





**SCIENTIFIC GROUP 3.1.11.** 

**ALGOLOGY (ALGAL COLLECTIONS)** 

**Assoc. Prof. Dr Blagoy Uzunov** 







Algology - the branch of Botany which investigates prokaryotic and eukaryotic algae









### **ALGAL COLLECTIONS**

+ 5 culture collections and 2 927 algal strains in WFCC

25 313 algal strains in **29** culture collections

**ACUS** – Algal Collection of the University of Sofia St Kliment Ohridski

#### Search Results ( 24 culture collections from 19 countries & regions) acc. GCM & WDCM 22 386 algal strains



RCC,France (4,812)



NCMA,USA (2,635)



FACHB, China (711)



NRMC, India (413)



CAUP, Czech Republic (256)



ACUS, Bulgaria (93)



IBRC, Iran (74)



DBVPG, Italy (60)





CCAP,U.K. (2,512)



KMMCC, Korea (1,556)

CCCryo, Germany (494)

NIES, Japan (2,841)

















NBRC, Japan (347)









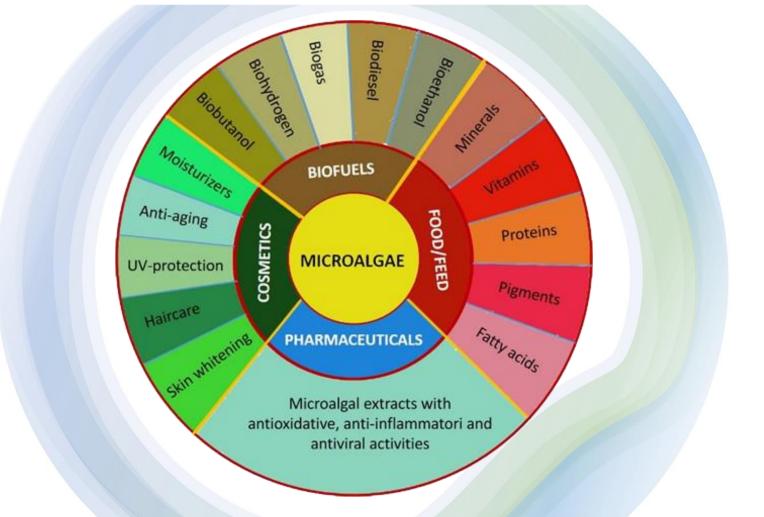






Algal collections matching every demand from bioresearchers and bioindustries in the sectors of:

- Health & Food
- Agro-Food
- Environment & Energy









The overall research objective of the scientific group 3.1.11. Algology (Algal Collections) in the framework of the project is to modernize and upgrade the ACUS.







The project team



# **Main activities**

Administrative activities

Prof. DSc Dr Maya Stoyneva

Assoc. Prof. Dr Ganka Chaneva

Assist. Prof. Dr Eng. Dobril Valchev

**Assist. Prof. Kristian Ivanov** 

**Assist. Prof. Miroslav Androv** 









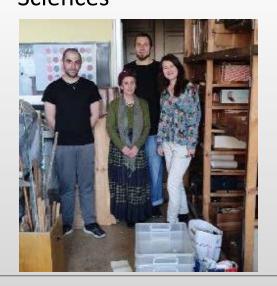
FACULTY OF BIOLOGY SOFIA UNIVERSITY







## **Main activities**



Univ. Prof. Georg Gärtner, DSc, PhD University of Innsbruck (Austria), Doctor Honoris Causa of Sofia University

### **ACUS** consultants



Dr Judita Koreivienė
Head of the Laboratory of Algology and Microbial Ecology
Nature Research Centre, Vilnius
Lithuania







# **Main activities**

### Administrative activities

In 2023, the room in which ACUS is housed was completely renovated:

3 growth chambers with an internal volume of 678 liters for long-term storage of Living algal collection under constant and defined conditions in terms of temperature, humidity and light.









# **Main activities**

Administrative activities

In 2023, the room in which ACUS is housed was completely renovated:

**a 300-litre tubular horizontal photobioreactor** for algae
cultivation with a chiller and
CO<sub>2</sub> supplier









# **Main activities**

### Administrative activities

In 2023, the microscopic room of ACUS was upgraded:

an inverted microscope, equipped with a high-class camera and a micromanipulator for the isolation of microscopic algae (including the single-celled ones)









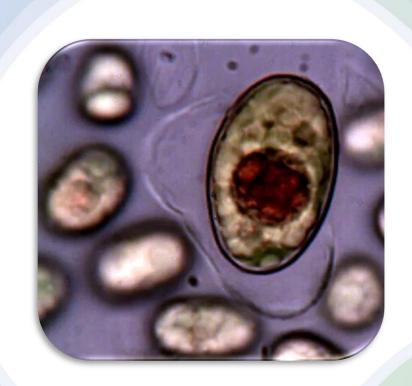
# **Main activities**

Research activities –
 Phycoprospecting

Haematoccocus pluvialis

Vischeria stellata

Tetradesmus obliquus Klebsormidium nitens









# **Main activities**

Research activities –

Participations (5) in international conferences (3)

### **International cooperation**

Submission of the application form for membership of the Alliance of National and International Science Organizations for the Belt and Road Regions (ANSO).

**GGBN** received membership invitation













## **Main activities**

## The project interrelated tasks











## **Future activities**

- Receiving the last piece from the ACUS modernisation programme Stereomicroscope
- Participations (4) in the International Botanical Congress
- Preparing for ERIC-MIRRI membership after the establishment of a national consortium for Bulgarian culture collections
- Publications in IF journals











July, 21st - 27th, 2024





MARKING MOMENTUM FOR INNOVATION AND TECHNOLOGICAL TRANSFER





National Recovery and Resilience Plan





