

9TH ANNUAL SEMINAR

PhD PROGRAMME IN ENVIRONMENT AND SUSTAINABILITY STUDIES

3 - 5 July, 2024 | NOVA FCT Campus

Organised by
Department of Environmental Sciences and Engineering (DCEA)
NOVA School of Science and Technology (NOVA FCT)
NOVA University Lisbon





TABLE OF CONTENTS

About the 9th PDAS Annual Seminar	04	
Aim and Scope	04	
Host institution		
Organising Committee	05	
Invited speakers	07	
Programme and Training Details	10	
Detailed programme and day-to-day Agenda	12	
Parallel Session 1	16	
Parallel Session 2	20	
Parallel Session 3	24	
PhD Creative Presentation	28	
Networking@PDAS Seminar	29	
Venue and local information		
Calendar 2024 – Important dates	31	
Acknowledgments	31	

ABOUT THE 9TH PDAS ANNUAL SEMINAR

Aim and Scope

The main objective of PhD in Environment and Sustainability (PDAS) is the formation of doctors able to apply a scientific approach to environmental issues and sustainability. PDAS' vision aims to empower change agents to support society and their organisations in achieving the necessary transformations to build a more sustainable future. Leadership in business, industry, government, and society in general require a high degree of technical and scientific knowledge, as well as a mature understanding of the human dimensions of sustainable development.

PDAS is built on a strong research base anchored in two recognized research centers of excellence of the School of Science and Technology, NOVA University Lisbon (NOVA FCT): CENSE – Research Centre for Environment and Sustainability and MARE – Marine and Environmental Sciences Centre. The learning model adopted in the PDAS is entirely student-centered, based mainly on the development of autonomous but supervised research, the attendance of interactive courses that enable them to develop soft skills or add specific skills, and the presentation of their work in conferences, international scientific meetings and scientific publications.

In this context, PDAS students should develop a solid horizontal scientific culture in the field of environmental and sustainability sciences and engineering, as well as gain the ability to integrate knowledge in a inter, multi, and transdisciplinary approach to develop innovative solutions to society challenges. The aim is to enable graduates to be able to join international research teams, promote their integration into the global network of top scientists in their field, and develop entrepreneurial skills that enable them to develop new businesses, promoting the articulation between their R&D activities and the economic and business fabric.

The Annual PDAS Seminar is held annually, lasting three days, with the mandatory participation of all students enrolled in the doctoral program, regardless of the stage of their work. This seminar includes the participation of guest speakers, the presentation and discussion of the work of all students, and the realization of interactive co-learning activities.

The parallel sessions will be held for individual discussions of each student's ongoing research. The objective is to facilitate a constructive exchange of ideas regarding the progress and achievements thus far, as well as the proposed plans for future developments. Each student will present their research to their colleagues and the academic staff, followed by a discussion with two assigned discussants (one professor and one doctoral student), complemented by questions from the audience and the track chair. These sessions are organized according to thematic tracks, thus facilitating joint discussions between students working on related topics.

The 2024 edition of the seminar will feature a PhD Creative Presentation of the research "roadmap" or "final expected" outcome, with both teaching staff and students present, along with a selected jury of examiners. In this presentation, students are encouraged to showcase their PhD projects in a distinctive manner that captures the public's attention. They are invited to exercise creativity in various ways, whether it be a teaser, an installation, a musical composition, a painting, a drawing, infographics, or any other innovative idea. This will allow students to fully demonstrate their creativity and communication skills. A prize will be awarded for the best presentation/performance.



Host institution – Department of Environmental Sciences and Engineering (DCEA) NOVA FCT

The NOVA School of Science and Technology (NOVA FCT) is located in Caparica. It is one of the most prestigious Portuguese public schools of Science, Engineering and Technology science and is part of the NOVA University Lisbon. The campus is engaged in extensive research activity conducted in 14 departments and 16 research centers, involving a total enrolment of about 8000 students (683 PhD students), 501 faculty members and 300 researchers. NOVA FCT has several key foreign universities partners, such as the Massachusetts Institute of Technology (MIT), the University of Carnegie Mellon and the University of Texas at Austin, to offer some of its advanced study programs.

DCEA at NOVA FCT was created in 1976, being a pioneer in the graduation of Environmental Engineers in

Portugal. Over the last 40 years, DCEA has followed the extraordinary evolution in this area, expanding the scope and tools that it provides to tackle the environmental and sustainability challenges of the 21st century. DCEA offers bachelor's, master's and doctoral programs in environment and sustainability which are of high scientific and technical quality, preparing students for the national and international market, in a wide range of roles and responsibilities.

DCEA assumes research as a key pillar of the learning processes that it promotes, supported by national and international research projects, and by an extensive collaboration network with industry and public bodies. The faculty, researchers, and collaborators, around 140 people, work daily to achieve its mission.

