


## PERSONAL INFORMATION

## Consuela Elena MATEI



 National Institute for Laser, Plasma and Radiation Physics  
 Laser Department,

 +4021 457 44 67 (office)  +40 752 071 739

 409 Atomistilor St., PO Box MG-36, 077125 Magurele,  
 Romania

 consuela.matei@inflpr.ro

SexF | Date of birth08/09/1971 | NationalityRomanian

## POSITION

Scientific Researcher III

## WORK EXPERIENCE

1996 - present

**Scientific Researcher Third Degree**

National Institute for Laser, Plasma and Radiation Physics, Laser Department,  
 409 Atomistilor St., PO Box MG-36, 077125 Magurele, Romania

- Physics and technology of lasers ( CO<sub>2</sub>, excimer, Nd:YLF, Ti:Sapphire)
- Photoacoustic spectroscopy,
- Medical applications of lasers,
- Laser - matter interactions,
- High-power femtosecond laser applications
- Noninvasive imaging methods for medicine and biology

2001 - 2005

**Scientific Researcher**

Technical University Vienna, Institute for Applied Physics ,  
 Karlsplatz 13, 1040 Wien , Viena, Austria

- Mass spectroscopy (SIMS, SNMS),
- Ultrashort pulse physics and applications,
- Laser - matter interactions,
- Fundamental Research,
- Coherent control of ultrashort pulses by genetical algorithms

## EDUCATION AND TRAINING

2013 - Present

**PhD Studies**

University "Politehnica" of Bucharest, Faculty of Electronics and Telecommunications,  
 Speciality Physical Engineering

1991-1996

**B. Sc. and M.Eng**

University "Politehnica" of Bucharest, Faculty of Electronics and Telecommunications,  
 Speciality Physical Engineering

- 7-11 Aug. 2017 **9th International Summer School "New Frontiers in Optical Technologies,**  
Tampere, Finland
- 21-26 Aug. 2016 **ELI & HILASE Summer School ELISS 2016**  
Dolní Břežany, Czech Republic
- 21-25 Sept. 2015 **ELI-NP Summer School,**  
Magurele-Bucharest, Romania
- 10-14 Aug. 2015 **8th International Summer School "New Frontiers in Optical Technologies,**  
Tampere, Finland
- 12- 22 Jul. 2015 **56th Course 'Atoms and Plasmas in Super-Intense Laser Fields,**  
Erice, Sicily, Italy
- 29 June – 4 July 2015 **Advanced Study School on Imaging for Medical Applications (SSIMA),**  
Sinaia, Romania
- 18 May -12 June 2015 **Control of Ultrafast Quantum Phenomena,**  
NORDITA, Stockholm, Sweden
- 2-20 Feb. 2015 **Light: a Bridge between Earth and Space: Winter College on Optics,**  
ICTP, Trieste, Italy
- 29 Nov -12 Dec. 2009 **UltraShort and Intense Laser Technology and Metrology – USIL,**  
Bordeaux, France

**PERSONAL SKILLS**

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
French	C2	C2	C1	C1	C1
German	C1	C1	B2	B2	B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
[Common European Framework of Reference for Languages](#)

**Communication skills** Improved communication skills gained through my experience as researcher, presenting oral lectures, working with students and attending professional tutorials communication-oriented

**Organisational / managerial skills**

- Good organisational / managerial skills proved in the financial and technical implementation of 15 scientific projects, as well in the organization of 4 scientific conferences:
  - „Advanced Laser Technologies ALT’06”, 8-12 Sept. 2006, Brasov, Romania ,
  - „Light at Extreme Intensities LEI 2009”, Braşov, Romania, 16-21 October 2009)
  - „International Conference on Ultra Intense Lasers ICUIL 2012”, Mamaia, Romania, 16-21 September 2012.
  - 2-nd International Conference of the Romanian Society of Hadrontherapy, 25-28 February 2016
- Representative of INFLPR employees (2016-present)

**Job-related skills**

- High capacity of analysis and synthesis of scientific data
- Experience in writing scientific papers and proposals for research projects under RO and EU regulations
- Experience in developing laboratory setups (optical, electrical, computer controlled a.o.)
- Experience with financial aspects related to the implementation of specific research projects
- Ability to work both independently or in a mixed team of specialists
- Ability to mentor students and young researchers

**Digital competence**

SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem solving
Proficient	Proficient	Proficient	Proficient	Proficient

Levels: Basic user - Independent user - Proficient user  
[Digital competences - Self-assessment grid](#)

Scientific and engineering programming in FORTRAN , Mathematica, TestPOINT and LabVIEW.

