UNIVERSITATEA DIN CRAIOVA
FACULTATEA DE ȘTIINȚE
ȘCOALA DOCTORALĂ DE ȘTIINȚE

ANUNȚĂ:

SUSȚINEREA PUBLICĂ A TEZEI DE DOCTORAT INTITULATE

“FUNCȚIONALIZAREA INDUSĂTERMIC A FILMELOR SUBȚIRI DE MATERIALE DE MOLECULARE OBȚINUTE PRIN TEHNICI LASER”,

elaborate de domnul **ROTARU ANDREI**, în vederea obţinerii titlului ştiinţific de doctor în Domeniul *Fizică,* va avea loc în ziua de *4 octombrie 2016*, la ora *11^{00}*, în *Sala Eminescu*, *C*asa Universitarilor din Craiova.

Teza de doctorat a fost depusă la Biblioteca Universității din Craiova și poate fi consultată la Sala de Lectură, în Cladirea Centrală a a Universității din Craiova.

Componenţa comisiei de doctorat este următoarea:

PREŞEDINTE:	**Prof.univ.dr. Sorin MICU** Universitatea din Craiova
CONDUCĂTOR ŞTIINŢIFIC	**Cercet. șt. I dr. Maria DINESCU** Universitatea din Craiova
MEMBRI REFERENŢI:	**Prof.univ.dr. Johny NEAMȚU** Universitatatea de Medicină și Farmacie Craiova
	Cercet. șt. I dr. Ion MORJAN Institul Național de Cercetare – Dezvoltare pentru Fizica Laserilor, Plasmei și Radiației București
	Conf. univ.dr. Gabriela Eugenia IACOBESCU Universitatea din Craiova

CURRICULUM VITAE

Candidatură depusă pentru Decan al Facultății de Farmacie din Craiova

DATE BIOGRAFICE:

Nume, prenume: Neamțu *Johny*;

Data și locul nașterii: 1 august 1964, Fetești, județul Ialomița

Starea civilă: căsătorit;

Copii: 2

STUDII UNIVERSITARE :

-1983 - 1988: Facultatea de Fizică, Universitatea București;

-1997 - 2003: Facultatea de Farmacie, Universitatea de Medicină și Farmacie din Craiova;

DOCTORAT :

Doctor în Fizică, distincția *Summa cum Laude*: „Interacțiunea radiației laser cu substanța aflată în fază solidă, lichidă, gazoasă și/sau plasmă", Institutul de Fizică Atomică, București, 12.IX.2000;

PREGATIRE POSTUNIVERSITARĂ:

- Stagiu de specializare: Analiza fizico-chimică a biomaterialelor proiectate pentru implanturi medicale; Departamentul de Chimie Ciamician, *Laboratorul de biomimetică și chimia materialelor, Universitatea din Bologna, Italia,* septembrie 2007.

- Curs intensiv: Microsoft Project Advanced, Craiova 2010;

APARTENENȚA LA SOCIETĂȚI ȘTIINȚIFICE :

- membru al Societății de Științe Farmaceutice, filiala Dolj;
- membru in Consiliul Național de Conducere al Societății de Științe Farmaceutice;
- membru al Societății de Chimie Fizică;

Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	ION MORJAN
Address(es)	1 Cărămidarii de Jos Str., Bl.76, Sc.B, Ap.70, District 4, Bucharest, Romania
Telephone(s)	+40 21 457 44 89 Mobile: +40 743147410
Fax(es)	+40 21 457 42 43
E-mail	ion.morjan@inflpr.ro
Nationality	Romanian
Date of birth	01. 09. 1949
Gender	Male

