
Roberto Magueta	Transmitter and Receiver Designs for mmW mMIMO based Wireless Systems
Romilkumar Patel	Simplified Coherent Transceiver for Optical Communication Networks
Rui Antunes	Medical Concept Normalization
Samuel Pereira	Multi-technology RRH based on ADTs
Sanket Chaudhary	All Digital Power Amplifiers
Tagleorge Silveira	RFID Technology Chipless

### Energy Systems and Climate Change (PDSEAC)

Hugo Marques	Polymeric air-to-air heat recovery system
Luis Martins	Artificial neural network modelling of solar thermal hybrid façade
Reza Sirous	A framework to evaluate and optimize Circular Economies
Seyedeh Borazjani	High-value biohythane production from anaerobic digestion of municipal food waste: effect of biomass ash supplementation

### Environmental Sciences and Engineering (PDCEA)

Ana Ascenso	Direct and indirect impacts of nature based solutions for climate change adaptation: urban heat island, air quality and urban sprawl
Carlos Silveira	Multiscale urban air pollution modelling: towards healthier cities
Eduardo Oliveira	Detecting flood extents with satellite imagery
Sílvia Coelho	Assessing air quality in cities under climate change scenarios: a source apportionment approach

### Food Science and Technology and Nutrition (PDCTAN)

Soraia Silva	Valorisation of pine nut skin
Carlos Pinto	The influence of pH in key case-studies bacterial and fungal spores' behaviour inoculated in food model solutions and food products stored under pressure (hyperbaric storage)
Rita Inácio	Evaluation of high-pressure as a non-thermal pasteurisation technology to render Serra cheese manufactured from raw ewe milk microbiologically safe
Luís Castro	Gluten free starch extracted by emerging technologies from by-products and losses of acorn and chestnut
Mauro Santos	Evaluation of hyperbaric storage as a novel food preservation methodology for raw meat versus refrigeration
Liliana Fidalgo	Hyperbaric storage as a novel preservation process compared to refrigeration: fresh fish as a case-study

Ricardo Duarte	Storage under pressure of dairy foods as an alternative to refrigeration
Guido Lopes	Espresso coffee: anytime, the convenience of innovation
Sónia Ferreira	Isolation, derivatisation, and characterisation of polysaccharides with immunomodulatory potential for valorisation of broccoli by-products
Sílvia Moreira	Evaluation of high-pressure as a novel non-thermal extraction technology to obtain extracts with improved biological activities from medicinal plants
Álvaro Lemos	Shelf-life extension of pasteurized and ready-to-eat foods by hyperbaric storage at room temperature
Ana Ribeiro	Innovative Sequentially Combined Processing Technologies to Improve the quality of Egg Pasteurized Products

#### Geosciences (PDG)

Carla Bastos	Topical Clayey Product Design & Therapeutic objectives
Ricardo Correia	Lithospheric Structure in W/SW Iberia Margin and Rifting Processes

#### Gerontology and Geriatrics (PDGG)

Luciana Albuquerque	Vocal Aging: Acoustic and articulatory study of speech changes with age
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#### History of Science and Scientific Education (PDHCEC)

Luís Pereira	Perspectives on Science Communication in the Period 1945-1975: The Case of the Space Race
Luiz Neto	A Perspective on Brazilian Scientific History: the creation of the Brazilian Society of History of Science
Marion Pellier	And Galen crossed the Atlantic. The syncretism of Luso-Brazilian medical practices and knowledge (1500-1650)

#### Industrial Engineering Management (PDEGI)

Diana Dias	Methodologies to support the geographical distribution of human health resources
Fatameh Saghezchi	Developing and validating a scale for measuring consumer perceived service quality in customer-intensive service processes
Horácio Gomes	Success Factors for sustainability improvement strategies in lime production
Joaquim Martins	Contribution for the development of a reference model for the management of physical assets in industries
Ricardo Santos	An holistic model of decision support in energy efficiency in buildings
Ricardo Zimmermann	Innovation and supply chain management Strategies, capabilities and the effect of fit on business performance
Sedigheh Asefi	Characterizing an Innovation Reef (I-Reef) an Holistic Model Towards Exploring its Attributes
Seyed Ghiasi	Sustainable development of marine renewable energies supply chain management in Portugal

