

Research topics and equipments

Valorization of agro-resources in the context of a sustainable development – obtaining and valorizing of bioactive molecules under eco-friendly conditions:

- (i) establishing efficient methodologies for extraction-identification and characterization of bioactive molecules from plant sources (raw materials, by-products or waste);
- (ii) study of the influence of fertilizing agents on the content of bioactive molecules from the plant;
- (iii) assessment of the impact of plant waste on the environment and the possibilities of their recovery - by using bioactive molecules as a source.

Equipments:

- ✓ **Microwave reactor – Milestone** (synthesis and extraction)
- ✓ **Heidolph rotary evaporator** - Laborota 4000
- ✓ **HPTLC – CAMAG** (Linomat 5 sampling system+ development room + UV Alert smart camera+ TLC Scanner 3)
- ✓ **Multiparameter – Thermo Scientific Orion Versa Star Pro** (pH, Conductivity/TDS, DO)
- ✓ **ABBE refractometer**
- ✓ **Polarimeter (Carl Zeiss Jena)**
- ✓ **UV-Vis Spectrophotometer**
- ✓ **FT-IR Spectrophotometer**