Work experience

Dates	from: 1990-present
Occupation or position held	Scientific Director (1994-2009) and General Director (2009-present)
Main activities and responsibilities	• laser photochemistry (multi-photon processes induced by lasers in organic and inroganic gases), laser thermochemistry of inorganic salts, SO_2 oxidation, reactions with NH_3, CO, etc • the synthesis of TiO_2 /anion-doped TiO_2 nanoparticles (with N, C and S dopants) using the laser pyrolysis method • LCVD of thin coatings (carbide compunds-CN_x, TiC, Fe_3C), metal films from metalorganic precursors • the lasers synthesis of Si-based nanopowders (Si/C/N, Al_2O_3, Si/C/Ti, iron carbides , carbon like – fullerenes nanopowders,carbon nanotubes) from gaseous precursors • the lasers synthesis of Fe based nanopowders
Name and address of employer	National Institute for Lasers, Plasma and Radiation Physics (NILPRP), 409 Atomistilor Str, P.O.Box: MG-36, 077125, Bucharest, Romania, Tel.: (40-21) 457 44 89 - Fax:(40-21) 457 42 43 Website: http://www.inflpr.ro
Type of business or sector	Research and Development
Dates	from: 1973 - 1990
Occupation or position held	Scientific researcher
Main activities and responsibilities	• lasers and laser systems • activity on laser isotope separation by heterogeneous processes throgh membranes and capillaries • thermal effects induced by the IR laser radiation
Name and address of employer	Institute for Atomic Physics, 409 Atomistilor Str, P.O.Box: MG-36, 077125, Bucharest, Romania,
Type of business or sector	Research & Development

Education and training

Dates	from: 1985-1998
Title of qualification awarded	PhD in Physical

Europass Curriculum Vitae

INFORMAŢII PERSONALE

Prenume / Nume	**Gabriela-Eugenia Iacobescu**
Adresa	Str. Aleea I Paltiniş, Nr. 8, Craiova 200127, România
Telefon	+40 351 451369 Telefon mobil: +40 722 966196/+40 745099356
Fax	+40 251 415077
E-mail	gabrielaiacobescu@yahoo.com
Cetăţenie	Română
Data naşterii	9 Decembrie 1966
Sexul	feminin

Locul de munca vizat / Aria ocupaţională membru CNFIS

Experienţa profesională

Perioada	Sep. 1991 — Sep. 1999
Poziţie ocupată	profesor învăţământ preuniversitar
Principale activităţi şi responsabilităţi	predare-evaluare, disciplina “Fizică”
Numele şi adresa angajatorului	Şcoala “M. Eminescu” Craiova, Romania
Perioada	Oct. 1999-Feb. 2006
Poziţie ocupată	Asistent universitar Dr.
Principale activităţi şi responsabilităţi	predare şi cercetare
Numele şi adresa angajatorului	Universitatea din Craiova
Subiecte abordate	Laboratoare: Fizica solidului, Semiconductori, Fizică generală pentru ingineri, chimişti şi profilele agricole, Seminarii: Fizică generală pentru ingineri şi chimişti
Perioada	Mar. 2006 – Sep. 2009
Poziţie ocupată	Lector universitar Dr.
Principale activităţi şi responsabilităţi	predare şi cercetare
Numele şi adresa angajatorului	Universitatea din Craiova
Subiecte abordate	Cursuri: Semiconductori, Analiza semnalelor biolelectrice, Detectori, dozimetrie şi radioprotecţie Laboratoare Fizica solidului, Semiconductori, Analiza semnalelor biolelectrice
Perioada	Oct 2009 - prezent

Poziţie ocupată	Conferenţiar universitar Dr.
Principale activităţi şi responsabilităţi	predare şi cercetare
Numele şi adresa angajatorului	Universitatea din Craiova
Subiecte abordate	Cursuri: Detectori, dozimetrie şi radioprotecţie, Biofizică generală, Bazele fizice ale radioterapiei, Fizica solidului, Materiale semiconductoare avansate, dielectrice şi feroelelctrice, Efectele radiaţiilor asupra mediului ambiant, Efectul radiaţiilor asupra materiei vii Laboratoare Fizica solidului, Biofizică generală, Materiale semiconductoare avansate, dielectrice şi feroelelctrice

