

## **5 PhD positions on the study of structure, biodiversity, ecosystem function and modelling of saline lake ecosystems at METU, Turkey**

We are seeking highly motivated **Turkish or international PhD students** to join our large research project funded by TÜBİTAK 2232 programme for outstanding researchers - focusing on structure, functioning and modelling of saline lakes ecosystems. The researchers will be principally working with Professor Erik Jeppesen ([www.pure.au.dk/portal/da/persons/erik-jeppesen](http://www.pure.au.dk/portal/da/persons/erik-jeppesen)), Professor Meryem Beklioğlu ([www.limnology.bio.metu.edu.tr](http://www.limnology.bio.metu.edu.tr), [www.ekosam.metu.edu.tr](http://www.ekosam.metu.edu.tr)), Assit. Professor Korhan Özkan ([www.korhanozkan.org](http://www.korhanozkan.org)) and Professor Zuhale Akyürek (<http://users.metu.edu.tr/zakyurek/>) as well as collaborating with researchers across a wide international network. The project will be conducted at the Middle East Technical University (METU) Ankara and Mersin Campuses and the PhD Students may enrol graduate programmes of the Institute of Natural and Applied Sciences of METU Ankara Campus at the Biological Sciences and Civil Engineering Departments, Geodetic and Geographic information technologies programme, and the Institute of Marine Sciences at METU Mersin Campus

1 PhD position is on ecological modelling and remote sensing of saline lakes. The tasks involved in this **PhD research project** are:

- Monitoring and analysing saline lakes in Turkey and Kazakhstan by using remote sensing and GIS.
- Adaptation of lake ecosystem models (for example PCLake-FABM) to saline lakes using existing data as well as data obtained during the project fieldwork.
- Using adapted catchment-lake ecosystem models to better understand potential regime shifts in saline lakes and their drivers.

The candidate is required to have basic knowledge on aquatic ecosystems and statistical skills, and preferable also skills in R or Matlab, remote sensing and aquatic ecosystem modelling.

4 PhD positions are on experimental and field ecology of saline lakes. The tasks involved in these **PhD research projects** are:

- Conducting ecosystem scale replicated mesocosms experiments using new state of the art mesocosm experimental facilities at METU Ankara and Mersin Campuses that will be built in the first year of the project.
- Studying food-web ecology using stable isotopes and paleo-ecological approaches.
- Conduct fieldwork on numerous Turkish and Kazakhstan saline/brackish lakes.
- Conduct laboratory and microscopic analyses.
- Conduct cross-system analyses on the structure, biodiversity, ecosystem functioning of saline lakes using classical and trait-based approaches on the lakes sampled during the project as well as existing data from the literature
- Conduct cross system analyses to develop better understanding of regime shifts in saline lakes on the globe

The candidates are required to have basic knowledge on aquatic ecosystems and skills on statistics and scripting (R or Matlab). Previous experience in experimental studies and/or fieldwork, and skills in taxonomy (fish, plankton, microbial community, or a similar aquatic organism group) or computation will be favoured.

The expected start date is January 2020. We will accept applications until the positions are filled. We offer 3 years PhD stipend (4500 TL per month). The PhD stipend is %30 higher than regular Turkish PhD stipends and accommodate a comfortable student life in Turkey (minimum salary in Turkey is 2000 TL). The graduate student dormitory (shared room for two) costs 700 TL per month at METU Ankara Campus and free at METU Mersin Campus. METU campuses offer comprehensive living and recreation facilities.

**For more information:**

[salinelakes.ims.metu.edu.tr](http://salinelakes.ims.metu.edu.tr)  
[www.metu.edu.tr](http://www.metu.edu.tr)  
[limnology.bio.metu.edu.tr](http://limnology.bio.metu.edu.tr)  
[ekosam.metu.edu.tr](http://ekosam.metu.edu.tr)  
[bio.metu.edu.tr](http://bio.metu.edu.tr)  
[ims.metu.edu.tr](http://ims.metu.edu.tr)  
[ggit.metu.edu.tr](http://ggit.metu.edu.tr)

**Application:**

Please send your CV, transcripts (bachelor and master), exam results (language and GRE), recommendations and a brief letter of motivation to project leader Erik Jeppesen - [ej@bios.au.dk](mailto:ej@bios.au.dk) and the core project group (Meryem Beklioglu - [meryem@metu.edu.tr](mailto:meryem@metu.edu.tr); Korhan Özkan - [okorhan@metu.edu.tr](mailto:okorhan@metu.edu.tr) and Zuhul Akyürek - [zakyurek@metu.edu.tr](mailto:zakyurek@metu.edu.tr)). You can also contact us for informal inquiries.

METU Graduate student applications criteria **require official Graduate Record Exam (A) and language scores (B). A list of accepted examinations is given below. Examinations recommended for international applicants were marked with an asterix (\*).** Native English speakers and applicants having a university degree with English education are exempted from English tests. For more inquiries please check the link below:

<https://msphd.metu.edu.tr/en/graduate-application>

Examination type	Examination	METU IMS	METU BIOL	METU GGIT
A	ALES (Turkish Graduate Record Exam)	70	70	70
A*	GRE (Quantitative)	155	155	155
B*	TOEFL	79	79	79
B*	IELTS	6.5	7	7
B	METU EPE (METU English Proficiency Exam)	65	70	70