

Fierascu (Dumitriu) Irina

Dr. Chim., Cercetator Stiintific I

Educatie: Studii de Master si Doctorat in *Stiinta Materialelor*, studii Post doctorale in *Biotehnologie*, Program postuniversitar de formare si dezvoltare continua: *Eco-economie si dezvoltare durabila, Ingineria Mediului*

Experienta profesionala: competente in domeniul chimiei analitice (diferite tehnici moderne de analiza), nanomateriale - obtinere si caracterizare, nanotehnologie, abilitați analitice pentru materiale cu matrice anorganica / organica (interpretarea si corelarea rezultatelor furnizate prin diferite metode analitice), nanomateriale si compuși naturali pentru diferite domenii (patrimoniu cultural, aplicatii biomedicale), contributi/experienta in Laborator acreditat RENAR conform SR ISO 17025.

Experienta in proiecte de cercetare stiintifica: Manager de proiect - grant de cercetare, bursa doctorala CNCIS; Responsabil de proiect PNIII, bursa post-doctorala, membru in echipa de lucru la 22 de proiecte naționale; membru in echipa de lucru la 2 proiecte internationale din care putem menționa:

- *Materiale apatitice inovatoare cu activitate antimicrobiana ridicata pentru materiale de constructii si conservarea patrimoniului cultural- PN-III-P2-2.1-PED-2016-0198*
- *Nanocompozite inovative core-shell pe baza de ferite/beta-ciclodextrina pentru indepartarea poluantilor organici si anorganici din effluentii aposi - PN-III-P2-2.1-PED-2016-0251*
- *Depoluarea apelor cu continut de compusi organici greu biodegradabili (disruptori endocrini) prin procese de oxidare avansata utilizand catalizatori inovatori - PN-III-P2-2.1-PTE- 2016-0063*
- *Exploatarea unor extracte naturale selective pentru decontaminarea biologica a cladirilor.*

Publicatii: mai mult de 45 de articole ISI, 165 citari, Indice Hirsch 7, mai mult de 150 de lucrari indexate in alta baze de date si / sau prezentate la conferințe internationale, autor / coautor 7 carti / capitole publicate la edituri nationale/ internaționale:

- **Fierascu I.**, Avramescu S.M., Fierascu R.C.,Ortan A., Vasilievici G, Cimpeanu C, Ditu L.M, Micro-analytical and microbiological investigation of selected book papers from the nineteenth century, Journal of Thermal Analysis and Calorimetry, 2017, 1-11, doi:10.1007/s10973-017-6370-9
- Fierascu R.C., **Fierascu I.**, Ortan A., Constantin F., Mirea D. A., Statescu M., Complex archaeometallurgical investigation of silver coins from the XVIth-XVIIIth century, 2017 Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms, 401, 18–24
- Sutan N.A., **Fierascu I.**, Fierascu R.C., Manolescu D.S., Soare L.C., Comparative analytical characterization and in vitro citogenotoxic activity evaluation of *Asplenium scolopendrium* L. leaves and rhizome extracts prior to and after Ag nanoparticles phytosynthesis, 2016, Industrial Crops and Products, 83C, 379-386

- Ortan A., **Fierascu I.**, Ungureanu C., Fierascu R.C., Avramescu S.M., Dumitrescu O., Dinu-Pirvu C.E., Innovative phytosynthesized silver nanoarchitectures with enhanced antifungal and antioxidant properties, 2015, Applied Surface Science, 358, 540-548
- **Fierascu I.**, Ungureanu C., Avramescu S.M., Fierascu R.C., Ortan A., Soare L.C., Paunescu A., In vitro antioxidant and antifungal properties of *Achillea millefolium* L., 2015, Romanian Biotechnological Letters, 20 (4), 10626-10636
- **Fierascu I.**, Bunghez I.R., Fierascu R.C., Ion R.M., Dinu-Pirvu C.E., Nuta D., Characterization and antioxidant activity of phytosynthesized silver nanoparticles using *Calendula officinalis* extract, 2014, Farmacia, 62(1), 129-136

Lucrari premiate: UEFISCDI in cadrul programului "Premierea rezultatelor cercetarii - Articole;

Membru in Consiliul editorial: Current Trends in Natural Sciences

Membru in asociatii profesionale: Societatea de Chimie din Romania, Eurachem Romania, BALNET, Green Chemistry Network

Cursuri de perfectionare:

- “Curs Antreprenorial”, USAMV Bucharest 2015
- “Process Safety Management”, Siemens Romania, 2013
- “Project Management” - EuroBestTeam – 2010
- “Proficiency Testing Seminar”- LGC Standards – 2008
- “European and national harmonized legislation in the field of dangerous chemical substances and preparations” - ICECHIM – 2008
- “Training of auditors in the laboratory quality system” - FiaTest – 2008
- “Work hygiene and safety” - SC Principio Consulting Ltd – 2007
- “Presentation of the technical requirements of ISO / IEC 17025:2005 - referential for accrediting testing laboratories and ensuring metrological traceability through reference materials” organized by RENAR – 2006
- “Quality assurance in testing laboratories according to ISO / IEC 17025:2005” - SC SEMQ MANAGEMENT SRL - 2006