Organising Committee

Scientific Committee



Professor Tomás B. Ramos

Department of Environmental Sciences and Engineering | NOVA FCT

NOVA University Lisbon

PDAS Coordinator



Professor Graça Martinho

Department of Environmental Sciences and Engineering | NOVA FCT

NOVA University Lisbon

PDAS Scientific Committee



Professor Marta Martins

Department of Environmental Sciences and Engineering | NOVA FCT

NOVA University Lisbon

PDAS Scientific Committee

Students Committee



Diogo Sousa | PhD Student

MARE NOVA – Integrated in *Coastal Systems and Ocean Research Area*Department of Environmental Sciences and Engineering | NOVA FCT
NOVA University Lisbon



Catarina Santos | PhD Student

MARE NOVA – Integrated in *Coastal Systems and Ocean Research Area*Department of Environmental Sciences and Engineering | NOVA FCT
NOVA University Lisbon



Beatriz Matos | PhD Student

MARE NOVA – Integrated in *Coastal Systems and Ocean Research Area* Department of Environmental Sciences and Engineering | NOVA FCT NOVA University Lisbon



Beste Gün Aslan | PhD Student

MARE NOVA – Integrated in *Coastal Systems and Ocean Research Area*Department of Environmental Sciences and Engineering | NOVA FCT
NOVA University Lisbon



Lina Arroyave | PhD Student

CENSE - Integrated in *Ecological Economics and Environmental Management*Department of Environmental Sciences and Engineering | NOVA FCT
NOVA University Lisbon



Marta Carrega | PhD Student

MARE NOVA – Integrated in *Coastal Systems and Ocean Research Area*Department of Environmental Sciences and Engineering | NOVA FCT
NOVA University Lisbon





Sandra Ferreira

Department of Environmental Sciences and Engineering | NOVA FCT NOVA University Lisbon



Invited speakers



Maria Rosa Paiva is a PhD - Imperial College, University of London, UK. "Habilitation" NOVA FCT, PT.

Research: Chemical Ecology; Integrated crop protection; Sustainable ecosystem management and biodiversity conservation; Gender mainstreaming in science.

Experience: Professor/Guest Scientist at: University of Chapingo, MX; Federal University of Paraná, BR; CSIRO, Canberra, AU; University of Hannover, DE; Imperial College, UK; University BOKU, Vienna, AT.

Fellow of the Royal Entomological Society, UK; Scholar: A. von Humboldt Foundation, DE; C. Gulbenkian Foundation, PT; Expert evaluator: European Commission, EU. Co-founder: European Federation of Ecology (EEF) and first Vice-President. Honorary Member: Chinese Entomological Society, Beijing, CC.



Marco Painho is currently Full Professor of NOVA Information Management School (NOVA IMS). Coordinates the Master of Science Program in Geospatial Technologies (Eramus Mundus) and the Master in Geographic Information Systems and Science. Research interests include Geographic Information Systems, Natural resource Information Systems, Information Integration, Crowed Sourced Geospatial Information, Spatial Analysis, GIS Education and Information Infrastructures. He holds a Bachelor degree in Environmental Engineering by the NOVA School of Science and Technology | NOVA FCT of the NOVA Univeristy of Lisbon, a Master of Regional Planning (MRP) by the University of Massachusetts, a Doctor of Philosophy in Geography (Ph.D.) by the University of California and Habilitation Geographic Information Systems by the NOVA Univeristy of Lisbon. He was NOVA IMS' Director between 2000 and 2010. He is the author and editor of over 200 publications including books, books chapters, papers and articles in national and international conference proceedings. Has coordinated over 100 research and development, consulting and international cooperation projects. Has had the following duties: Member of the scientific Committee of the European Environmental Agency Portuguese representative of the Thematic cooperation group: Earth Monitoring and Observation (IV Framework Program - environment and climate) Member of the Management Board and Steering Committee of the European Topic Centre for Nature Conservation, Paris.



André Santos Nouri is an architect and urbanist who specialises in interdisciplinary climate resilient planning and design, environmental management and modelling, urban climates, human biometeorology, sustainable development practices, and bottom-up climate change adaptation. He has undertaken research in numerous countries, including through on-going international collaborations, and acquired/coordinated international project funding. Having taught in numerous countries, including in institutions located in New Zealand, Romania, Portugal, and Türkiye. Currently, he serves as a Professor at the Department of Environmental Sciences and Engineering at NOVA FCT. In association, he is a member of MARE. He moreover is a Visiting Scientist at the Chair of Environmental Meteorology within the Faculty of Environmental and Natural Resources at Albert-Ludwigs-University, Germany.



Paula Guedes is a researcher at CENSE, where she serves on the Management Board, overseeing the "Impact on Society and Technology Transfer" area. She also lectures at NOVA FCT, covering soil pollution, resource recovery, and advanced analytical methodologies. With multidisciplinary expertise, Paula has developed innovative solutions for pollution control and resource recovery. Her international research experience includes stays in Spain, Denmark, China, the USA, and Italy, enriching her extensive international network. Paula is actively involved in various national and European research projects, including collaborations with the private sector, and has secured two patents. She also contributes to several editorial and scientific committees and networks, including the International Union of Soil Sciences.



