

# Grupa za eko-biotehnologiju i razvoj lekova

*Institut za molekularnu genetiku i genetičko  
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naučni savetnik





# Tim

- **16** istraživača
- znanja iz biologije, hemije, polimera, veterine i mikrobiologije



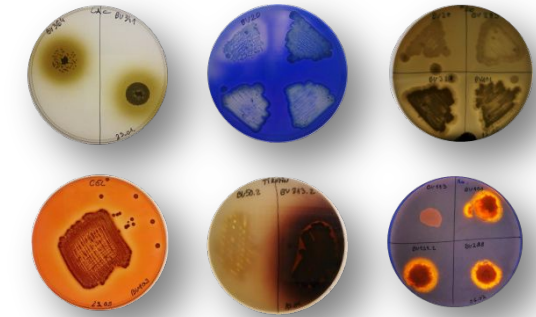
## Naš fokus:

- Biokataliza i zeleni procesi
- Biorazgradivi materijali
- Eko-inovativna reciklaža
- Biotehnološka rešenja za plastični otpad

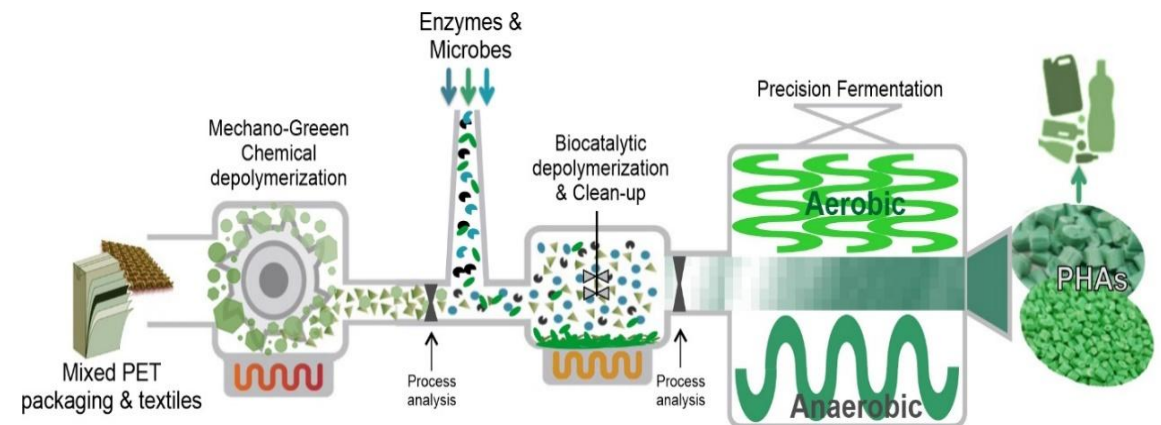
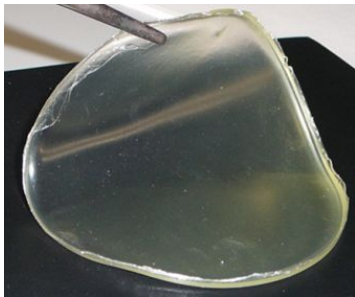




# Naš pristup



- Kolekcija mikroorganizama za biokatalizu i bioreciklažu
- Koncept od otpada do vrednosti (W2V)
- Konverzija plastičnog otpada u biomaterijale, bioaktivne molekule i biosurfaktante
- Inovativni materijali za biomedicinske i ekološke primene na bazi biopolimera polihidroksialkanoata (PHA) i bakterijske nanoceluloze
- Bio-alternative za pigmente i farmaceutske proizvode







# Analiza i oprema

- Enzimaska degradacija plastike i analiza proizvoda razgradnje
- Usmerena evolucija proteina za poboljšanu aktivnost enzima
- Genomska pretraga za nove biokatalizatore
- Proteomske studije degradacije i metaboličkih promena
- Metagenomska analiza mikrobnih zajednica

Bioreactor  
EDF-5.4\_1,  
5 L and 20 L



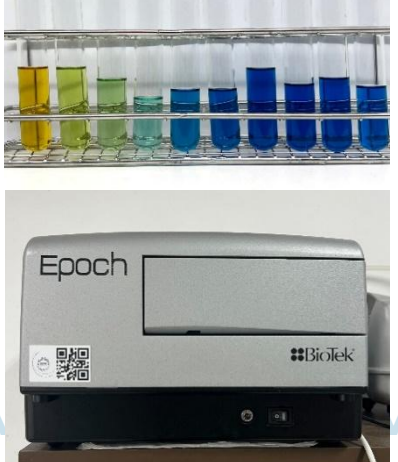
Spray drier,  
continuous  
flow centrifuge



