

	
Curriculum vitae Europass	National Institute for Research and Development of Isotopic and Molecular Technologies (INCDTIM)
Personal information	
Surname / First name	Pruneanu Stela Maria
Address	67-103 Donat Street, Cluj-Napoca, ROMANIA, RO-400293
Telephone(o)	+40-264-584037
Telephone(h)	
Fax	+40-264-420042
E-mail(s)	stela.pruneanu@itim-cj.ro
Nationality	Romanian
Data of birth	23 Oct 1962
Gender	Female
Marital status	Married
Employments/ Occupational field Education Research activity	Senior Researcher (CS I) at INCDTIM Cluj-Napoca, Romania <ul style="list-style-type: none"> • B.Sc. in Physics, Babes-Bolyai University , Cluj-Napoca, Romania (1982-1987) • Ph.D. in Chemical Physics at Babes-Bolyai University, Cluj-Napoca, Romania (1996-1999) Electrochemical studies of porous aluminum oxide growth in organic and inorganic acids (1987-1992) <ul style="list-style-type: none"> • preparation of alumina membranes having different pore diameter (10-100 nm) • preparation of gold and platinum nanowires, using alumina membranes as template Electrochemical studies on conducting polymers (polypyrrole, polyaniline) 1993-1998 <ul style="list-style-type: none"> • cyclic voltammetry • electrochemical quartz crystal microbalance- EQCM • impedance spectroscopy Carbon nanotubes and DNA-templated nanowires (1999-2010)

<p>Research Stay</p>	<ul style="list-style-type: none"> • electrochemical investigation of biomolecules oxidation (adenine; guanine; ssDNA) using carbon nanotubes modified electrodes • preparation and characterization of glucose biosensors, using carbon nanofibers and MWCNT as support for enzyme immobilization • electrochemical investigation of direct transfer of electrons between glucose-oxidase and multi wall carbon nanotubes • immobilization of DNA and avidin-biotin on self-assembled monolayers (Au-SAM) or carbon nanotubes modified electrodes (studied by differential pulse voltammetry and impedance spectroscopy) • investigation of DNA hybridization, using electrochemical method (differential pulse voltammetry) • Synthesis of metallic and polymeric nanowires using DNA as a template <p>Graphene-based composites (2010-present)</p> <ul style="list-style-type: none"> • Preparation of graphene-modified electrodes for electrochemical detection of pharmaceutical pollutants (e.g. carbamazepine, s-captopril; amaranth) and biological molecules (adenine, guanine, dopamine) <ul style="list-style-type: none"> • Institute fur Festkorperphysik, Graz- Austria 1995 (October)- <i>Research Stay</i> • Eotvos-Lorand University, Budapest- Hungary, 1997 (April-June)- <i>PhD scholarship</i> • Teesside University, UK, February 2004 - July 2006, <i>Post Doc</i> • Newcastle University, UK, August 2006 - June 2008, <i>Post Doc</i>
<p>Research projects</p>	<p><u>I. International Projects</u></p> <p>1.FP6 Project, Newcastle University, UK NUCAN (Nucleic Acid Based Nanostructures), September 2007 – June 2008- (Post Doc)</p> <p>2.EPSRC Project- Newcastle University, UK, ‘Molecular Self Repair’ (EP/D053080), August 2006 – August 2007- (Post Doc)</p> <p>3.Network of excellence: Nano2Life, Newcastle University, UK, August 2006 –June 2008- (Post Doc)</p> <p>4.European Regional Development Fund- Teesside University, UK; North East England Objective 2 Programme 2000-2006; Measure 2.4-Technology Transfer Package, 70/203/011C- Microarray sensor system unit, February 2004 – July 2006 - (Post Doc)</p> <p><u>II. National Projects (selected)</u></p> <p>1. PN-III-P4-ID-PCCF-2016-0006 (2018-2022) “Graphene-based stochastic sensors for molecular diagnosis of upper gastro-intestinal cancer” <u>Project Partner (667.000 euro)</u></p> <p>2. PN-III-P2-2.1-PED-2016-0392 (2017-2018)” <i>Laboratory technology for detection of</i></p>

