



Re-UNITA

RESEARCH

Newsletter



Editorial

One of the pillars of the “Re-UNITA: Research for UNITA” initiative focuses on renewable energy. As part of this research effort, the University of Beira Interior (UBI) has a dedicated Energy Economics group composed of young and senior researchers. Together, they are conducting extensive research on “energy transition and resources management”. The group is committed to providing evidence on the complexities of energy transition, not only to the scientific community but also to society at large. Its research lines include, among others:

- (i) the recognition and analysis of the critical role played by electricity consumers in facilitating a successful and fair transition to renewable energy sources;
- (ii) the conditions and repercussions of diversifying the energy mix whilst simultaneously discontinuing controllable energy sources, such as coal, in the context of both the electricity/energy systems and economies; and
- (iii) electric mobility challenges and opportunities related to electricity system management, environmental sustainability, and the accommodation of renewables.

Additionally, following the Re-UNITA research pillars, the Energy Economics team has also focused its research on the circular economy, looking to contribute by analyzing:

- (i) Drivers and barriers of circular economy in the European Union
- (ii) Management of e-waste, namely recycling and exports

We sincerely hope that you will find the valuable insights presented in this newsletter useful and that you will use them to generate innovative ideas for our consortium. I encourage you to delve into the contents with enthusiasm and think outside the box. Let us work together to ensure that our collective efforts result in progress and success.

Links: https://www.youtube.com/watch?v=af2_cPgLkI

António Cardoso Marques
Professor and Researcher of University of Beira Interior

Cultural Heritage



Religious symbols: a cross-analysis between jurists and linguists

The fruit of an interdisciplinary collaboration between two USMB researchers, Dominique Laforgette, professor of linguistics, and Clément Bénébaz, assistant professor of law, this research project focuses on the question of religious signs, which is regularly raised in public spaces, particularly schools. These questions concern not only the place of religious signs, but also their meaning. How can we determine what a religious sign is or isn't? How should they be interpreted? And finally, what are the consequences, both for public services and for users?

This research was the subject of an Amphi pour tous, a series of lectures for the general public designed to pass on to the public the knowledge produced at the Université as part of a science-for-society approach. The video of the conference will soon be available on the USMB Youtube site.

Circular Economy



Full aggregate replacement by crushed oyster shell wastes in environmental-friendly concrete: a local and circular industrial case-study at the Dune of Pilat site in France

Concrete is one of the most used materials in the world, but its production has several negative environmental impacts such as climate change and resource depletion. To make concrete more sustainable, we can reduce the amount of clinker cement and reuse industrial waste as aggregate replacement. In this study, we investigated the reuse of crushed oyster seashell waste as full aggregate replacement in concrete in the context of the renovation of the Dune of Pilat welcome center in the Arcachon Bay area in France.

University De Pau Et Des Pays De L'adour (UPPA)
Research group @ UPPA: www.davidgregoire.fr

Renewable Energies



Bringing research closer to teaching activities and focusing on transferring knowledge to the community not only enriches the academic landscape but also delivers value to the communities. In this sense, UBI has proposed a master's degree in “Circular and Energy Economics” to feed the research-teaching-transfer relationship and strengthen future links between UNITA members. In addition, UBI has created a non-degree course, “Informed Choices in Energy,” to increase consumer energy literacy, targeting the whole community. This symbiosis cultivates the educational ecosystem and stimulates innovation and breakthrough solutions to contemporary challenges. There have also been several publicity campaigns in secondary schools and frequent interventions in the media to inform and empower consumers. The aim is to promote an energy transition that is less exclusionary and, therefore, fairer.

University of Beira Interior (UBI)

PhD student of the month



Anna Theurel is a doctoral student at the Institut des Sciences de la Terre (ISTerre).

Her thesis is entitled "Influence of crystals on the eruptive dynamics of siliceous magmas". Anna is interested in volcanoes and associated risks.

Anna took part in the "My thesis in 180 seconds" competition and was awarded 2nd prize by the jury in the academic final involving doctoral students from the USMB and Université Grenoble Alpes. Her presentation can be viewed at the following link: <https://www.youtube.com/watch?v=AiloXRneU6A>

Contact : anna.theurel@univ-smb.fr

Woman researcher of the month



Françoise Hapel received her PhD in applied Languages from the Université Sorbonne Nouvelle in Paris (2012). She is currently Senior Lecturer at the Université de Pau et des Pays de l'Adour, and a member of the research group, ALTER (UR7504). She is particularly interested in the didactics of French as a foreign language and intercomprehension. Her research focuses on seeking how to measure the impact of emotions on language learning and assessing the benefits of a learning method based on learners' plurilingualism.

https://alter.univ-pau.fr/fr/organisation/membres/cv_-fhapel-fr.html

[Read interview »](#)

Infrastructure of the Month



CICS-UBI is a Health Sciences Research unit located in the Medical School Campus of the University of Beira Interior, with national and international recognition. CICS-UBI is dedicated to interdisciplinary, translational research at the crossroads of Biomedicine and Biotechnology, focusing on diseases with a high impact on human health, particularly neurological, infectious, endocrine, neoplastic, and respiratory diseases.

CICS-UBI is interested and available to receive colleagues from partner Universities, and researchers will benefit from a set of facilities, encompassing an area of 1830 m², that bring together in the same unit basic, applied and translational perspectives of biomedical research.

Check available infrastructures and contact details at: <https://reunitaresearchinfrastructure.i3a.es/en>

Highlights

Re-UNITA Workshops "Research Challenges for Cultural Heritage, Circular Economy and Renewable Energies in rural and mountain areas" will take place at University of Beira Interior (UBI), Covilhã, Portugal on 18th and 19th April.

More info: <https://www.ubi.pt/Evento/12178>

Re-UNITA's Seeding Proof of Concept program open until 17 May 2024.

<https://www.research.univ-unita.eu/en/events/reunita-seeding-proof-of-concept.html>

Contact: reunita@univ-pau.fr | Website: <http://research.univ-unita.eu>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 101035810.