

WHO WE ARE

The Malta College of Arts, Science and Technology (MCAST) is the leading entity responsible for the provision of further and higher vocational education in Malta. Research will be carried out by the Applied Environmental Sciences Research Group (AESReG), which is based at the Institute of Applied Sciences (IAS). AESReG is coordinated by two principal researchers, both of whom are also senior lecturing staff at IAS. The group carries out basic and applied research to address environmental and sustainability issues of concern to the Maltese and European environment, and works with a number of environmental authorities and organisations to ensure results dissemination and use in policy-making. AESReG actively contributes to the provision of quality environmental management and engineering education at MCAST. Current research activities focus on multidisciplinary aspects relating to the fields of natural resources management and agro-environmental sustainability. We have considerable experience in ecosystem services (ES) assessment and mapping scales, and aim to play a leading role by providing tools and support for environmental management at national and European scales.

OUR EXPERIENCE

- ★ Expertise on environmental management in small island states
- ★ Ecosystem services assessment and management in small island states
- ★ Spatio-temporal modelling of biodiversity and ecosystem services delivery
- ★ Research on agro-environmental issues and habitat management in rural landscapes;
- ★ Research on Biodiversity-Ecosystem Function (BEF) relationships
- ★ Expertise on the management of agroecosystem services, such as pollination and pest control services
- ★ Management of urban habitats (e.g. design and use of green roofs for biodiversity conservation)
- ★ Expertise in coastal and marine biology
- ★ Expertise on marine fisheries resources management
- ★ Research on fisheries-related issues and survey design
- ★ Expertise in plant and environmental sciences
- ★ Organisation of short-term international postgraduate and PhD training schools
- ★ Further and higher vocational education
- ★ Hosting of workshops and conferences of national or international importance
- ★ Conducting local interdisciplinary research
- ★ Good working relationship with government bodies, ENGOs, and private companies through a proven track record of collaboration



WHAT WE DO IN ESMERALDA

- ★ Identification of key stakeholders and their needs and uses of ES at national and European scales;
- ★ Participate in the development of biophysical, economic and social methods for mapping ES and their integration in a multi-tiered methodology;
- ★ Contribute to the development of integrated ES assessment methods and will participate in testing developed methods;
- ★ Participate in dissemination and knowledge exchange

WE ARE ALSO INVOLVED IN SUPER-B; BIOGREENHOUSE; EURO-AGRIWAT; CRIM-SAFRI; Agrivoltaics; RO Descaling; FOWARim



Dr Mario V Balzan

- ★ Senior Lecturer II at the Institute of Applied Sciences, MCAST
- ★ Principal researcher for the Applied Environmental Sciences Research Group (AESReG)
- ★ General project management
- ★ Research interests: ecosystem services assessment and mapping; habitat management; landscape ecology; environmental management in small island states; agroecosystem services; pollination ecology; conservation biological control.



Dr Eman J Calleja

- ★ Senior Lecturer II at the Institute of Applied Sciences, MCAST
- ★ Principal researcher for the Applied Environmental Sciences Research Group (AESReG)
- ★ Research Interests: climate change; rural geography; agriculture; policy making; conservation; management of protected areas.



Francesca Spagnol Gravino

- ★ Lecturer at the Institute of Applied Sciences, MCAST
- ★ Marine biologist
- ★ Research Interests: marine ecology; fisheries biology; elasmobranch population studies; population dynamics of exploited marine species; natural resources management.