



**HORIZON EUROPE Research and Innovation Framework Programme
MARIE SKŁODOWSKA-CURIE ACTIONS**

**EXPRESSION OF INTEREST
Postdoctoral Fellowships (PF)
HORIZON-MSCA-2023-PF-01**

Organisation Name/ Department <i>(if applicable)</i>	Organisation name: Malta College of Arts, Science and Technology	
	Centre: Applied Research and Innovation Centre (ARIC)	
Website of the organisation <i>(in English)</i>	https://mcast.edu.mt/applied-research/	
Organisation Short Name	MCAST	
Organisation Type	<input checked="" type="checkbox"/> Academic <input type="checkbox"/> Non-academic	<input checked="" type="checkbox"/> Higher Education establishment <input type="checkbox"/> Research organisation <input type="checkbox"/> International European Research Organisation <input type="checkbox"/> SME <input type="checkbox"/> Other (please specify)
Research Fields	<input type="checkbox"/> Chemistry (CHE) <input type="checkbox"/> Social Sciences and Humanities (SOC) <input type="checkbox"/> Economic Sciences (ECO) <input type="checkbox"/> Information Science and Engineering (ENG) <input checked="" type="checkbox"/> Environment and Geosciences (ENV) <input type="checkbox"/> Life Sciences (LIF) <input type="checkbox"/> Mathematics (MAT) <input type="checkbox"/> Physics (PHY)	
Sub-Fields/ Keywords <i>(up to 5)</i>	Integrated protected areas management; Cultural ecosystem services (CES); Education for sustainable development (ESD); Environmental education; Applied and landscape ecology.	
Marie Skłodowska-Curie Action(s) of interest	<input checked="" type="checkbox"/> European Postdoctoral Fellowships <input type="checkbox"/> Global Postdoctoral Fellowships	
Short Description of the Organisation/ Department - strengths and scientific achievements (publications, patents, etc.), important infrastructure <i>(up to 2000 characters with spaces)</i>	The Applied Research and Innovation Centre (ARIC), which is situated in MCAST Resource Centre, is part of the College's strategic plan, giving rise to a dynamic learning space, where knowledge and innovation thrive.	

**Publications:**

M. V. BALZAN, D. GENELETTI, M. GRACE, L. DE SANTIS, **JUDITA TOMASKINOVA**, H. REDDINGTON, A. SAPUNDZHIEVA, L. V. DICKS, M. COLLIER. Assessing nature-based solutions uptake in a Mediterranean climate: insights from the case-study of Malta, In *Nature-Based Solutions*, Volume 2, 2022, 100029, ISSN 2772-4115, <https://doi.org/10.1016/j.nbsj.2022.100029>

TOMAŠKIN, Ján - **TOMAŠKINOVÁ, Judita** - THEUMA, Hubert. Chlorophyll fluorescence as a criterion for the diagnosis of abiotic environmental stress of *Miscanthus x Giganteus* hybrid Pol. J. Environ. Stud. Vol. 30, No. 4 (2021), 3269-3276. DOI: 10.15244/pjoes/126874.

TOMAŠKINOVÁ, Judita - TOMAŠKIN, Ján - Theuma Hubert – Alcantara Valero Andres F. – Attard Vincent. Addressing present challenges in the life-cycle of wetlands management to successfully integrate sustainability and good governance. In *Journal of Environmental Engineering and Landscape Management*. Vilnius : Vilnius Tech, 2021, Vol. 29, No. 1, pp. 48-60. ISSN 1648–6897 / eISSN 1822-41992021.

<https://doi.org/10.3846/jeelm.2021.14142>.

GRACE, M. - BALZAN, M. - COLLIER, M. - GENELETTI, D. - **TOMAŠKINOVÁ, Judita** - ABELA, R. - BORG, D. - BUHAGIAR, G. - CAMILLERI, L. - CARDONA, M. - CASSAR, N. - CASSAR, R. - CATTAFI, I. - GAUCHI, D. - GALEA, C. - LA ROSA, D. - MALEKKIDOU, E. - MASINI, M. - PORTELLI, P. - PUNGETTI, G. - SPAGNOL, M. - ZAHRA, J. - ZAMMIT, A. - DICKS, L. V. Priority knowledge needs for implementing nature-based solutions in the Mediterranean islands. In *Environmental Science and Policy* 116 (2021), pp. 56-68.

