

CIRQUA - NEWSLETTER



Waterwise Futures: Integrated Approaches at Local Scale for Enhancing Water Reuse Efficiency and Sustainable Soil Fertilization from Wastewater's Recovered Nutrients

What's Inside: Revolutionary Water Treatment, biomass-derived nanostructured fertilizer development, Mediterranean CW Demo Sites, Agriculture 4.0, and more.

The CIRQUA project is an ambitious initiative funded by the Partnership for Research and Innovation in the Mediterranean Area (PRIMA). It aims to tackle water scarcity and soil degradation across the Mediterranean by upgrading nature-based solutions (NBS) for wastewater treatment, specifically focusing on constructed wetlands (CWs) and provide biomass-derived nanostructured nutrients-rich, slow release fertilizers capable of improving soil properties and fertility. Our vision is to create a circular economy at a local scale through cutting-edge technologies and innovative approaches.

Meet the Leaders: The Minds Behind CIRQUA

CIRQUA is driven by a consortium of leading academic institutions and innovative SMEs. Here are the Principal Investigators leading the charge at each partner organization:



Spyridon Ntougias
(Coordinator) - Democritus University of Thrace (DUTH), Greece



Anastasios Tasiopoulos - University of Cyprus (UCY), Cyprus



Sophia Alexandra Tsipas - Universidad Carlos III de Madrid (UC3M), Spain



George Tsiamis - University of Patras (UPAT), Greece



Tatiana Stella- Monitoring and Management of Microbial Resources (M3R), Italy



Marios Drosos - University of Basilicata (UBas), Italy



Amal Maurady - University Abdelmalek Essaâdi-Tetouan (UAET), Morocco



Meriç Albay - Istanbul University (IU), Turkiye



Hoda Kamal Fouad Soussa - Ain Shams University (ASU), Egypt



Eftychia Goutakoli- uDevelop e.V. (uDev), Germany



Hanene Cherif - African Biotechnology Company (ABC), Tunisia



Cristina Calheiros - Interdisciplinary Center for Marine and Environmental Research (CIIM), Portugal



Ameer Cherif - University of Manouba (UMA), Tunisia

Project Highlights & Events

CIRQUA has been bustling with activity, fostering collaboration and sharing knowledge across the Mediterranean.

Kick-off Meeting in Xanthi, Greece (June 5-7, 2024): The official launch of the project, where partners gathered to align on strategies, methods, and outcomes. The meeting included the first session with the Stakeholder Advisory Board to gather initial feedback.



Workshop on Genomic Sequencing in Tunis, Tunisia (September 26-27, 2024):

Hosted at the University of Manouba, this workshop focused on the groundbreaking MinION sequencing technology, equipping researchers with hands-on skills for data analysis and its application in agriculture and environmental science.



Stakeholders' Consultation Workshop in Munich, Germany (November 1, 2024):

This event united key regional and local stakeholders to review project progress, discuss recent developments, and align with end-users' priorities. It provided a platform for dialogue and collaborative decision-making.



Workshop on Metal-Organic Frameworks (MOFs) in Cairo, Egypt (February 3-4, 2025): Held at the prestigious Ain Shams University, this comprehensive two-day workshop thoroughly explored the sophisticated synthesis methodologies and diverse practical applications of Metal-Organic Frameworks. The workshop featured hands-on laboratory demonstrations, expert presentations from leading researchers in the field, and collaborative sessions focused on optimising MOF performance in environmental remediation contexts.





Professor Spyridon Ntougias

Spotlight on the Coordinator

At the helm of the CIRQUA project is Professor Spyridon Ntougias, a distinguished academic from the Department of Environmental Engineering at the Democritus University of Thrace (DUTH). With a Ph.D. from the University of London and 25 years of research experience, his expertise spans environmental microbiology, bioengineering, biomass valorization, and wastewater treatment technologies. Professor Ntougias has an extensive track record of leading international and national research projects, including initiatives funded by the EU (PRIMA/H2020, Interreg) and the International Atomic Energy Agency (IAEA). His significant scientific contributions include over 95 publications, a patent, and the discovery and description of three novel bacterial genera. He holds several prestigious editorial roles, including Chief Editor for the "Nature-Based Solutions" section of Frontiers in Sustainability, making him exceptionally qualified to guide CIRQUA's ambitious vision for a sustainable future.

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