



## GRADUATE RESEARCHER NEEDED FOR THE PRIMA ORGANIZATION FUNDED PROJECT

*Sustainable water storage and distribution in the Mediterranean (OurMED)*

(BOĞAZIÇI UNIVERSITY PROJECT NO: 58000406)

**INVESTIGATORS:** İrem Daloğlu Çetinkaya, Nadim Copty, Ali Kerem Saysel, Cem İskender Aydın (BU Institute of Environmental Sciences)

**BRIEF PROJECT DESCRIPTION:** With fourteen partner countries involved in eight case studies in selected Mediterranean basins including the Konya closed basin, the project aims to design and explore innovative and sustainable storage and distribution systems tightly integrated into ecosystem management at the river basin scale. The focus of the project is to improve water storage and distribution knowledge and optimization through modeling at demo sites with the combination of in-situ historical data, high-resolution monitoring, EO-based products, and socio-economic assessments.

The project has multiple dimensions, such as modeling surface and groundwater distribution, water governance analysis, socio-hydrological modeling and assessment of multiple benefits of nature. These dimensions will be used to assess the resilience of water storage and distribution systems to anthropogenic and climatic pressures as part of larger socio-economic and socio-ecological systems.

The project offers invaluable international experience for the young researchers and will contribute immensely to their future careers in academia and industry.

A number of **GRADUATE RESEARCHER POSITIONS** are available to

1. Review legislations and protocols and academic literature related to water governance and management particularly related to Konya closed basin and Med at large; identify institutions and stakeholders involved in decision making related to groundwater and surface water governance and management; map power, hierarchy and information flows between the institutions and stakeholders; organize and conduct the stakeholder workshops in Konya

Researcher qualifications: An undergrad or a graduate degree preferably but not limited to Political Sciences, Sociology, and Economics.

2. Conducting hydrological modeling focusing on surface water distribution while accounting for groundwater interactions under historical and future climates, for creating plausible management scenarios.

Researcher qualifications: An undergrad or a graduate degree preferably but not limited to Environmental Engineering, Civil Engineering. Experience with computer programming software (e.g. Matlab, Python, or R)

3. Assessing (quantitatively or qualitatively) the benefits provided by natural water resources and water-related ecosystems (termed as ecosystem services or nature's contribution to people). Conducting a comprehensive socio-economic valuation process incorporating both monetary and non-monetary values by using integrated valuation methods, which help understanding differences in valuation languages and multiplicity of worldviews held by stakeholders.

Researcher qualifications: An undergrad or a graduate degree preferably but not limited to Economics. Knowledge of statistical softwares (STATA, SPSS or alike) is an asset.

4. Development of behavioral, multi-agent, socio-hydrological models of water storage and distribution systems for scenario analysis and policy design to the benefit of people and nature. Designing relevant empirical studies and field work for data acquisition. Building of dynamic simulation models, model validation and analysis. Creating stakeholder engagement and participatory processes to test and disseminate model based learning with a community of stakeholders.

Researcher qualifications: An undergrad or a graduate degree preferably but not limited to Industrial Engineering and other management disciplines.

Researcher qualifications for all candidates:

- Excellent reading and writing skills in English,
- Strong interest and acquaintance with the sustainability problems at the water-food-ecosystems nexus,
- Communication skills for in-depth interviews and group facilitations are strongly desired.
- Ability to communicate effectively with faculty, staff, and stakeholders.

The positions are initially offered for 18 months with a possible extension up to 24 months.

Applications (most recent CV with references and transcripts) will be received by [irem.daloglu@boun.edu.tr](mailto:irem.daloglu@boun.edu.tr) with a subject line "OurMED" and evaluated by the research team on a rolling basis. The deadline for application is June 30<sup>th</sup>, 2023.

For the graduate researcher positions, the salary is competitive with the salary of a research assistant publicly employed under Law No: 2547.