**ADDITIONAL INFORMATION**

- Publications**
  - 25 ISI papers
- Presentations**
  - over 80 communications at national and international conferences (8 invited lectures in co-authorship, oral presentations, posters)
- Citations**
  - 249 (without self-citation)
- Honours and awards**
  - Best Poster Award at International Conference „Advanced Laser Technologies – ALT’06”, 8-12 Sept. 2006, Brasov, Romania
  - SPIE Award for Second Place Student Presentation at 11th International Conference "Micro- to Nano-Photonics IV- ROMOPTO 2015", 1-4 Sept.2015, Bucharest,Romania

**ANNEXES**

<b>Programme/Project</b>	<b>Position</b>	<b>Period: from... to...</b>
Project PNCDI II 5/5.1/ELI-RO "Quasi-Classical Methods in Laser - Nucleus Interactions - QLASNUC"	Partner Responsible	2016 -2019
Project PNCDI II 5/5.1/ELI-RO "Development of a Novel 2D Detector Array for Dosimetric Characterisation of ELI Laser Accelerated Charged Particle Beams - ELIDOSE"	Principal Investigator	2016 -2019
Project "Preliminary Studies for Implementation of BioMedical Experiments at ELI-NP" (ELI-BIOMED)	Principal Investigator	2014 - 2016
Project PNCD II Partnership PN-II-PT-PCCA-2013-3-2098, contract 200/2014 "Imaging System for Differentiation of Malign and Benign Tumoral Lesions based on the Duality of Hyperspectral Fluorescence and Diffuse Optical Tomography - HyperDOT"	Principal Investigator	2014 - 2017
Project PNCD II Partnership PN-II-PT-PCCA-2013-4-0608, contract: 72/2014 " Integrated system for monitoring and bioremediation of metal/radionuclides contaminated area - IMONBIO"	Researcher	2014 - 2017
Doctoral European Social Fund (ESF) through the Operational Programme Human Resources Development (HRD) of University POLITEHNICA of Bucharest	PhD Researcher	2014 - 2015
Project PNCD II Partnership PN-II-PT-PCCA-2011-3.2-1023, Contract 184/2012 "Multimodal optical imaging system for intraoperative detection of tumor positive margins (MOIST)"	Researcher	2012 – 2016
PN-II-RU-TE-2011-3-0269, No. TE50 " Trace gas detection in life sciences by laser photoacoustic methods"	Researcher	2011 - 2014
Project PNCD II Partnership 32-148 "Assessment of impact of petrol related pollutants and hydrocarbons natural degradation on aquatic ecosystems"	Scientific Responsible	2008-2011
Project PNCD II Capacities 3EU "Infrastructure for extreme light – preparatory phase"	Scientific Responsible	2008-2010
Project PNCD II Partnership 11-031 "Studies for clear up the interaction mechanisms between laser and radiofrequency radiations with the tissues of upper aerodigestive tract and elaboration of therapeutical protocols"	Researcher	2007-2010
Project PNCD II Partnership 31-020 "Advanced research for determination of thermal, spectral and chemical parameters of minerals, rocks and industrial wastes for developing georeferenced data and meta-data bases for environmental problems monitoring"	Researcher	2007-2010
<b>Project PC7 Grant Agreement Number 212105 "ELI – Extreme Light Infrastructure – Preparatory Phase"</b>	<ul style="list-style-type: none"> <li>• <b>National Leader</b></li> <li><b>WP9 – International networking/ communication</b></li> <li>• <b>Financial Leader</b></li> <li><b>WP5 - Finance</b></li> </ul>	<b>2007-2010</b>
Project CEEX 06-D11-16 "Near infrared (NIR) diffuse optical tomography for breast specific diseases - BIOT"	Researcher	2006-2008
Project CEEX CX-4 "Laser, optical and spectral methods for early detection of pathological changes in bio-tissues"	Researcher	2005-2008