



## Transforming our relationship with nature is key to a sustainable future



Pr. Monia Najjar professor and VP in charge of international cooperation and strategic orientations at the University of Tunis El Manar, Higher institute of computer science and head of research team in the domain of optical communication.

In 2023, the University of Tunis El Manar (UTM) engaged in significant **renewable energy** and sustainability initiatives. One of its standout projects is the development of green hydrogen in collaboration with German institutions, particularly within a Tunisian-Bavarian partnership. This initiative leverages Tunisia's abundant solar and wind resources to produce green hydrogen, an innovative and eco-friendly energy carrier. With expertise in chemical engineering and renewable energy, UTM leads research efforts aiming to lower greenhouse gas emissions and enhance Tunisia's energy security.

Furthermore, UTM has been recognized globally for its commitment to quality education and sustainable development, enhancing its academic influence and attractiveness to international partners and students in these strategic areas. These initiatives reflect UTM's mission to address energy and environmental challenges through innovative solutions while strengthening its global collaborations for a sustainable future.

The RESMYLE project focuses on educational resources for waste and paper valorization. It aims to enhance environmental awareness and promote sustainable practices among youth in the Mediterranean region. Key activities include the development of engaging, cost-effective educational materials to facilitate learning about waste management and recycling. The project also emphasizes creating practical schools for sustainable development, encouraging hands-on experiences that prepare students for future employment in eco-friendly sectors.

12 CONSOMMATION  
ET PRODUCTION  
RESPONSABLES





# Transforming our relationship with nature is key to a sustainable future



Jour : 24 novembre 2023  
 Conference : Digital Engineering For Smarter Energy Systems  
 November 30, 2023 at 14h - ENIT  
 Amphitheater: Mokhtar LAATIRI

**Digital Engineering for Smarter Energy Systems**  
 Mr. Michael Short  
 Professor of Control Engineering and Systems Informatics

Conference : Reduction of Lower Sidetone Problems in Pulse Width Modulation System  
 November 30, 2023 at 10:30 - ENIT  
 Amphitheater: Mokhtar LAATIRI

**Reduction of Lower Sidetone Problems in Pulse Width Modulation System**  
 Prof. Amer Ragab ZEREK (IEEE member)

Seminar on "Rapid prototyping based on embedded solutions"  
 Amphi Mokhtar Laatiri



Med-EcoSuRe

Mediterranean University as Catalyst for Eco-Sustainable Renovation



Med-EcoSuRe (Mediterranean University as Catalyst for Eco-Sustainable Renovation) is a project funded by the European Union, under the ENI CBC MED programme. The programme is managed by the Autonomous Region of Sardinia (Italy) and aims to promote cross-border cooperation in the Mediterranean region.

Start date: 1<sup>st</sup> of September 2019  
 Duration: three years  
 Total project Budget: 2.934.856,69 €

12 CONSOMMATION ET PRODUCTION RESPONSABLES



**School on Solid Waste Management:** In March 2023, UTM participated in the Heinrich BöllStiftung's Summer School, which focused on solid waste management in the MENA region. The program included workshops on the principles of a zero-waste approach and discussions about the impacts of plastic waste. Participants explored community-based waste management strategies and were encouraged to develop interdisciplinary approaches to waste governance.

**Transparent Menu Labeling:** UTM's dining services ensure menu transparency by providing a detailed list of ingredients for each meal. This initiative allows students, faculty, and staff to make informed dietary choices and promotes a culture of conscious consumption.

**Collaboration with International Initiatives:** UTM has also collaborated with various international initiatives focusing on improving waste management practices. This includes educational programs that promote awareness of waste generation, recycling, and the importance of transitioning to a circular economy.

**Research and Innovation:** Ongoing research projects at UTM have emphasized innovative solutions for waste management, particularly in addressing the challenges posed by municipal solid waste. These initiatives aim to develop strategies for effective waste collection, segregation, and recycling within local communities.



## Transforming our relationship with nature is key to a sustainable future



In 2022 and 2023, the University of Tunis El Manar (UTM) engaged in projects focusing on sustainable fishing practices, addressing both environmental challenges and gender equality in the sector.

Initiatives included workshops aimed at integrating women into fishing roles and promoting responsible fishing methods. EmnaBenkahla, a researcher at UTM, highlighted the impact of climate change and pollution on marine life, advocating for sustainable practices to protect the fishing economy. These efforts are part of a broader aim to foster resilience in Tunisia's coastal communities.

The **Living Lab** concept at the UTM focuses on collaborative innovation in various fields, including energy and environmental sustainability. It aims to bridge the gap between academia, industry, and the community, facilitating hands-on experimentation and co-creation processes.

One notable initiative is the **FASTER Living Lab**, which addresses adaptation to climate change within the agricultural sector. This project encourages knowledge transfer among researchers and practitioners, promoting collaborative efforts to devise effective adaptation strategies. The Living Lab engages diverse stakeholders through workshops, allowing them to share insights and develop actionable solutions relevant to local contexts.

**Workshops and Training:** Throughout 2022, the FASTER project organized workshops aimed at training Farm Advisory System (FAS) agents and disseminating knowledge to farmers. These workshops included discussions on adaptation strategies to combat the impacts of climate change

**Collaborative Research:** There was a continued focus on research collaboration between Tunisian stakeholders and European partners, especially under the Horizon 2020 framework. The goal was to improve Tunisia's participation in EU-funded programs, with over €10 million allocated to research and innovation

12 CONSOMMATION  
ET PRODUCTION  
RESPONSABLES





Transforming our relationship with nature is key to a sustainable future



12 CONSOMMATION ET PRODUCTION RESPONSABLES



Fish Living Lab 

ورشة عمل لإعداد وتنفيذ منهج المختبر الحي •

مخصص لدعم الصيد التقليدي المستدام •

Projet GEL GINTEL- BIZERTE