RTS-8 Plus Multi-channel bioreactor  
with non-invasive OD, pH and pO2  
monitoring (Bio-San)



BioTek Epoch  
Microplate Reader



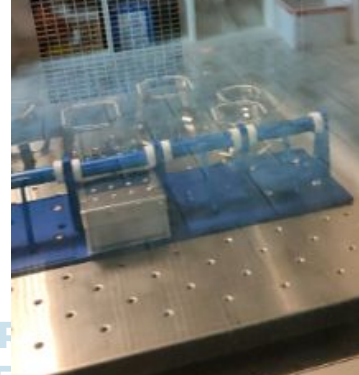
Freeze Drier Alpha  
1-2 LDplus Entry  
Package



HPLC Ultimate 3000 &  
TSQ Fortis LC/MS



System Duetz





# Projekti

www.bioicep.eu

Bio Innovation of a Circular Economy for Plastics

BioICEP

European Commission

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 870292.

**Twinn4MicroUP** - Twinning Innovation Hub for Microbial Platforms in Plastic Upcycling

– HE TWINNING

[www.twinn4microup.eu](http://www.twinn4microup.eu)

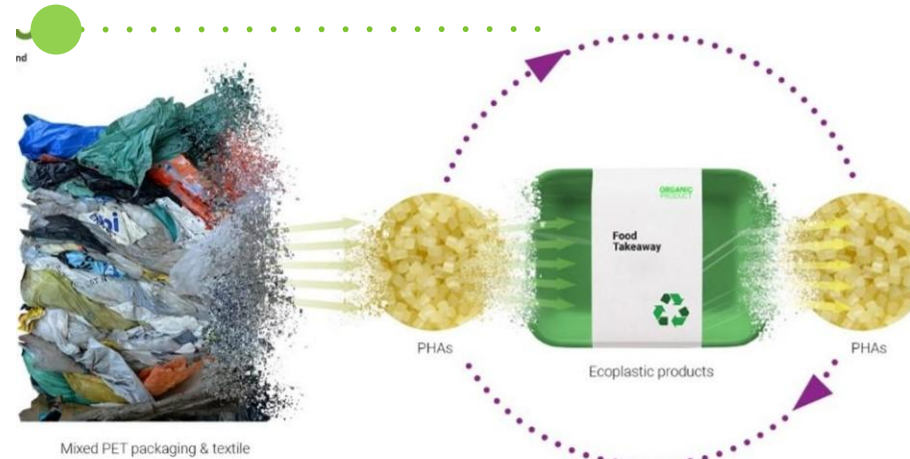


**EcoPlastiC** - Eco conversion of lower grade PET and mixed recalcitrant PET plastic waste into high performing biopolymers

– HE PATHFINDER PROJECT



<https://ecoplasticproject.eu/>



**NEW**



**Bio<sup>2</sup>PEs: DEVELOPMENT OF BIO-BASED AND BIODEGRADABLE POLYETHYLENE AND POLYESTERS FOR PACKAGING AND AGRICULTURAL APPLICATIONS**



**BioECOLOGics** - Value-added biologics through eco-sustainable routes

[www.bioecologics.rs](http://www.bioecologics.rs)



– HE PATHFINDER CHALLENGES

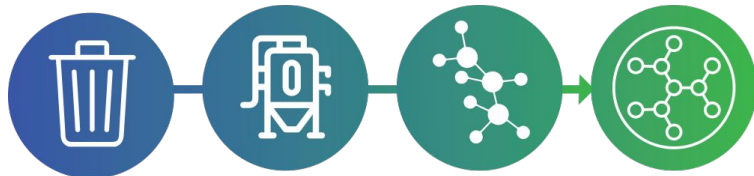
TIKE SRBIJE, HERCEGOVINE

MIKROPLASTIKA ZA DORUČAK - PRVI SUSRET ISTRAŽIVAČA MIKRO I  
NANOPLASTIKE SRBIJE, CRNE GORE & BOSNE I HERCEGOVINE



INSTITUT ZA MOLEKULARNU  
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# Hvala



*Palatinus*  
POSLOVNO SVETOVANJE  
Andreja Palatinus s.p.

