

MIHAI DUMITRAȘ

Research Areas/Interest

- Kinetics and mechanism of chain reactions
- Kinetic modeling of thermal and thermooxidative degradations
- Non-isothermal kinetics
- Disperse systems

Kinetic modeling of chain reactions in environmental chemistry; combustion and pyrolysis of polymeric materials and of organic and inorganic materials.

Non-isothermal kinetics and mechanistic modeling in thermal analysis: thermogravimetry, DSC, DTA.

Kinetics and mechanism of thermal degradation of polymers, coordinative compounds and other inorganic materials, of organic compounds. Polymeric waste recovery by thermal degradation.

Disperse systems: lyophobic and lyophilic colloids, gels, with applications in environmental and food chemistry and in medicine.

Waste water treatment: catalytic heterogeneous systems on polymeric matrices for reactive decolorization; unconventional sorbents for dye removal and recovery from waste waters in textile industry; preparation of Ion-selective membranes for metallic ions using calixarenic ligands.



(b.1976)

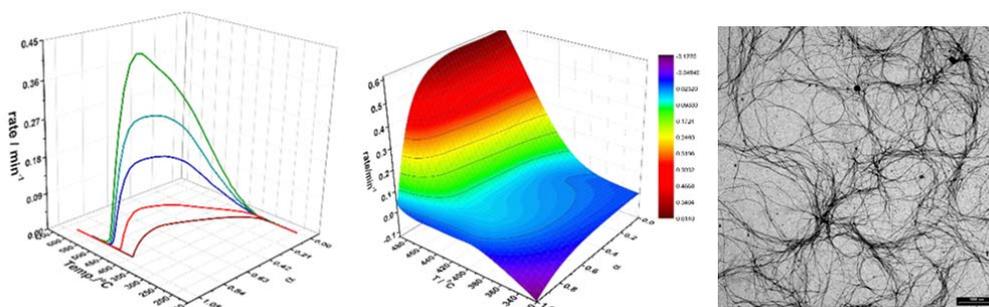
Lecturer, PhD.

e-mail:
mihai.dumitras@uaic.ro

Physical chemistry

Thermal analysis

Physical chemistry
of polymers



PhD studies

„Alexandru Ioan
Cuza” University,
Iassy, 2008

Research

Scholarship (PhD)

DFG scholarship,
Institute for
Macromolecular
Chemistry, Freiburg,
Germany, 2003-2004

Publications (selection)

Dulman, V., Cucu-Man, S.M., Bunia, I., **Dumitras, M.**, Batch and fixed bed column studies on removal of Orange G acid dye by a weak base functionalized polymer, *Desalination and Water Treatment*, 57 (31), p. 14708-14727, **2016**.

Dulman, V., Cucu-Man, S.M., Olariu R.I., Buhaceanu, R., **Dumitras, M.**, Bunia, I., A new heterogeneous catalytic system for decolorization and mineralization of Orange G acid dye based on hydrogen peroxide and a macroporous chelating polymer, *Dyes and Pigments*, 95 (1), 79 – 88, **2012**.

Moldoveanu, C., Odochian, L., Mangalagiu, I., **Dumitras, M.**, Apostolescu, N., Study by thermal methods on some new cyclic ylides and derivatives, *J. Therm. Anal. Calorim.* 93(3), 907-914, **2008**.

Odochian, L., Dulman, V., **Dumitras, M.**, Pui, A., Study by thermal methods on the materials obtained by dye removal from waste waters with beech flour, *J. Therm. Anal. Calorim.* 89(2), 625, **2007**.

Research

Internships

Albert-Ludwigs
University, Freiburg,
Germany.