<https://doi.org/10.1016/j.envsci.2020.10.003>.

TOMASKINOVA, Judita, GENELETTI, Davide, DICKS, Lynn V., GRACE, Miriam, COLLIER, Marcus, LONGATO, Davide, STOEV, Pavel, SAPUNDZHIEVA, Anna, BALZAN, Mario V. Capacity-building as an instrument to foster the implementation of nature-based solutions. 2021. *Research Ideas and Outcomes* 7: e77666. <https://doi.org/10.3897/rio.7.e77666>.

TOMAŠKIN, Ján - **TOMAŠKINOVÁ, Judita**.

Evaluation of assortment of ornamental grasses and their environmental importance in the urban landscape. In *Journal of Environmental Protection and Ecology*. Thessaloniki, Sofia : Scibulcom, 2020, Vol. 21, No. 5, pp. 1673-1682. ISSN 1311-5065.



TOMAŠKINOVÁ, Judita - TOMAŠKIN, Ján - SOPORSKÁ, Petra. Ecosystem Services and Recreational Values as Building Blocks for Eco Development in NATURA 2000 Sites. *Polish Journal of Environmental Studies*. Olsztyn: HARD, 2019. eISSN 2083-5906, Vol. 28, No. 3, pp. 1-8. <https://doi.org/10.15244/pjoes/90623>

TOMAŠKINOVÁ, Judita - ŠŤASTNÁ Milada - TOMAŠKIN, Ján - HNILIČKOVÁ, Helena - HNILIČKA František. Soil respiration dynamics, as a new approach in nature-based solutions for reduction of greenhouse gas fluxes in the terrestrial biosphere. In *Journal of Environmental Protection and Ecology*. Thessaloniki, Sofia : Scibulcom, 2019, Vol. 20, No. 2, pp. 802-810. ISSN 1311-5065.

TOMAŠKINOVÁ, Judita - TOMAŠKIN, Ján. Life cycle assessment of the nature and history park Il-Majjistral (Malta, EU). In *Journal of Environmental Protection and Ecology*. Sofia : Scibulcom, 2018. ISSN 1311-5065, 2018, Vol. 19, No. 1, pp. 236-245.

Research equipment at ARIC:

- Visualisation Wall (1 year old) - Multiple high-resolution displays are arranged into a single, curved, large display surface. It enables viewers to see large amounts of data at once and allows for interactive exploration and analysis of the data, training and simulation.
- Optical motion-capture cameras (1 month old)
- A versatile system with a number of applications in the life sciences, engineering, virtual reality, virtual production, and animation, able to capture motion with high accuracy and high positional and angular precision.
- Virtual Reality Headsets (1 year old)
- Robots (6 months old) - Teleoperation making it useful for tasks that require remote control, such as telepresence, remote inspection, or teleoperation in hazardous environments.
- Semi-humanoid robot (In final stages of procurement) - it combines advanced technology with human-like features to provide an engaging, personalized, and interactive educational experience for students.
- 360-degree camera (3.5 years)

Licences available at ARIC

- MAXQDA® -- software package for qualitative data analysis and mixed methods research.
- IBM® SPSS® -- statistical software platform.