#### Information and Communication in Digital Platforms (PDICPD)

Daniel Carvalho	Seniors and ITV services: identification of interaction typologies
Inês Santos Moura	The multimedia technology in the creation of collaborative practices in community: the case of a group of residentes of the Alexandre Herculano Neighbourhood
Inga Saboia	A influência dos líderes de opinião nas redes sociais: um estudo sobre a mudança do comportamento alimentar no Instagram
Iva Lima	Senior literacy: learning strategies when playing digital games
Jesse Nery Filho	Location based-games and active ageing: the pokémon go study in seniors' life
Liliana Gonçalves	Sharing knowledge through digital platforms to socio-territorial well-being: the forest fires' case
Raissa Sales	Infocommunication and Digital Platforms in the Sharing Economy: A Multicases Study about the Trust in Sustainable Contexts

Sofia Nunes	The conception of the elderly's image in children Infocommunicational analysis in animated films
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### Marine Science, Technology and Management (PDCTGM)

Américo Ribeiro	Climate Change Impact on West Iberian Coast Port Defenses and Maritime Traffic
Carla Silva	Impact of the invasive macroalgae <i>Asparagopsis armata</i> on coastal environments
Caroline Ferreira	Morphodynamics of coastal environments in mixed sediment beds
Daniela Rodrigues	Incorporation of n-3 fatty acids on insect meal for a more sustainable marine aquaculture shrimp feed
Elisabet Cruz	Modeling the physical processes that underlie Harmful Algal Blooms in North-Western Iberian shelf and Rias Baixas
Felipe Lourenço	The use of endogenous insects to promote a more sustainable shrimp aquaculture
Joana Rodrigues	Interactions between pollutants and microplastics in the marine environment and their accumulation on biota
Laura Olmedilla	Impact of storm waves on coastal beach – dune geomorphology at Aveiro – Cabo Mondego stretch (NW Portugal)
Laurício Terra	Shallow Gas accumulations in the north port terminca in the Ria de Aveiro barrier-lagoon system
Leandro Vaz	Optimal Conditions for Aquaculture Exploitation in Ria de Aveiro: a Numerical Modelling Approach
Marco Custódio	Integration of halophytes production to promote coastal aquaculture eco-intensification
Maria Fernandes	Spatial patterns for the European Atlantic basin
Mariana Andrade	Marine Protected Areas monitoring indicators and their cost-effectiveness
Marili Viitak	Numerical study of sediment-transport processes in NW Iberian Continental Shelf
Rui Albuquerque	Global-scale patterns of biodiversity and biomass of the neustonic zooplankton

### Materials Science and Engineering (PDCEM)

Alena Kuznetsova	Layered double hydroxide (LDH) nanoreservoirs of corrosion inhibitors for application in self-healing protective coatings
Alice Trabulo	Mixed oxide thin films as eletrochromic layer
Amin Davarpanah	Tri-critical point in Magnetocalorics
Aneeta Jaggernauth	Diamonds and Dielectrics – A Brilliant Combination for High Temperature Electronics
Inês Oliveira	Solar Degradation of Organic Pollutants via Hybrid Carbon-based Nanostructures"
Isabel Borge	Let's get physical
Joana Lagarinhos	Can T-RTM be an alternative strategy to produce thermoplastic composites?
Kiryl Zakharchuk	Electrochemical elimination of NOx by reversible solid oxide cell with selective electrocatalysts
Liliana Pires	Different additive techniques, different products?
Rui Sampaio	Electrochemical Sensors for pH, Dissolved Oxygen and Chloride Monitoring in Reinforced Concrete Structures
Sara Silva	Disruptive approach on cork processing technologies

### Mathematics (PDM)

Alberto Silva	Multivariate Contributions in the Decomposition of a Time Series
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### Mechanical Engineering (PDEM)

André Quintã	Modelling, simulation and control of tankless gas water heaters: a hardware-in-the-loop approach
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António Festas	Components manufacturing for medical application – case studies
Francisco Lamas	Low GWP Heat Pump Water Heaters
João Dias	Adsorption heat pumps for space and water heating
Silvia Carvalho	Inteligente & Sustainable Machining Methods for Titanium Alloys

#### Multimedia in Education (PDMedu)

Ana Carvalho	Peer learning and its impact on peer teacher students' academic performance – proposal of a procedure model
Ângelo Conde	Teacher nonverbal language influence on first impressions
António Franque	Distance education in Mozambique: reality and potential
Carla Leite	Digital media supporting informed decision-making regarding childbirth preferences
Elisabete Pires	Skills development through project-based learning in professional courses
Lersí Duran	DEEP, promotion of literacy in depression: impact of a digital intervention
Lurdes Nakala	Quality Assurance in Distance Education: a Proposal for Public Policy In Mozambique
Patrícia Cuamba	Factors Determining the non-Prosecution of Higher Studies in Mozambique: their Mitigation through Distance Education in Digital Media

