Re-UNITA RESEARCH Newsletter

#3
May
2022

Editorial

Launched in November 2020, the UNITA alliance is only two years old but has already achieved much! In terms of research, thanks to the work of the Thematic Hubs on the three central subjects of UNITA (renewable energies, circular economy and cultural heritage), a mapping of research activities allows us to know the researchers involved and their skills in each partner. This mapping is intended to be a facilitating tool to initiate and develop scientific collaborations.

In order to further promote mutual knowledge, Unita Talks are held every week to share research in development with as many people as possible within the Alliance.

The Re- UNITA newsletter pursues the same objective of networking. Thus, this third issue allows us to highlight the Be-Archaeo project, which is based on and promotes a new trans-disciplinary vision of archaeology. This interdisciplinary approach is often necessary today to better study complex phenomena with high societal stakes such as those around renewable energies (see for example the work on solar energy of Andreea SABADUS (West University of Timisoara) or the work on geothermal energy of Jean-Luc Got (Savoie Mont Blanc University)) or the accessibility to cultural heritage and social inclusion, subjects of Simona Corciulo's thesis (University of Turin) or finally the work around Sustainability, at the heart of the "Green UVT" Sustainability Center.

More great research to share and conduct together!

Mareva Sabatier
Vice-Rector of Research
Université Savoie Mont Blanc

Cultural Heritage

Be-Archaeo: a truly transdisciplinary project

Archaeological research benefits from the collaboration of differing disciplines, to make prospections of the sites and to characterise the materials finded. Common procedure is the involvement of a specific discipline to solve specific problems. Be-Archaeo project experienced an innovative approach where all disciplines have been simultaneously involved in the excavation of a Japanese burial mound, with a cross-fertilization of skills and the challenge to define new methods and guidelines to integrate field archaeology, archaeometry and interactive museum experience.

https://www.bearchaeo.com/

Circular Economy

Teaching and Educating for Sustainability

The general objective of the project is to **create a common, new, non-formal education structure for sustainability**. This will enable institutions and organisations involved in education, adult training and professional development from all over Europe to plan learning experiences that empower their students and beneficiaries to develop and evaluate alternative visions of a sustainable future. It will also help them to work creatively with major stakeholders from the economic sector to assure the practical link between education for sustainability and real economy and community needs.

The **"Green UVT" Sustainability Center** is the result of the implementation of the Erasmus + Program Key Action 2 project, "Teaching and educating for Sustainability", No. project: 2018-1-RO01-049253, project manager Professor Gabriela Mircea, PhD.

The **main activities** of the center will include:

- **education** for sustainable development and related **innovative teaching methods**
- scientific **research** in the field of sustainable development
- transdisciplinary education and research
- collaborative **activities** with public authorities.

https://www.teachsus.eu/home

Renewable Energies

The Geothest project, co-funded by the USMB Foundation, focuses on geothermal energy. The project aims to estimate the geothermal potential for domestic, collective and industrial heating in three geographical areas located in Savoie Mont Blanc territories. By carrying out geophysical investigations using new signal processing methods, it will make it possible to know the position and depth of deep aquifers and to identify the possible benefits and risks of exploitation.

More information

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PhD student of the month

Simona Corciulo, PhD student in Technologies for Cultural Heritage (XXXVII cycle)
University of Turin
Department of Computer Science
Tutor: Prof.ssa Rossana Damiano

SENSEtionART: a model for processing and collecting sensory and emotional data for the design of multi-sensory and inclusive exhibitions

The multi-sensory exhibition design involves many challenges and considering the dialog between sensory linguistics and natural language processing techniques could provide new insights to solve them.

The project investigates the use of existing natural language processing models to find the multi-sensory and emotional dimensions preserved in language, namely in artwork descriptions, to suggest a mapping between artworks and sensory stimuli.

Woman researcher of the month

Andreea SABADUS, Institute for Advanced Environmental Research, West University of Timisoara

She is currently a young Research Assistant at West University of Timisoara, at the Institute for Advanced Environmental Research. After her PhD defence in October 2021, she continued her research on modeling photovoltaic systems. She focuses mainly on solar cells, more specifically on the one-diode model of a solar cell.

Read the interview »

Highlights

A Summer School on Lakes and Rivers Ecological Monitoring, involving UNITO and USMB, will be held from July 18th - 22nd in Thônon-les-Bains.
Info: serena.rasconi@inrae.fr
Flyer

In 2022 September, a colloquium on "The transnational and transmedia circulation of crime fiction in Romance languages" will be organized in UPPA (in collaboration with USMB).
https://alter.univ-pau.fr/fr/activites-scientifiques/manifestations-scientifiques/colloques/colloque-la-circulation-transnationale-et-transmediatique-du-polar-en-langues-romanes.html

Reunita Meetings will be held in Timisoara in early June. The program includes discussions on research policies, interdisciplinarity and open innovation, strategies for coordinated responses to calls for European projects, the HRS4R label, etc.