<p>Computer skill and competences</p>	<p><i>leukemia biomarkers using new graphene-based materials</i>” Project Director (133.400 euro)</p> <p>3. PN-III-P2-2.1-PED-2016-1907 (2017-2018): “<i>New luting materials with graphene used in dentistry</i>” Project Partner (56.000 euro)</p> <p>4. PN-II-PT-PCCA-2013-4-1282 (2014-2017) “<i>New composite materials based on biocompatible polymers and graphene for dental applications</i>”, Project Director (277.780 euro)</p> <p>5. PN-II-ID-PCE-2011-3-0125 (2011-2016) “<i>Graphene-metal nanoparticles based electrodes for detection of pharmaceutical pollutants</i>”, Project Director (350.000 euro)</p> <p>6. Grant –CNCS (2001) “<i>Research on preparation and characterization of chalcogenide membranes for Cooper and Cyanide Ion-Selective Electrodes</i>” Grant Director (10.000 euro)</p> <p>Competent with Microsoft Office (Word, Excel, Power Point, Origin, Chem Windows), Internet</p>
<p>Publications in ISI journals</p> <p>Chapter in Books</p> <p>Patents</p>	<ul style="list-style-type: none"> • 81 ISI papers • Citations in peer-review papers: 926 (without self-citation) • H index: 17 <p>1. Stela Pruneanu, M. Coros, F. Pogacean, <i>Bio-Functionalized Metallic Nanoparticles with Applications in Medicine</i> Springer International Publishing, Online ISBN: 978-3-319-13188-7; 2015</p> <p>2. L. Olenic, Stela Pruneanu, V. Almasan, A. R. Biris, <i>Electrochemical and Adsorption Properties of Catalytically Formed Carbon Nanofibers</i> in "Nanofibers", Ed. IN-TECH, Kirchengasse 43/3, A-1070 Vienna, Austria, ISBN 978-953-7619-86-2</p> <p>3. F. Pogacean, Stela Pruneanu, L. Olenic, <i>New hybrid materials with applications in microelectronics</i> in Recent Res. Devel. Mat. Sci.,9 (2012): 117-135 ISBN: 978-81-308-0466-8, Research Signpost 37/661 (2), Fort P.O.Trivandrum-695 023, Kerala, India</p> <p>Eight patent applications, two granted:</p> <p>1. Stela Pruneanu, Pogacean F., Olenic L., Almasan V., <i>Fabrication of a glassy carbon electrode modified with gold nanoparticles and L-cysteine</i>, Patent RO 129261 A2/2017;</p> <p>2. Stela Pruneanu, Biris A.R., Lazar M. D., Coros M., Pogacean F., <i>Synthesis of a composite material based on graphene and bimetallic nanoparticles</i>, Patent RO 130085 B1/2018;</p> <p>3. Magerusan L., Socaci C.A., Coros M., Rosu M.C., Pogacean F., Stela Pruneanu, <i>Preparation, design and applicability of a new chitosan N-doped graphene</i></p>

	<p><i>nanocomposite in electrochemical heavy metal ion detection</i>, Patent application A/00311/04.05.2016;</p> <p>4. Rosu M.C., Coros M., Socaci C.A., Magerusan L., Pogacean F., Stela Pruneanu, <i>Composite materials based on TiO₂-Pt/graphene oxide and TiO₂-Pt/reduced graphene oxide for photodegradation of azo-dyes from water</i> Patent application approved A/00731/14.10.2016;</p> <p>5. Moldovan M., Stela Pruneanu, Socaci C., Roșu M-C, Saroși L. Codruța, Cuc S., Prodan D., Filip A. <i>Composite material based on graphene oxide used for dental restorations</i>, Patent application A/00901/24.11.2016 ;</p> <p>6. M. Coros, C. Socaci, Stela Pruneanu, F. Pogacean, M-C Rosu, L. Magerusan, <i>Method for electrochemical synthesis of new composite material based on graphene and porphyrin and its application</i>, Patent application A/00208/05.04.2017</p> <p>7. C. Sarosi, Stela Pruneanu, M. Moldovan, M-C. Rosu, C. Prejmerean, D. Prodan, L. Silaghi-Dumitrescu, <i>The composition of adhesive cement with graphene oxide for orthodontic collage</i>, Patent application A/00483/29.06.2018</p> <p>8. V. Mirel, F. Pogacean, M. Coros and S. Pruneanu, <i>Electronic system for controlling the electrochemical exfoliation of graphite and synthesis of graphene</i>”, Patent application approved, A/00904/16.11.2018</p> <p>Awards</p> <ul style="list-style-type: none"> • “Nicolae Teclu” award of the Romanian Academy (2018) for the group of research works “Graphene derivatives with catalytic and electro-catalytic properties”. <p>Referee</p> <ul style="list-style-type: none"> • Referee for UEFISCDI- Romania; National Agency for Research (ANR)- France • Referee for: <i>Electrochimica Acta</i>, <i>Sensors</i>, <i>ACS Nano</i>, <i>Langmuir</i>, <i>Journal of Materials Science</i>, <i>J. Electroanalytical Chemistry</i>
--	--