Rita Lopes is an Assistant Professor at NOVA School of Science and Technology | NOVA FCT, at the Department of Sciences and Environmental Engineering and a senior researcher at CENSE, Center for Environmental and Sustainability Research at NOVA FCT, and part of the Associate Laboratory CHANGE – Institute for Global Changes and Sustainability. She has been researching to advance knowledge on collaborative and mixed-method approaches to support better informed decision-making processes and well-designed policies in key sustainability areas for deep social transformations. Rita has been working on topics including socio-ecological systems, ecosystem services, circular economic, collaborative governance, socio-environmental dynamics and analysis and social innovations, collaborating in several national and international research projects. At CENSE, Rita is part of the board management responsible for international networks, and an elected member of the Board of the European Society for Ecological Economics, leading the ESEE country contact network.



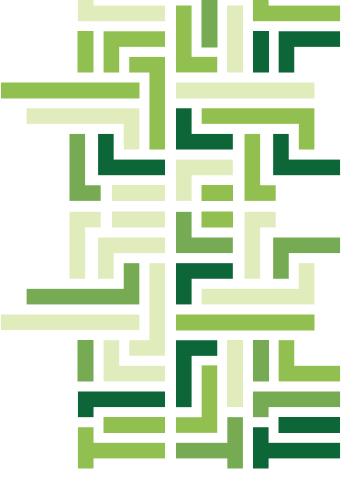
Bart van Hoof has made pioneering research and education contributions by introducing Industrial Ecology in Schools of Management in Colombia, Peru, Uruguay, Mexico and Kenya. He has served as an investigator on numerous externally funded projects, using a transdisciplinary approach for the development of enterprise networks, including participation of over 7,000 companies in Colombia and Mexico. He led the development of National Strategies for Circular Economy in Colombia, Uruguay, and Peru. He designed, including industrial ecology models, the Corporate Environmental Strategy of Ecopetrol a fortune 500 oil company. His research topics includes the dissemination of industrial ecology implementation in networks of firms such as sustainable supply chains, in agro-food chains. Besides his work at Universidad de Los Andes, Bart is the founder of the program of Artists in Residence Esbeek, a social innovation program in his 1,000 inhabitant home town in the Netherlands.



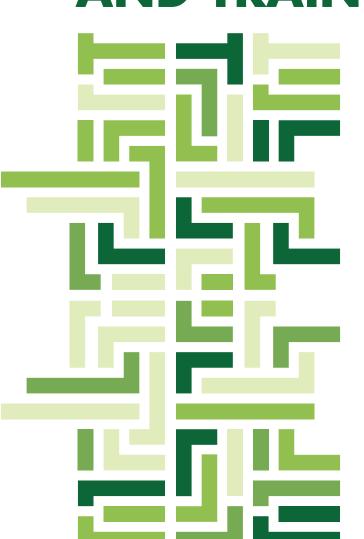
Nélia Câmara, after working for more than 20 years in the corporate world, she founded two brands in the consultancy field – Connect You and N Lab- to leverage her experience in managing large multidisciplinary teams. She recently accepted the challenge of being Director of the Executive School at NOVA FCT, having worked for the last 2 years as President of the Faculty Council of this same University. She worked for around 20 years at Mercer, as Partner, Board Member of Mercer Portugal and Global Leader of a business services center (Global WAS) that produces work in the actuarial and investments areas for more than 16 countries. She was responsible for the growth of one of Mercer line of business in Portugal (from 4 to 500 people) and then leader of more than 1500 people in Portugal, UK, United States, Canada and India reporting directly to Mercer COO. Diversity and Inclusion is one of her passions reason why she started the Women @ Mercer initiative in Portugal (internal initiative regarding gender equality) several years ago and was its representative until 2016. She also is a co-founder of PWN (Professional Women Network) in Lisbon and one of the creators of PWN Leadership course. She also implemented and was President of one Toastmaster club in Lisbon (non-profit organization with the goal to improve communication and leadership skills). She continues to be actively involved on D&I topics mainly being a guest speaker for several events. For several years, she has been a professor in Post-graduation and Master's programs in different fields (Leadership, Agile mindset, Entrepreneurship, High Performance Teams, ...).



Vanda Santos, based in Lisbon, PT, is currently a Chief People Officer | HR, Communications, Marketing and Operations at *biosurfit*, bringing experience from previous roles at *biosurfit*. Vanda Santos holds an Executive Master in Leadership from Nova School of Business and Economics (NOVA SBE). With a robust skill set that includes Teamwork, Financial Analysis, Financial Accounting, Team Management, Financial Reporting and more, Vanda Santos contributes valuable insights to the industry.



