



Dr. CS III Maria Ignat

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Maria Ignat is responsible for the operation of the Atomic Absorption Spectrofotometer, ContrAA 800 D and Total Organic Carbon Analyzer Multi N/C 3100 (CLD), devices used for determination of various elements (metal ions, carbon, nitrogen) in different samples. Furthermore, she has experience in materials characterization using methods such as: N₂-sorption measurements, UV-DR/UV-Vis spectroscopy, FT-IR spectroscopy, SEM and TEM microscopy, thermogravimetric analysis, X-ray Diffraction, X-ray Photoelectron Spectroscopy. She also has experience in evaluation of physico-chemical characteristics of materials in correlation with their applications in adsorption/catalytic/photocatalytic processes and in the development of drug delivery systems.

Scientific record: ISI articles: **65** – within **28** as main author. Articles in international conference proceedings: **17**: Hirsch index, **H=12** (Scopus). Patents (national): **5**. Research projects/grants as project coordinator: **19**, Research projects/grants as member: **16**, Citations: **544** (Scopus).

SELECTED SCIENTIFIC ARTICLES

1. Ignat, M.*, Samoila, P., Cojocaru, C., Soreanu, G., Cretescu, I., Harabagiu, V., Porous polymer/inorganic composite matrices as efficient desiccants for air dehumidification (2019) Applied Surface Science, 487, pp. 1189-1197.
2. Pascariu, P., Cojocaru, C., Olaru, N., Samoila, P., Airinei, A., Ignat, M., Sacarescu, L., Timpu, D., Novel rare earth (RE-La, Er, Sm) metal doped ZnO photocatalysts for degradation of Congo-Red dye: Synthesis, characterization and kinetic studies (2019) Journal of Environmental Management, 239, pp. 225-234.
3. Ignat, M.*, Sacarescu, L., Fortuna, M.E., Cool, P., Harabagiu, V., Effect of synthesis parameters on sorptive properties of glycerol-derived mesoporous carbon (2019) Environmental Engineering and Management Journal, 18 (1), pp. 59-69.
4. Fortună, M.E., Ignat, M.*, Asandulesa, M., Rotaru, R., Pricop, L., Harabagiu, V., Improved Physico-chemical Properties of Mesoporous Carbon by Functionalization with Aminopropyl-polydimethylsiloxane (AP-PDMS) (2018) Journal of Inorganic and Organometallic Polymers and Materials, 28 (6), pp. 2275-2287.
5. Ignat, M.*, Rotaru, R., Samoila, P., Sacarescu, L., Timpu, D., Harabagiu, V., Relationship between the component synthesis order of zinc ferrite–titania nanocomposites and their performances as visible light-driven photocatalysts for relevant organic pollutant degradation (2018) Comptes Rendus Chimie, 21 (3-4), pp. 263-269.
6. Ignat, M.*, Samoila, P., Coromelci, C., Sacarescu, L., Asaftei, I., Harabagiu, V., Miron, C., Plasma generation in liquid as a new efficient synthesis approach of titania–zinc ferrite nano(photo)catalyst (2018) Comptes Rendus Chimie, 21 (3-4), pp. 310-317.