Educaţie şi formare

Perioada	1987-1991
Calificarea / diploma obţinută	Licenţiat în fizică
Numele şi tipul instituţiei de învăţământ / furnizorului de formare	Universitatea din Craiova, Facultatea de Ştiinţe, specializarea Fizică
Perioada	2005
Calificarea / diploma obţinută	Doctor în fizică
Numele şi tipul instituţiei de învăţământ / furnizorului de formare	Universitatea “Politehnica” Bucureşti
Titlul tezei de doctorat	Efecte induse de câmpuri exterioare în mixturi de cristale lichide

Instruiri ERASMUS

Marseille, Universite Aix Marseille – 24-30 Apr. 2010

Granada, Universidad de Granada – 20-26 Sept. 2011

Marseille, CINaM – 22-28 Mart. 2012

Aptitudini şi competenţe personale

Limba(i) maternă(e) **Română**

Limba(i) străină(e) cunoscută(e) **Engleza, Franceza**

Autoevaluare	Înţelegere		Vorbire		Scriere
Nivel european (*)	Ascultare	Citire	Participare la conversaţie	Ascultare	
Limba engleza	C1 Utilizator experimentat	C2 Utilizator experimentat	B2 Utilizator independent	B2 Utilizator independent	C1 Utilizator experimentat
Limba franceza	C1 Utilizator experimentat	C2 Utilizator experimentat	B1 Utilizator independent	B1 Utilizator independent	B1 I Utilizator independent

(*) Common European Framework of Reference for Languages

Competenţe şi abilităţi sociale	Bună capacitate de comunicare, de adaptare la medii multiculturale şi spirit accentuat de echipă, abilităţi dobandite în urma mobilităţilor efectuate în cadrul programelor de pregatire profesională la nivel intern şi internaţional.
Competenţe şi aptitudini organizatorice	Spirit organizatoric, experienţă bună a managementului de proiect şi al echipei, în calitate de coordonator unor contracte de cercetare cu finanţare naţională şi internaţională, câştigate pe baza de competiţie Competenţe manageriale, dobandite in calitate de: - Prodecan cu cercetarea, calitatea procesului de învăţământ, relaţiile internaţionale şi legătura cu mediul socio-economic şi cultural, - Responsabil cu implementarea Managementului Calităţii în învăţământul superior - Coordonator Programe Socrates-Erasmus
Competenţe şi aptitudini tehnice	Capacitatea de a concepe, organiza şi realiza experimente în domeniu fizicii stării condensate, competenţe în microscopie de forţă atomică, diferacţie de raxe X, microscopie optică, dozimetrie, etc.

Competenţe şi cunoştinţe de utilizare a calculatorului	Microsoft Office, Corel, Origin, Adobe Photoshop, Matlab
Permis de conducere	categoria B
Alte competenţe şi aptitudini	- Membru al Societăţii Române de Fizică, Societăţii europene de Fizică, Colegiului Fizicienilor Medicali afiliată EFOMP and IOMP - Reviewer la jurnalele ştiinţifice "Plasma Processes & Polymers Journal", Wiley-VCH Verlag GmbH & Co. KgaA şi "Optics Communications", Elsevier - Expert evaluator ARACIS în domeniul Fizică - Auditor in domeniul calitatii, - Formator "Proiecte şi consultanţă managerială" **Contributii in domeniul educatiei:** • 21- 23 Sept. 2010, Bucuresti - Proiectul POSDRU/2/1.2/S/2 „DOCIS - Dezvoltarea unui sistem operational al calificarilor din invatamantul superior din Romania" – participarea la actiunea: „Validarea calificărilor specifice domeniului de studii universitare de licenţă "Fizică" • 4-5 Apr. 2011, Bucuresti - Proiectul POSDRU/2/1.2/S/2 „DOCIS - Dezvoltarea unui sistem operational al calificarilor din invatamantul superior din Romania" – participarea la actiunea „Validarea calificărilor specifice domeniului de studii universitare de licenţă "Stiinta mediului" • 10-12 Mart. 2011, Tg. Mures; 3-4 iun. 2011, Craiova - Proiectul POSDRU/2/1.2/S/6 ¨Informare corecta - cheia recunoasterii studiilor¨ - participarea la crearea unei retele de Centre de resurse de informare si documentare – recunoasterea perioadelor de studii in strainatate • 10-11 Apr. 2013, Bucuresti - Proiect ANPCDEFP: The Modernisation of Higher Education, LOLA - Learning Outcomes, Learning Assessment, curs de specializare 1-2 Mai 2013, Poiana Brasov - POSDRU/56/1.2/S/41506 „Educatia si formarea profesionala in sprijinul cresterii economice si dezvoltarii societatii bazate pe cunoastere" – participarea la activitatea „Acces si echitate in invatamantul superior" • 7-9 august 2013, Sinaia - „Cariera de succes in invatamantul preuniversitar prin implementarea de programe de formare inovative!" – prezentarea lucrarii „Postgraduate Programmes at the University of Craiova"
Informaţii suplimentare	**Sumarul activităţii ştiinţifice:** - Manager la 1 grant naţional şi 4 granturi internaţionale, membru în 12 granturi naţionale şi internaţionale - Peste 50 lucrări ştiinţifice (23 în jurnale cotate ISI) - Autor şi/sau coautor a 6 monografii ştiinţifice - 5 lecţii invitate la conferinţe internaţionale - Peste 40 prezentări la conferinţe naţionale şi internaţionale
Anexa	Lista selectivă a proiectelor si publicatiilor