PROGRAMME AND TRAINING DETAILS



O3 JULY

8:45 am - Sala Ágora - NOVA FCT Library

ARRIVALS AT WELCOME DESK

Sandra Ferreira, Administrative Assistant of the PDAS

9:00 am - Sala Ágora - NOVA FCT Library

WELCOME AND OPENING

Information and updates about the PhD Programme

José Paulo Santos, Vice-Dean for Scientific Affairs, NOVA FCT Tomás Ramos, Coordinator of the PDAS, NOVA FCT

9:30 am - Sala Ágora - NOVA FCT Library

POST PhD - ACADEMIC CARREER

Maria Rosa Paiva, NOVA FCT & Marco Painho, NOVA IMS André Nouri, Paula Guedes & Rita Lopes, NOVA FCT

11:00 am - Coffee and tea break

PARALLEL SESSION 1

11:30 am - Room 105 - Departmental Building

Track 1 - Sustainability transformations

Chair: Paula Antunes

11:30 am - Room 114 - Departmental Building

Track 2 - Environmental quality and ecotoxicology

Chair: Maria Rosa Paiva

11:30 am - Room 115 - Departmental Building

Track 3 - Circular economy and waste management

Chair: Rui Santos

11:30 am - Room 117 - Departmental Building

Track 4 - Water use, recycling and reuse

Chair: Marta Martins

1:00 pm - Lunch break

O3 JULY 2:00 pm - Sala Ágora - NOVA FCT Library

MIXED METHODS FOR SUSTAINABILITY RESEARCH

Chair: Tomás Ramos, Scientific Committee of the PDAS, NOVA FCT **Speaker:** Bart van Hoof, School of Management, University of Los Andes, Colombia

4:00 pm - Coffee and tea break

4:15 pm - Sala Ágora - NOVA FCT Library

PhD CREATIVE PRESENTATION

Chair: Marta Martins, Scientific Committee of the PDAS, NOVA FCT Jury: Juliana Monteiro, NOVA FCT | Mauro Guerra, NOVA FCT Davor Kržišnik, University of Ljubljana

5:30 pm - Garden in front of the NOVA FCT Library

NETWORKING@PDAS SEMINAR

Social gathering with drinks

04JULY

PARALLEL SESSION 2

9:00 am - Room 105 - Departmental Building

Track 5 - Sustainability transformations

Chair: Marta Martins

9:00 am - Room 114 - Departmental Building

Track 6 - Environmental quality and ecotoxicology

Chair: Maria Rosa Paiva

9:00 am - Room 115 - Departmental Building

Track 7 - Models, data and AI

Chair: António Câmara

9:00 am - Room 117 - Departmental Building

Track 8 - Ocean and coastal management

Chair: Tomás Ramos

11:00 am - Coffee and tea break

04 JULY

PARALLEL SESSION 3

11:30 am - Room 105 - Departmental Building

Track 9 - Ecosystem services and land management

Chair: Paula Antunes

11:30 am - Room 114 - Departmental Building

Track 10 - Water use, recycling and reuse

Chair: Tomás Ramos

11:30 am-Room 115 - Departmental Building

Track 11 - Circular economy and waste management

Chair: Alexandra Ribeiro

11:30 am - Room 117 - Departmental Building

Track 12 - Energy and climate

Chair: Maria Rosa Paiva

1:00 pm - Lunch break

2:30 pm - Sala Ágora - NOVA FCT Library

POST PhD — CORPORATE CAREER

Chair: António Câmara, NOVA FCT

Speaker: Nélia Câmara, NOVA FCT Executive Education

Speaker: Vanda Santos, biosurfit

4:00 pm - Coffee and tea break

4:30 pm - Sala Ágora - NOVA FCT Library

PhD CREATIVE PRESENTATION

Chair: Graça Martinho, Scientific Committee of the PDAS, NOVA FCT Jury: Juliana Monteiro, NOVA FCT | Mauro Guerra, NOVA FCT Davor Kržišnik, University of Ljubljana

5:30 pm - Garden in front of the NOVA FCT Library

NETWORKING@PDAS SEMINAR

Social gathering with drinks



9:00 am - Sala Ágora - NOVA FCT Library

CENSE AND MARE:

An Introduction to the PhD Program's Research Hubs

Chair: Alexandra Ribeiro, NOVA FCT

Speaker: Nuno Videira, Coordinator of CENSE, NOVA FCT

Speaker: Marta Martins, MARE, NOVA FCT

9:30 am - Sala Ágora - NOVA FCT Library

DOCTORAL STUDENTS OPEN SESSION:

Interactive Discussion for Setting Priorities and Overcoming Challenges

Diogo Sousa, Catarina Santos, Beatriz Matos, Beste Gün Aslan, Lina Arroyave & Marta Carrega, Students Committee of the PDAS

11:00 am - Coffee and tea break

11:30 am - Sala Ágora - NOVA FCT Library

PRIZE FOR THE BEST 'CREATIVE PRESENTATION'

Graça Martinho & Marta Martins, Scientific Committee PDAS, NOVA FCT

12:00 pm - Sala Ágora - NOVA FCT Library

CLOSING AND EVALUATION

Tomás Ramos, Coordinator of the PDAS, NOVA FCT

12:15 pm - Garden in front of the NOVA FCT Library

PDAS GROUP PHOTO PhD ANNUAL SEMINAR 2024

Tomás Ramos, Coordinator of the PDAS, NOVA FCT

12:30 pm - Closing lunch





Track 1 - Sustainability transformations

Room 105 - Departmental Building

Chair: Paula Antunes

IMPLEMENTATION OF CONSTRUCTIVE SUSTAINABILITY ASSESSMENT FRAMEWORK FOR AN EMERGING ENERGY STORAGE TECHNOLOGY (EST)WITH SUPERVISORS