#### Music (PDMu)

António Ventura	“Easter Mysteries” in Idanha-a-Nova: Processes of Patrimonialization and Turistification
Daniel Nery	Beyond Gesture: The interpersonal communication between conductor and orchestra
Eduardo Falcão	Agapito de Miranda composer of memories. The notebooks of a song collector from XX <sup>th</sup> century Goa
Margarida Cardoso	A regulação da atividade musical e a construção de um estatuto dos músicos: o caso do quinteto de sopros da emissora nacional
Pedro Barreiros	The continuous Synchronization movement
Sara Simões	The legacy of António Leal Moreira (1758-1819): music, dramaturgy and vocality for an interpretation of his dramatic works

#### Nanosciences Nanotechnology (PDNN)

Sofia Soares	Magnetic bio-hybrid sorbents for the uptake of active pharmaceutical ingredients from water
Tiago Fernandes	Magneto-plasmonic nanoassemblies using dendrimers: chemical synthesis and water quality monitoring

#### Physical Engineering (PDEF)

Bruno Teixeira	Misaligning to write faster
Carlos Rosário	Understanding the electronic transport in Ta <sub>2</sub> O <sub>5</sub> -based memristive devices Assessment of the easyPET-3D system performance: NEMA NU 4-2008 standards and animal model
Fabiana Ribeiro	Assessment of the easyPET-3D system performance: NEMA NU 4-2008 standards and animal model
Liliana Sousa	Multi-core fibers devices for high-capacity optical networks

#### Physics (MAP-Fis)

Filipe Santos	Compact localized states in geometrically frustrated systems
Silvia Rodrigues	Electromagnetically induced transparency in HC-MOFs

#### Political Science (PDPC)

Diamantino Raposinho	Implementing local management policies for World Heritage Historic Urban Landscapes: The importance of governance systems
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Fan Zhongpu	Chinese Democratization at local level – The case of Hezhai
João Moniz	Mapping Politicization in the European Parliament: a longitudinal analysis
Mahmoud Alferjani	Libyan tribes in the shadow of peace and conflict
Pedro Lourenço	European radical left parties: programmatic change since the fall of the Berlin wall(1989-2019)

### Psychology (PDP)

Ana Bártoło	Reproductive concerns in young adult female cancer survivors
Filipa Barros	Olfaction as a social facilitator in autism spectrum
Inês Cadório	Primary progressive aphasia (PPA): Advances in treatment

### Public Policies (PDPP)

Monique Borges	Decision aiding for public policy formulation
Jan Wolf	The spatial organization of educational facilities
Rúben Mendes	Roadmaps for strengthening the institutionalization of 'Nature-based Solutions" in Spatial Planning
Fillipe Feitosa	Social Justice in accessibility to services of general interest
Emanuel Leite Jr.	Chinese soft power and public diplomacy: the football case
Nathan Carvalho	Cross-Border Higher Education: in the perspective of quality assurance public policies

### Sustainable Chemistry (PDQS)

Cláudia Neves	(Metallo)Porfirinas como (Foto)Catalisadores homogêneos e heterogêneos na (Foto) Oxidação de xenobióticos
Andreia Ferreira	Polissacarídeos das microalgas <i>Chlorella vulgaris</i> e <i>Porphyridium cruentum</i> : potenciais aplicações biotecnológicas
Ana Bastos	Valorização dos polissacarídeos da levedura cervejeira excedentária para aplicações alimentares e biomédicas
Zélia Alves	Nanocompósitos à base de polissacarídeos para embalagens alimentares ativas
Ana Figueiredo	Microalgas como fonte sustentável de lipídios para nutrição e fitoquímicos
Maria Rocha	Estudo das interações entre os filmes com base em quitosana e os componentes dos alimentos
Daniela Fonseca	Desenvolvimento de biomateriais inovadores com nanocelulose e proteínas através de metodologias verdes para aplicações biomédicas
Vasco Batista	Enzimas oxidativas para a síntese sustentável de compostos não-naturais de valor acrescentado
Carlos Silva	Design, síntese e avaliação de novos potenciais agentes anti-leishmaniose
Jéssica Barbosa	Materiais do tipo MOFs para regeneração óssea
Marina Matos	Desenvolvimento de polímeros e materiais compósitos mais sustentáveis a partir do ácido 2,5-furanodicarboxílico
Diana Julião	Materiais híbridos oxometálicos para o processo de dessulfurização oxidativa
Lucie Nogueira	Catalisadores supramoleculares baseados em receptores macrocíclicos e complexos de metais de transição
Marcelo Catarino	Florotaninos das algas castanhas - caracterização estrutural, atividades biológicas e biodisponibilidade
Letícia Costa	Corantes para células solares baseados em tiazolotiazóis

