



Issue 6/ September 2023

An Integrated System for the Complex Environmental Research and Monitoring in the Danube River Area, REXDAN



An Integrated System for the Complex Environmental Research and Monitoring in the Danube River Area, REXDAN

Contract no. 309/ 10.07.2020, SMIS Code 2014+: 127065

Project co-financed by the European Regional Development Fund through the Competitiveness Operational Programme 2014-2020 (COP)

Priority axis: 1. Research, technological development and innovation (RTDI) to support economic competitiveness and business development;

Investment priority: IP 1a: Strengthening research and innovation (R&I) and infrastructure and building capabilities in order to develop R&I excellence, as well as promoting centers of expertise, especially those of European interest;

Specific objective: SO1.1. Increasing scientific capacity in the fields of smart specialization and health;

Action: 1.1.1 Large R&I infrastructures;

Area of intervention - 058 : Research and innovation infrastructures (public)

Project implementation period: 10. 07. 2020 - 31. 12. 2023

Beneficiary: "Dunarea de Jos" University of Galati,

Contact: Domnească Street, no. 47, Galați, Romania

Tel: (+40) 336 130 108;

Fax: (+40) 236 461 353;

E-mail: rectorat@ugal.ro; www.ugal.ro

Web page: www.ugal.ro.



REXDAN RESEARCH VESSEL BROUGHT HOME

On the last day of August, 4 months before the completion of the project "An Integrated System for the Complex Environmental Research and Monitoring in the Danube River area", *REXDAN*, SMIS code 127065, the *REXDAN* research vessel docked in the port of Galați.



Built at *ATG Shipyard*, Giurgiu, the vessel made its first trip on the Danube (343 km) and anchored home, at the Schengen pontoon owned by the National Company Administration of the Danube Maritime Ports (CNAPDM) Galați, at 2 p.m., on August 31, 2023. The value of the *REXDAN* research vessel, which represents the mobile component of the project, is

approximately 7.5 million euros, and of the equipment in the related laboratories is 2 million euros.

As stated by the Rector of "Dunărea de Jos" University of Galați, Prof. Dr. Eng. Puiu Lucian Georgescu in the speech given to those who welcomed the *REXDAN* research vessel at the pontoon in front of the Navigation Palace, this is "a unique project, both from the perspective of the professionals working on the vessel, and of the equipment provided. *REXDAN* is a vessel which will cover a wide range of research activities in the field of sustainable development. Measurements of environmental factors, biodiversity, water quality, sediment quality, bird activity and ichthyofauna will be made. Moreover, using the specific equipment, the course of the Danube will be scanned so as to make recommendations regarding future works along this river. Relevant educational and research activities will be carried out on the shore, as well: all the activities on the vessel will be filmed and broadcast both to the general public and to researchers. The vessel will also be used as a mobile campus for other universities in big cities".



The first research trip of the *REXDAN* research vessel will cover the Romanian sector of the Danube and will bring together young researchers from "Dunărea de Jos" University of Galați and from other universities in Romania.

GLIMPSES OF REXDAN RESERACH VESSEL



GLIMPSES OF REXDAN RESEARCH VESSEL



REXDAN RESEARCH RESULTS PRESENTED AT THE CONFERENCE "MODERN APPROACHES OF THE ENVIRONMENT-CLIMATE CHANGE INTERCONNECTIVITY"

The results of the research activity carried out by the *REXDAN* Research Infrastructure (RI) members were presented at the International Conference "Modern approaches of the environment - climate change interconnectivity", ENVIROCLIM 2, organized by "Dunărea de Jos" University of Galati on 20-22 September 2023.

Devoted to the dissemination of research results in the field of feedback between environmental processes (water, soil, biodiversity, ecological reconstruction) and climate change, the conference aimed at creating an interdisciplinary vision on environmental processes affected by or contributing to climate change and at creating synergies at national and international levels which allow the efficient use of the latest generation equipment available in *REXDAN* RI laboratories.



REXDAN RESEARCH CENTER - PARTNER IN A STUDY ON PLASTIC POLLUTION OF THE DANUBE IN ROMANIA

The *REXDAN* Research Center within "Dunărea de Jos" University of Galați participated in a significant study on plastic pollution of the Danube in Romania. Carried out in collaboration with the associations "*Mai Mult Verde*" and "*Global Water Partnership Romania*" within the program "*Cu Ape Curate*" supported by Lidl Romania, the study revealed that almost 100 tons of plastic are brought annually by the waters of the Danube to the territory of Romania.

The study, the most extensive of this type in Romania, was carried out between 2022 and 2023, during five seasons, with 14 sampling campaigns (135 samples) carried out in three sections along the Romanian Danube, respectively Moldova Noua, Gruia and Isaccea. Designed to support government organizations and the research community in their efforts to prevent microplastic pollution, the study highlighted the importance of responsible actions for environment protection.

The present study was inspired by a similar research carried out in Austria and conducted by the *REXDAN* Research Center of "Dunărea de Jos" University of Galati in partnership with the River Administration of the Lower Danube (AFDJ), the National Institute of Hydrology and Water Management (INHGA), the University of Natural Resources and Life Sciences Vienna (BOKU) and ROMEXIM Bucharest.





*An Integrated System for the Complex Environmental
Research and Monitoring in the Danube River Area, REXDAN*

Project co-financed by the European Regional Development Fund
through the Competitiveness Operational Programme 2014-2020 (COP)
"Dunărea de Jos" University of Galați

September 2023

The content of this material does not necessarily represent the official position of the European Union or of the Government of Romania.

Contact:

"Dunărea de Jos" University of Galați,
REXDAN Research Infrastructure
George Coșbuc Bvd., no. 98, Galați, 800385
E-mail: rexdan@ugal.ro,
Web page: www.rexdan.ugal.ro