Student: Hüseyin Ersoy

Discussants: Nuno Videira | Salomé Areias **Supervisors:** Manuel Baumann | Tomás Ramos

STRATEGIC MATERIALITY AND SUSTAINABILITY REPORTING: ADVANCES AND CHALLENGES IN THE AGRI-FOOD INDUSTRY IN PORTUGAL AND BRAZIL

Student: Yone Macedo Gomes

Discussants: Tomás Ramos | Hüseyin Ersoy

Supervisors: Rita Lopes

THE CASE FOR AGROFORESTRY IN POST-FIRE RESTORATION

Student: Christian Theil

Discussants: Rita Lopes | Yone Gomes

Supervisors: Rui Santos

ONENESS LINKS TO FASHION CONSUMPTION REDUCTION

Student: Salomé Areias

Discussants: José Carlos Ferreira | Christian Theil **Supervisors:** Antje Disterheft | João Pedro Gouveia

Track 2 - Environmental quality and ecotoxicology

Room 114 - Departmental Building

Chair: Maria Rosa Paiva

THE FUNCTION OF THE GUT MICROBIOME OF MACROBENTHIC SPECIES UNDER DIFFERENT SEDIMENT CONTAMINATION

Student: Joana Neves

Discussants: Carla Silva | Adriane Brito

Supervisors: Jorge Arteaga | Marta Martins | Maria Helena Adão

MOLECULAR INSIGHT ON THE TOXICITY OF MIXTURES OF POLYCYCLIC AROMATIC HYDROCARBONS TO IMPROVE ENVIRONMENTAL GUIDELINES

Student: Beatriz Matos

Discussants: Alexandra Ribeiro | Joana Neves

Supervisors: Marta Martins | Mário Diniz | Vasco Branco

MACRO AND MICROPLASTIC POLLUTION IN ECOSYSTEMS MARINE IN NAMIBE, ANGOLA: IMPACTS ON FISHERY RESOURCES AND MITIGATION MEASURES TO BE IMPLEMENTED

Student: Bernardo Malongo José

Discussants: Leonor Amaral | Beatriz Matos **Supervisors:** Marta Martins | Agostinho Cachapa

THE SOURCE-TO-SEA APPROACH: CHALLENGES FOR THE SUSTAINABILITY, GOVERNANCE, AND MANAGEMENT

Student: Adriane Brito

Discussants: Paulo Diogo | Bernardo Malongo **Supervisors:** José Carlos Ferreira | Carlos Saito

Track 3 - Circular economy and waste management

Room 115 - Departmental Building

Chair: Rui Santos

BIODEGRADABILITY EVALUATION FOR NEW MATERIALS DESIGN AN INTEGRATED MODEL FOR INDUSTRY

Student: Luana Boavida

Discussants: Rita Maurício | Lourenço Booth

Supervisors: Ana Silveira

CURRENT TRENDS IN PLASTIC RECYCLING: SYSTEMATIC REVIEW

Student: Maria Lizete Heleno

Discussants: Mário Ramos | Luana Boavida **Supervisors:** Ana Silveira | Joel Vasco

RIGHT TO REPAIR OF EEE: STRATEGIES FOR ITS IMPLEMENTATION IN PORTUGAL

Student: Marta Carrega

Discussants: Nuno Videira | Maria Lizete Heleno **Supervisors:** Graça Martinho | Mário Ramos

STAKEHOLDER ENGAGEMENT IN THE PROCESS OF DEVELOPING URBAN CIRCULAR ECONOMY STRATEGIES

Student: Lourenço Booth

Discussants: André Nouri | Marta Carrega **Supervisors:** Paula Antunes | Ana Silva

Track 4 - Water use, recycling and reuse

Room 117 - Departmental Building

Chair: Marta Martins

CIRCULAR PERFORMANCE EVALUATION WITH 4 R MODEL IN TREATMENT SYSTEMS: FROM WASTEWATER TREATMENT PLANTS TO BIO-FACTORIES

Student: Carlos Rodrigues

Discussants: Paula Guedes | André Figueiredo

Supervisors: Leonor Amaral

RESILIENCE OF PUBLIC WATER SUPPLY SYSTEMS IN THE MEDITERRANEAN - APARTADURA CASE STUDY

Student: Sandra Duarte

Discussants: Neusa Figueiredo | Carlos Rodrigues

Supervisors: Rita Maurício

ASSESSMENT AND OPTIMIZATION OF ACTIVATED SLUDGE THICKENING THROUGH ELECTROFLOTATION TOWARDS OXYGEN AND HYDROGEN RECOVERY AND REUSE IN WASTEWATER TREATMENT PLANTS

Student: André Figueiredo

Discussants: Joana Almeida | Sandra Duarte **Supervisors:** Leonor Amaral | António Brito



Track 5 - Sustainability transformations

Room 105 - Departmental Building

Chair: Marta Martins

DEVELOPING NEW ENVIRONMENTAL AND SOCIOECONOMIC INDICATORS TO EVALUATE DISRUPTIVE TECHNOLOGIES, TOWARDS LOW CARBON AND RESILIENT AGRICULTURE 4.0

