

Personal Information



Alexandra Falamas

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Sex Female | Citizenship Romanian

Work Experience

- Jun. 2013– present **Scientific Researcher III** (INCDTIM, Cluj-Napoca, Romania)-Femtosecond Laser Laboratory – in charge with the optical alignment of the femtosecond laser systems and user of time-resolved absorption and fluorescence spectroscopy set-ups
Time-resolved molecular spectroscopy with applications in biophysics and biochemistry
Project director of **“Raman spectroscopy applied for ultra-sensitive diagnosis of saliva and radiotherapy treatment monitoring of oral cancer” (RAMSES)** – PN-III-P1-1.1-PD-145/2018
Key person in: **“Developing photosensitive materials based on phycobiliproteins extracted from cyanobacteria for solar cells applications”**, project component of *TehnoBioMed project PN-III-P1-1.2-PCCDI-2017*
Team member of:
- **“Characterizing method of propagation effects on ELI laser pulses (PULSE-PROPAG)”** Capacities, Module III Program RO-CERN ELI-NP No. E02/2014
 - **“Structural changes and (sub)picosecond dynamics in DNA molecules probed with ultrasensitive Raman spectroscopic techniques”** PN-II-ID-PCE-2012-4-0115
 - **“Single attosecond pulse generation by femtosecond waveforms”** PN-II-ID-PCE 31/02.09.2013
 - **“Structural changes and (sub)picosecond dynamics in DNA molecules probed with ultrasensitive Raman spectroscopic techniques”** PN-II-ID-PCE-2012-4-0115
- May 2009 – Jan. 2012 **Researcher Assistant** (“Babeş –Bolyai” University, Cluj-Napoca, Romania) as a member of the research team of the project **“Cancer diagnostic and monitoring using ultrasensitive Raman spectroscopy techniques”** PN-II-PCE-ID-2284 No. 537/2009

Education and Training

- Oct. 2009 – Feb. 2013 **Ph.D. in Physics** (Feb. 20, 2013) - **“Raman spectroscopy applied for the investigation of biological systems”**, “Babeş –Bolyai” University, Cluj-Napoca, Romania - <http://doctorat.ubbcluj.ro>
Supervisor: Prof. Dr. Vasile Chiş
- Jan. – Oct. 2012 **Research Internship** as an exchange PhD student at Faculty of Physics and Astronomy, Nottingham University, UK – *identification of biomarkers specific to the differentiation process of human embryonic stem cells to fibroblasts cells using micro-Raman spectroscopy and fluorescence imaging*
Biophotonics Group - Dr. Ioan Notingher <http://www.biophotonics-nottingham-nanoscience.net>
- Oct. 2008 – Feb. 2010 **Master of Science in Biophysics and Medical Physics**
“Babeş –Bolyai” University, Faculty of Physics, Cluj-Napoca, Romania
- Feb. – Sept. 2009 **Erasmus student** at Friedrich Schiller University and Institute for Photonics Technologies (IPHT), Jena, Germany; Biophotonics Group - Prof. Dr. Jürgen Popp and Dr. Christoph Krafft
- Oct. 2003 – June 2008 **Bachelor of Science in Physics Engineering**
“Babeş –Bolyai” University, Faculty of Physics, Cluj-Napoca, Romania

Personal Skills

Mother tongue *Romanian*

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| Other languages | English (C2) German (B1) |
| Other skills | Data Analysis (Origin, MatLab, CarpetView, EasyTau) Optical alignment and use of the femtosecond laser system (Light Conversion) and of the time-resolved absorption and fluorescence systems Multilaser confocal Raman system InVia Reflex Renishaw Organizer of the first Science Cafe in Cluj-Napoca (www.facebook.com/cafescicluj) |

Additional Information

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| Affiliations | Romanian Society for Pure and Applied Biophysics (since 2011) |
| Editor | Former Assoc. Editor at <i>Open Physics</i> (De Gruyter) Guest Editor for the "Special Issue presented at 10 th International Conference on Processes in Isotopes and Molecules (PIM 2015)" in <i>Analytical Letters</i> , Issue 16, 2537-2701, 2016 and for the "Processes in Isotopes and Molecules (PIM 2015)" in <i>AIP Conference Proceedings</i> , 1700, 2015 |
| Fellowships | <i>Applied Optical Techniques for Bio-Imaging ICTP</i> , 2017, Trieste, Italy; <i>The 13th Greta Pifat-Mrzljak International School of Biophysics</i> , 2016, Split, Croatia; <i>Lasers in Medicine and Life Sciences Summer School</i> 2014, Szeged, Hungary |
| Awards | European Physical Society award for "Reflection and Transmission Holograms of Coins: Experimental Approach" presentation at the 5 th <i>International Student Conference of the Balkan Physical Union</i> 2007, Bodrum, Turkey Romanian Society of Pure and Applied Biophysics best poster at the <i>International Conference Processes in Isotopes and Molecules PIM 2013</i> |

Scientific Results

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| Publications | 19 ISI-indexed; 1 BDI indexed |
| Scientometrics | Hirsch index: 5 (google scholar); 4 (Web of knowledge); Times cited without self-citations: 74 |