RESEARCH LABORATORY FOR COMPOSITE MATERIALS AND ENVIRONMENTAL CHEMISTRY

Contact details

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<th>Name</th>
<th>Research Laboratory for Composite Materials and Environmental Chemistry</th>
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Site

| Address | 103-105 Muncii Bv, Room: C 415, C 500, 400641 Cluj-Napoca, Romania |
| Faculty Department | Faculty of Materials and Environment Engineering Physics and Chemistry Department |
| Telephone | +40 264 401 778 +40 743 174 195 |
| Director | Prof. Dr. Eng. Violeta Popescu |
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Areas of expertise

- Materials science and engineering: oxides, sulphides, polymeric materials, biomaterials, polymers recycling, nanomaterials;
- Environment science and engineering: pollutants separation and degradation trough adsorption or photodegradation;

Team


Representative projects

- COMBREG, “Research related to the obtaining of fuels and raw materials from renewable sources. The project aims to develop methods for organic waste materials recycling”

Significant results

The most representative publications of the past 5 years:

5. Popescu, G.L., Filip, N., Popescu, V., A comparison between diesel and fuel obtained from recicled waste plastics


Activity with undergraduate students: More than 22 graduation thesis or dissertation.

Activity with PhD students. Research activity with 9 PhD students: 7 with finalized thesis and 2 in progress.

Activity with postdoctoral students. Research activity of 2 postdoctoral students.


Products
2. Fuels from plastic waste.
4. Diverse natural extracts.

The offer addressed to the economic environment

Research & development The correlation between optical, structural and morphological properties of semiconductors.
The obtaining of materials with photocatalytic properties.
Chemical recycling of plastic materials.
Fuels obtaining, characterization and testing.

Consulting FT-IR and UV-VIS spectroscopy.
Plastic materials characterization and recycling.

Training Rapid identification of organic compounds by IR spectroscopy using ATR-FTIR.
Elaboration of UV-VIS spectroscopic quantitative analysis methods.
Polymers recycling.