



# MODERN PLANT

for a holistic approach for water depuration

## Advanced Research Workshop



Sewage advanced treatment combining resource recovery, emerging pollutants degradation and carbon dioxide emission reduction: a new strategy to turn a Problem into AN opportunity

## MODERN PLANT

16 July 2025, Bari

CNR Area territoriale di Ricerca di Bari  
Via F. De Blasio, 5 - 70132 Bari (BA)

In the framework of the Modern Plant Project, CNR – National Council of Research of Italy – is pleased to announce the organization of an international Advanced Research Workshop on 16<sup>th</sup> July 2025 in its Research Area in Bari (BA), Italy. The workshop will provide a forum for scientists, industry practitioners and involved institutions to discuss the state of the art and a possible roadmap of Modern Plant Project.

### The main objectives of the Workshop will be:

- ✓ Monitoring the presence (and eventual decay) of EPs along with the processes (IT & CH).
- ✓ Optimizing the oxidative-recovery of grease (through a technology patented by IRSA CNR) from CEPS and microalgal-bacterial (MB) sludge (IT)
- ✓ Optimizing advanced treatment (nitrogen and EPs removal) by Microalgal-Bacterial (MB) biogranules process after CEPS as well as capture and valorization of CO<sub>2</sub> to bioenergy (CH)
- ✓ Improving the recovery of phosphorous and organic carbon in the form of vivianite and VFAs by acidogenic sludge fermentation (CH)
- ✓ Developing operative conditions for inducing the chain elongation to obtain C6-C8 VFA (IT)
- ✓ Maximizing the removal of organic carbon and phosphorus through Chemical Enhanced Primary Sedimentation, CEPS (CH)

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