Student: Maria Bell

Discussants: Nuno Videira | Michael Israel

Supervisors: Joana Portugal

CO-CREATING TAILOR-MADE STRATEGIES TOWARDS SUSTAINABILITY TRANSFORMATION: A COLLABORATIVE FRAMEWORK FOR LOCAL GOVERNMENTS IN A DECENTRALIZATION CONTEXT

Student: Lina Arroyave

Discussants: José Carlos Ferreira | Maria Bell **Supervisors:** Rita Lopes | Rui Santos | Jelle Behagel

ARE SUSTAINABLE SMART CITIES REAL? CHALLENGES AND OPPORTUNITIES TO MOVE THE URBAN INNOVATION ECOSYSTEM TOWARDS THE SDG-11 TARGETS

Student: Thiago Tolentino Muniz

Discussants: Joanaz de Melo | Lina Arroyave **Supervisors:** Rita Lopes | Giulia Sonetti

A NOVEL SOLUTION FOR SUSTAINABLE FUTURE SMART CITIES APPLIED ON MACRO AND MICRO LEVELS OF THE GREATER CAIRO

Student: Michael Israel

Discussants: José Carlos Ferreira | Thiago Muniz **Supervisors:** Shenouda Mekhael | Patrícia Fortes

Track 6 - Environmental quality and ecotoxicology

Room 114 - Departmental Building

Chair: Maria Rosa Paiva

SOIL PESTICIDE CONTAMINATION: ELECTROKINETIC REMEDIATION, ADVANCED MONITORING TOOLS AND DEGRADATION MECHANISMS

Student: João Brinco

Discussants: Rita Maurício | Carlos Diniz **Supervisors:** Alexandra Ribeiro | Paula Guedes

ALGTERNATIVE- ALGAE TOWARDS ENERGY AND RECYCLING NUTRIENTS IN WASTEWATER AND CO2-RICH GASES FOR INCREASING VALUE

Student: Bruna Thomazinho França
Discussants: Paula Guedes | João Brinco

Supervisors: Alberto Reis | Marta Martins | Ana Luísa Fernando

IMPACT OF ACTIVE LITHIUM FROM MINING INDUSTRY: AN ENVIRONMENTAL HEALTH APPROACH

Student: Susana Jesus

Discussants: Alexandra Ribeiro | Bruna França

Supervisors: Marta Martins

Track 7 - Models, data and Al

Room 115 - Departmental Building

Chair: António Câmara

EARTH OBSERVATIONS OF ARCTIC CLIMATE CHANGE THROUGH A MULTI SENSOR AND ARTIFICIAL INTELLIGENCE APPROACH

Student: Sara Aparício

Discussants: André Nouri | Isabel Nobre

Supervisors: Júlia Seixas | Marco Tedesco | Mark Drinkwater

DATA AND ALGORITHMS WRITTEN FOR NATURE

Student: António Galvão

Discussants: Sofia Simões | Sara Aparício

Supervisors: João Joanaz de Melo

ENVIRONMENTAL DECISION SUPPORT FRAMEWORK: DATA EXPLORATION AND ANALYSIS

Student: Theo Fernandes

Discussants: João Pedro Gouveia | António Galvão **Supervisors:** António Câmara | António Brito

WATER-ENERGY-FOOD-ECOSYSTEMS NEXUS (WEFE): A TOOL FOR SUSTAINABLE AGRICULTURE

Student: Isabel Nobre

Discussants: Patrícia Fortes | Theo Fernandes

Supervisors: Paula Antunes | Paulo Condado | Alfonso Calera

Track 8 - Ocean and coastal management

Room 117 - Departmental Building

Chair: Tomás Ramos

INCOME ALTERNATIVES FOR COASTAL COMMUNITIES ADDRESSING THE CHALLENGES OF THE SEA ECONOMY IN NAMPULA - MOZAMBIQUE

Student: Fernando Momade

Discussants: Rita Lopes | Catarina Santos

Supervisors: Mónica Mesquita

FUTURITY AND SUSTAINABLE PRACTICES IN ARTISANAL FISHING. THE VALUE OF ARTE XÁVEGABYCATCH IN COSTA DE CAPARICA

Student: Felipe Alvarado

Discussants: Rita Lopes | Fernando Momade

Supervisors: Mónica Mesquita

NATURE-BASED SOLUTIONS FOR COASTAL PROTECTION

Student: Catarina Jóia Santos **Discussants:** Carla Silva | Rita Dias

Supervisors: José Carlos Ferreira | Michael Beck



Track 9 - Ecosystem services and land management

Room 105 - Departmental Building

Chair: Paula Antunes

PRAXIS, HEURISTICS, TECHNOLOGIES: APPROACHES TO ECOLOGICAL RESTORATION IN PORTUGAL FROM A PRACTITIONERS PERSPECTIVE

Student: Justin R-Sondergaard

Discussants: Marta Martins | Carlos Rio Carvalho

Supervisors: João Joanaz de Melo

PAYMENTS FOR ECOSYSTEM SERVICES IN PORTUGAL. STATE OF THE ART AND RESEARCH QUESTIONS

Student: Carlos Rio Carvalho

Discussants: Rita Lopes | Carolina de Mello Silva **Supervisors:** Rui Santos | José Lima Santos