	<p><u>Other significant research infrastructure available within MCAST's institutes</u></p> <p><i>Institute of Applied Sciences:</i></p> <ul style="list-style-type: none">• PT20 Test Water Rig Facility• GC-MS• GC-FID• Fourier Transform IR spectrophotometer• Spectrofluorometer• Bomb calorimeter <p><i>Institute of Information and Communication Technology:</i></p> <ul style="list-style-type: none">• VR Goggles• Digital Video/Photo camera• Thermal Screening Camera• Green Screen• Fibre Optic splicing machines
<p>Previous Projects/ Research Experience (international/ EU/ big national or regional projects especially in the areas in which you would like to host fellows) (<i>up to 5</i>)</p>	<ul style="list-style-type: none">▪ <i>ReNature: Promoting research excellence in nature-based solutions for innovation, sustainable economic growth and human well-being in Malta</i> [H2020 research and innovation programme No. 809988 (2018 – 2021); project partners: MCAST (project coordinator); Trinity College Dublin (Ireland); University of Trento (Italy); University of East Anglia and University of Cambridge (United Kingdom) and Pensoft Publishers (Bulgaria); Senior Researcher].▪ <i>HEIGHT: Higher Education Innovation Growth and Training: heightening sustainable innovation in our HEIs and societies.</i> [EIT, Climate-KIC, No. 210291 (2021)].▪ <i>ELY: Environmental Literacy for Youths in 21st century: Go to green team together</i> [project coordinator, Erasmus+, Youth in Action No. 2018-1-SK02-KA105-001631 (Slovak Republic, Malta and Bulgaria), 2018 - 2019].▪ <i>Learning for the future: Key competences in Education for Sustainable Development (LEFU)</i> [project coordinator, Erasmus+ No. 2016-1-SK01-KA104-022236 (Slovak Republic, Czech Republic, Portugal, Malta and Greece), 2016 – 2018].
<p>Thematic areas and list of supervisors who are looking forward to preparing a project</p>	<p>Dr Judita Tomaskinova (link to CV, contact information):</p> <ol style="list-style-type: none">1. Integrated protected areas management;2. Applied and landscape ecology;



proposal with postdoctoral researchers	3. Cultural ecosystem services (CES); 4. Education for sustainable development (ESD); 5. Environmental education.
Contact Person/ Position in the Organisation/ Phone/ E-mail	<i>Dr Judita Tomaskinova</i> <i>Deputy Director Research & Innovation</i> <i>Phone: +356 2398 7391</i> <i>Email: Judita.Tomaskinova@mcast.edu.mt</i>
Deadline for Expressions of Interest from postdoctoral researchers	20 June 2023
Necessary documents	✓ Expression of Interest form ✓ CV ✓ Brief description of the project idea
What we offer	✓ Full-time contract to work on a research project and enjoy advanced training, ✓ Competitive salary –€4,475.48 gross amount, including compulsory deductions under national law, such as employer and employee social security contributions and direct taxes; ✓ Mobility (€ 600) and Family allowances (if applicable - € 660); ✓ Budget for Research, Training and Networking costs (€ 1 000); ✓ Special needs allowance (if applicable).
Requirements	✓ <i>Experience:</i> <ul style="list-style-type: none">- Applicants should be in a possession of a doctoral degree at the call deadline.- At the call deadline, supported researchers must have a maximum of 8 years full-time equivalent experience in research, measured from the date of award of the doctoral degree. Years of experience outside research and career breaks (e.g. due to parental leave) will not count towards the amount of research experience. For nationals or long-term residents of EU Member States or Horizon Europe Associated Countries who wish to reintegrate to pursue their research career in EU Member States or Horizon Europe Associated Countries, years of experience in research in third countries will not be considered in the above maximum. ✓ <i>Mobility rule:</i> <ul style="list-style-type: none">- European Postdoctoral Fellowships - applicants must not have resided or carried out their main activity (work, studies, etc.) in the country of the beneficiary for more than 12 months in the 36 months immediately before the call deadline.



IMPORTANT – apply with us and increase your chances for success¹:

✓ Not funded applications for European Postdoctoral Fellowships with a host organisation from Malta have the chance to be funded under the **ERA Fellowships Call** (‘Widening Participation and Strengthening the European Research Area’ part of the Framework Programme). They will be automatically transferred to the ERA Fellowships Call and will be ranked in one single list according to the scores and evaluation of the Postdoctoral Fellowships call with an additional budget.

¹ The first bullet is only for Widening countries, the second bullet is only for countries and/ or organisations that have a Seal of Excellence programme adopted. Delete accordingly.