### Telecommunications (MAP-Tele)

Akeem Mutafo	Flexible Fronthaul for 5G Mobile
Asad Rehman	Reliability in Software-defined Networks

Catia Pinho	Otimização de sistemas com multiplexagem por divisão espacial
Celestino Martins	Técnicas de processamento digital de sinal para sistemas de transmissão óptica multiportada
Fatma Marzouk	Energy Efficient Virtual Resource Management for 5G
Hadeel Abdah	Mobilidade em Redes de Telecomunicações definidas por software
Jéssica Sanson	Estudo de formas de onda e conceção de algoritmos para operação conjunta de sistemas de comunicação e radar
José Rego	Approching internet of things scenarios from an information centric networking perspective
Luis Rodrigues	Arquiteturas de sistemas de comunicação por luz visível para a Internet das coisas
Pedro Tomé	Análise e compensação de transmissores MIMO sem fios
Sherif Busari	MIMO Auto-organizado para otimização de cobertura de capacidade em arquiteturas CRAN

### Tourism (PDT)

André Teixeira	Critical success factors for the development of cultural routes in tourism
Augusto Antunes	User-generated content as an input for the decision-making process in tourism public organizations
Brenno Costa	Determinantes da escolha de transportes públicos ou individuais por turistas em viagem a Lisboa, Portugal
Clezio Amorim	Rede interorganizacional e ecoeficiência no ecoturismo: Um estudo de caso Rota das Emoções
Aveline Aguiar	O potencial do turismo gastronómico no desenvolvimento territorial
Michelle Lima	Economia circular e novos modelos de negócio no turismo
Noelle Camel	Military tourism as a niche tourism market in the Brazilian context
Nuno Leal	A importância da formação dos profissionais de turismo no desenvolvimento do turismo acessível
Rayane Velasquez	Tourism management model: An approach based on online indicators
Renata Reis	Turismo e experiências culturais: Do cacau ao chocolate
Ricardo Lopes	Smart tourism destination: Designing an open living lab model
Telma Brito	Interculturalidade e multiculturalidade na prestação de serviços: O caso das relações interpessoais nos cruzeiros marítimos
Thianne Freitas	Hospitalidade nos serviços: Proposta de um modelo para destinos turísticos
Ana Santos	Tourism and maritime, coastal cultural heritage: A new approach and opportunity
Marília Durão	Capitalising on the full potential of the tourism and hospitality workforce: Managing talent retention, careers and quality of life at work
Ivana Stevic	Designing visitor experience through a creative project: Object elicitation with Portuguese azulejos
Susana Rachão	The role of the creative economy in territorial dynamics: The case of micro, small and medium firms in gastronomy and wine-related businesses in North of Portugal
Manoela Valduga	A relevância da hospitalidade na procura turística internacional: Um olhar sobre o Brasil
Jussara Aires	A mensuração da inovação em empresas do sector de turismo
Rogelio Flores Jr	Capacity development for destination communities
Vitor Sá	Tourism guidebooks: Perspectives about Portugal between the 19th and 20th centuries
Parisa Behmanesh	Synergy between future thinking and experience designing

**Research Summit 2019** is a forum to foster important discussion on the global theme of Energy and Sustainability, among the University of Aveiro research community and to enable collaborations to advance the state of the art and empower the research efforts at the campus.

The objectives of Research Summit 2019 are:

- To strengthen the networking among the faculty members, researchers and students at the campus, developing sustainable research partnerships, for a more sustainable use of infrastructures, sharing of know-how and contacts;
- To showcase the research developed at the Research Units within the theme of Energy and Sustainability;
- To provide PhD students the opportunity to pitch their work, so as to improve communication and networking skills.

I thank you for your participation.

Artur Silva  
Vice-Rector for Research, Innovation and 3rd Cycle  
University of Aveiro