SOCIAL-ECOLOGICAL CARTOGRAPHIES OF LAGOA DE ALBUFEIRA. A CRITICAL ETHNOGRAPHIC STUDY FOR SUSTAINABILITY

Student: Daniel Oliveira

Discussants: Joanaz de Melo | Justin R-Sondergaard **Supervisors:** Mónica Mesquita | Zara Teixeira

REGENERATIVE UNIVERSITIES: DEEP TIME WALK AS A TRANSFORMATIVE TOOL IN HIGHER EDUCATION INSTITUTIONS

Student: Carolina de Mello Silva

Discussants: Rui Santos | Daniel Oliveira **Supervisors:** Antje Disterheft | Matthias Barth

Track 10 - Water use, recycling and reuse

Room 114 - Departmental Building

Chair: Tomás Ramos

UPCYCLING OF WATER TREATMENT SLUDGE - A LOW-COST ADSORBENT BARRIER FOR THE REMOVAL OF POLLUTANTS OF EMERGING CONCERN IN WASTEWATER

Student: Diogo Borges Sousa

Discussants: Carla Silva | Carlos Rodrigues **Supervisors:** Rita Mauírcio | Maria Bernardo

COMPREHENSIVE STUDY AND RISK ANALYSIS OF ALTERNATIVES FOR THE REMOVAL OF EMERGING POLLUTANTS FROM TREATED WASTEWATER FOR DIFFERENT USES

Student: Rita Dias

Discussants: Paulo Diogo | Tânia Correia

Supervisors: Rita Maurício | Michiel Adriaan Daam | Mário Diniz

DEVELOPMENT OF MUNICIPAL WASTEWATER CHEMICAL TREATMENT FOR IN SITU APPLICATION OF THE WATER-ENERGY-FOOD NEXUS

Student: Tânia Correia

Discussants: Marta Martins | Diogo Borges Sousa **Supervisors:** Maria Fátima Carvalho | Leonor Amaral

Track 11 - Circular economy and waste management

Room 115 - Departmental Building

Chair: Alexandra Ribeiro

DEVELOPMENT OF AN INTEGRATED MODEL FOR MANAGING AGRICULTURAL PLASTIC WASTE

Student: Ana Vanessa Alves

Discussants: Rita Maurício | Maria José Correia

Supervisors: Graça Martinho

MUNICIPAL SOLID WASTE MANAGEMENT PLANNING WITH SPECIAL FOCUS ON THE COLLECTION STAGE

Student: João Ana

Discussants: Mário Ramos | Ana Vanessa Alves

Supervisors: Ana Silveira

PROFILING CIRCULAR ECONOMY PRACTICES OF CATHOLIC NON-PROFIT ORGANISATIONS

Student: Susana Trindade

Discussants: Nuno Videira | João Ana

Supervisors: Tomás Ramos | Pauline Deutz | Natacha Klein

BIODEGRADABILITY OF BIOPLASTICS IN COMPOSTING CONDITIONS

Student: Maria José Correia

Discussants: Mário Ramos | Susana Trindade

Supervisors: Ana Silveira



Track 12 - Energy and climate

Room 117 - Departmental Building

Chair: Maria Rosa Paiva

EXPLORING THE ROLE OF HARD-TO-REACH ENERGY USERS IN JUST ENERGY TRANSITIONS: CHARACTERIZATION OF AUDIENCES AND DEVELOPMENT OF A LOCAL-SCALE SUPPORT FRAMEWORK

Student: Miguel Sequeira

Discussants: José Carlos Ferreira | Evandro Ferreira **Supervisors:** João Pedro Gouveia | João Joanaz de Melo

THE ROLE OF GREEN ELECTRICITY AND HYDROGEN IN NORTH AFRICA DECARBONIZATION: ENDOGENOUS POTENTIALS, EXPORTS, AND CHALLENGES

Student: Yasmine Ayed

Discussants: Sofia Simões | Miguel Sequeira **Supervisors:** Patrícia Fortes | Rafat Al Afif

THINKING BACKWARDS: EXPLORING POLICIES AND DATA TO DESIGN A JUST AND HEALTHY ENERGY FUTURE

Student: Salomé Bessa

Discussants: Patrícia Fortes | Yasmine Ayed

Supervisors: João Pedro Gouveia

IN SEARCH OF INSTITUTIONAL REQUIREMENTS AND STAKEHOLDERS' VALUE FORMATION FOR JUST ENERGY TRANSITIONS: A COMPARATIVE CASE STUDY

Student: Beste Gün Aslan

Discussants: João Pedro Gouveia | Salomé Bessa **Supervisors:** Nuno Videira | Patrícia Fortes

SMART ENERGY SOLUTIONS: HARNESSING BIG DATA FOR ENERGY POVERTY DIAGNOSIS AND ITS MITIGATION THROUGH RENEWABLE ENERGY COMMUNITIES

