

CATALINA PAULA SPATARELU

ABILITATI

XRD, **DLS**, **SEM**, cromatografie, FT-IR, DSC, TGA, UV-VIS, electrofilare, **mini-emulsie**, electrozi ion-sensitivi, spectroscopie de impedanta, **optimizare sinteze**, Matlab.



English

French

EXPERIENTA

Asistent Cercetare | INCDPC-ICECHIM | 01/2016-present

Asistent Cercetare | Helmholtz Institute of Biomedical Research, Germania | 07/2014-10/2014

Asistent Cercetare | YILDIZ Technical University, Turcia | 01/2014-05/2014

Membru echipa de cercetare | Polytechnic University of Bucharest | 01/2012-09/2013

EDUCATIE

MSc. Inginerie Medicala | 2015-2017 | Universitatea Politehnica Bucuresti, Romania

Teza: "Nanogeluri pentru eliberare controlata a medicamentelor"

B.Eng. Inginerie Chimica | 2011-2015 | Universitatea Politehnica Bucuresti, Romania

Specializare in Stiinta si Tehnologia Polimerilor (engleza)

Teza: "Manufacturing injectable PMMA in a batch installation of 4000 tons annual capacity"

Media generala 9.95/10

Sef de promotie 2015-FILS

REALIZARI

Situata **prima din 300 studenti** in Facultatea de Inginerie in Limbi Straine, UPB

3 burse internationale: bursa de studii 1 an in Istanbul, Turcia; bursa de cercetare 3 luni in Germania; bursa de cercetare 3 luni in Franta.

Fondarea unei scoli de vara stiintifice, in urma cu 7 ani, cuprinzand 29 module nationale si 8 internationale pana in prezent.



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PROIECTE CERCETARE

- Nanogeluri PEGDA pentru eliberarea controlata a medicamentelor
- Scaffolduri fibroase biomimetice pentru inginerie tisulara
- Optimizarea incarcarii microbulelor polimerice pentru eliberarea targetata, mediata de ultrasunete
- Hidrogeluri compozite pentru eliberarea lenta a ingrasamintelor

PUBLICATII

Articole

- E.E. Totu, **C. P. Spatarelu**, A. Maier, Ion-Selective Polymeric Membranes for Chemical Sensors. I, Recent Researches in Energy, Environment and Sustainable Development, 2012, ISBN 978-1-61804-105-0, pp 161-165

Postere si Presentari Orale

- "Influence of synthesis parameters on the obtaining of PEG covalently cross-linked nanogels"**, Oral presentation, International Congress of Young Chemists (YoungChem), October 2016, Czestochowa, Poland
- "Hydrogels composites innovatrices pour la liberation controlee des engraischimiques", Poster Session, 9ème Colloque Franco-Roumain de ChimieAppliquée, June 2016, Clermond-Ferrand, France
- "L'obtention des hydrogels pour des systèmes a libérationcontrôlée", Poster Session, 9ème Colloque Franco-Roumain de ChimieAppliquée, June 2016, Clermond-Ferrand, France
- "Hydrogel-based fibrous scaffolds for bone tissue engineering"**, Oral presentation, Students' Scientific Communication Sessions, May 2016, "Politehnica" University of Bucharest, Romania
- "Hydrogels for controlled delivery of biologically active substances"**, Poster Session, 1st European Young Chemists Meeting (EYChem) & 5th Portuguese Young Chemists Meeting (PYChem), April 2016, Guimaraes, Portugal
- "Synthesis paths for micro-hydrogels containing polyethylene glycol and aliphatic amines", Poster Session, 1st European Young Chemists Meeting (EYChem) & 5th Portuguese Young Chemists Meeting (PYChem), April 2016, Guimaraes, Portugal
- "Two-components inorganic-organic hybrid polymer composites with red mud content: Synthesis and characterization", Poster Session, 1st European Young Chemists Meeting (EYChem) & 5th Portuguese Young Chemists Meeting (PYChem), April 2016, Guimaraes, Portugal
- "Oils extracted from medicinal plants as potential molecular drugs", Poster Session, Bioengineering Day, YILDIZ Technical University, June 2014, Istanbul, Turkey
- "Selective devices based on membranes with magnetic inclusions for applications in environmental protection", Poster Session, 17th European Conference on Analytic Chemistry (Euroanalysis), August 2013, Warsaw, Poland
- "Cellulosic micro-systems with magnetic nano-carriers for environment applications"**, Poster Session, 17th European Conference on Analytic Chemistry (Euroanalysis), August 2013, Warsaw, Poland
- "CeO2 and SiO2 composite materials, as biologically active substances' carriers"**, Oral presentation, Students' Scientific Communication Sessions, May 2013, "Politehnica" University of Bucharest, Romania
- "Polymeric Ion-Selective Membranes with alpha-4-calix-arenes as ionophores", Oral presentation, Students' Scientific Communication Sessions, May 2013, "Politehnica" University of Bucharest, Romania
- "Ion Selective Polymeric membranes for chemical sensors. I"**, Oral presentation, Food Industry, Agriculture and Applied Chemistry '12, World Scientific and Engineering Academy and Society, July 2012, Porto, Portugal
- "Zircon dioxide co-doped with rare earth metals synthesis and characterization", Oral presentation, Students' Scientific Communication Sessions, May 2012, "Politehnica" University of Bucharest, Romania

FUNDING AND ACADEMIC AWARDS

- 👤 **2017-Erasmus Scholarship for International Research Internship**
- 👤 **2016-3rd award for Oral Presentation, YoungChem, Czestochowa, Poland**
- 👤 2015-Sef de promotie Facultatea de Inginerie in Limbi Straine (FILS), UPB
- 👤 **2014: Erasmus Scholarship for International Research Internship**
- 👤 **2013: Erasmus Exchange Program Study Scholarship**
- 👤 2013:Premiul II si mentiune speciala, Sesiunea de Comunicari Stiintifice, UPB
- 👤 2012- Premiul I, Sesiunea de Comunicari Stiintifice, UPB
- 👤 **2010-"Personalitatea anului" pentru performante academice in domeniul stiintific (chimie, fizica, stiintele pamantului) (OMW Petrom)**
- 👤 **2010-Medalie de bronz, Olimpiada internationala de stiintele pamantului, Yogyakarta, Indonesia**