Student: Evandro Ferreira

Discussants: André Nouri | Beste Gün Aslan

Supervisors: João Pedro Gouveia

51

PhD CREATIVE PRESENTATION

DAY 1 - WEDNESDAY, JULY 3RD

Adriane Brito

Ana Vanessa dos Santos Alves André Guilherme Varela Figueiredo

António Miguel Portugal Galvão

Beatriz Isabel Manso de Matos Bernardo Malongo José

Beste Gün Aslan

Bruna Thomazinho França

Carlos Alberto da Silva Rodrigues

Carlos Diniz Calhaz Cardoso da Fonseca

Carlos Francisco da Silva do Rio Carvalho

Carolina de Mello Silva

Catarina Sofia Jóia de Oliveira dos Santos

Daniel Gomes Batista de Oliveira

Diogo Santos Antunes Borges Sousa

Evandro Cesar Cahino Ferreira

Felipe Garcia Alvarado

Fernando Charamatane Momade

Hüseyin Ersoy

Isabel José Capelo Ferreira Nobre

Joana Filipa Marujo Neves

João Eduardo Rodrigues Sedas Brinco

João Pedro de Brito Ana

Justin R-Sondergaard

DAY 2 - THURSDAY, JULY 4TH

Lina Marcela Ortiz Arroyave

Lourenço Gouveia Booth

Luana Raquel Arcanjo de Assis Boavida

Maria José Realinho Gonçalves Correia

Maria Lizete Lopes Heleno

Maria Regla Soroa Bell

Marta Alves Carrega

Michael Magdy Wahba Israel

Miguel Macias Marques Sequeira

Nicholas Paul Fitzpatrick

Rita Alexandra de Jesus Marques Dias

Rogério Afonso Cuinhane

Salomé Pimentel Areias

Sandra Marília Goulão Duarte

Sandra Salomé Neto Bessa

Sara Filipa Marques Nunes Aparício

Susana Gonçalves da Silva Cunha Trindade

Susana Patrícia Alegria de Jesus

Tânia Rute Aires Correia

Theo Rangel Correia da Silva Fernandes

Thiago Tolentino Muniz

Yasmine Ayed

Yone Macedo Gomes



NETWORKING@PDAS SEMINAR

Social gathering with drink

Meet other PDAS students and the academic staff for a chat at the after-seminar gathering, taking place from around 5:30 pm onwards in the outdoor spaces of NOVA FCT Campus – Garden in front of the NOVA FCT Library. Drinks will be provided.

VENUE AND LOCAL INFORMATION

Venue address & travel details

Sala Ágora, NOVA FCT Library Building | NOVA School of Science and Technology | NOVA FCT, NOVA University Lisbon

NOVA School of Science and Technology is accessible via public transport from Lisbon by either catching the tram (Metro Sul do Tejo) from Pragal train station to the university station. Alternatively, the Carris bus 3711 also runs between Lisbon and the faculty.

Please check the websites below, for detailed information on how to get to NOVA School of Science and Technology or Google Maps for specific travel routes and times.

www.fct.unl.pt/faculdade/como-chegar-fct www.mts.pt/mts/ www.carrismetropolitana.pt/

Information desk

The information desk will be staffed by Mrs. Sandra Ferreira and is located in the entrance of the venue, Sala Ágora (NOVA FCT Library Building) and it will remain open for the duration of the workshop for any queries related to the workshop.

th

Sessions

The plenary sessions will take place in "Sala Ágora", NOVA FCT Library building, and parallel sessions in rooms 105, 114, 115 and 117 at Departmental Building, Environmental Sciences and Engineering ward.

Please check the following image to guide you through the campus.



Coffee break/lunch

The coffee breaks, as well as the lunch, will take place in the NOVA FCT Library restaurant.

Vegetarian options will be included in the lunch.

Support services

For any specific queries about the seminar please contact:

Mrs. Sandra Ferreira | PDAS Administrative Assistant

Email: sf@fct.unl.pt

Tel: 212948397 | Ext: 10101

Department of Environmental Sciences and Engineering NOVA School of Science and Technology | NOVA FCT NOVA University Lisbon



CALENDAR 2024 IMPORTANT DATES

1st Year Students: Submission and Discussion of PhD Plan

For students enrolled in the 1st semester:

Submission of the Thesis Plan: 31st of July 2024

Presentation and discussion with Thesis Advisory Committee (TAC): 30th of September 2024

For students enrolled in the 2nd semester:

Submission of the Thesis Plan: 31st January 2024

Presentation and discussion with TAC: 29th February 2024

2nd and 3rd Year Students: Annual TAC meeting

Presentation and discussion with TAC: 30th of September 2024

ACKNOWLEDGMENTS

Keynote Speakers, Track Chairs and Discussants

We would like to thank the Keynote Speakers, Track Chairs, Discussants for presenting, chairing, and reviewing the scientific works at the PDAS annual event. We wish you all a warm welcome and hope that you enjoy the Seminar.

NOVA FCT Services

We would like to thank to all the NOVA FCT services that provided support for the organization of the 9th Annual Seminar of the PhD Programme in Environment and Sustainability Studies.