ANEXA

PROIECTE CASTIGATE PRIN COMPETITIE

A. Contracte internationale

1. Stakeholders Tune European Physics Studies - Two

Tipul programului: Lifelong Learning Programme, Sub-programmes -- Multilateral Projects, Networks, Accompanying measures
Numarul contractului de finantare/anul: 142371-LLP-1-2008-1-BE
Perioada de derulare a contractului: 2008-2011
Calitatea: Responsabil pentru Partener 53, Universitatea din Craiova

2. Titlu: Strengthening Basic and Engineering Sciences Capacities in South Eastern Europe SEE

Subproiect: Map of Excellence in Physics and Mathematics in SEE
Sursa de finantare: UNESCO Oficiul Venetia (BRESCE)
Perioada de derulare a contractului: 01-11-2009 - 31-08-2010
Coordonator: Universitatea din Nis (Serbia)
Parteneri: Universitatea din Craiova si alte 12 institutii din Sud Estul Europei (Reteaua SEENET MTP)
Calitatea: director de proiect din partea UCV

3. Titlu: Small angle neutron scattering and atomic force microscopy investigations of nanoscale particles

Tema: "Investigations of Nanosystems and Novel Materials by Neutron Scattering Methods"
Tipul: Cooperare JNIR Dubna, Rusia - IFIN-HH Magurele, Romania
Numarul contractului:60,83,30 /anul: No.04-4-1069-2009/2014
Calitatea: director de proiect din partea UCV

4. Titlu: Training and Mobility Program. Promotion of the excellence and growing of the youth's interest for education in Physics and Mathematics

Tipul contractului: proiect UNESCO, coordonat de Universitatea din Craiova, parteneri Universitatea din Nis (Serbia) si alte 12 institutii din sud-estul Europei (reteaua SEENET MTP)
Numarul contractului: /anul: AFC 10-12/01-11-2009 - 31-08-2010
Calitatea: membru in colectivul UCV

5. Titlu: EU-HOU - Connecting classrooms to the Milky Way

Tipul contractului: LLP-FR-COMENIUS-CMP
Numarul contractului: /anul: 510308-2010
Valoarea contractului (pentru Univ. din Craiova): 29.258 Euro
Calitatea: membru in colectivul UCV

6. Titlu: HOPE - Horizon 2020 in Physic Education”

Tipul contractului: Lifelong Learning Programme Sub-programmes - Multilateral Projects, Networks, Accompanying measures
Numarul contractului: 540130-LLP-1-2013-1-FR-ERASMUS-ENW

B. Contracte nationale

7. OPTOMATEH. Tehnologii si materiale avansate pentru aplicatii in optoelectronica

Tipul contractului: PNII-CAPACITATI, Modulul I
Numarul contractului/anul: 126/2007
Beneficiar: MCT-ANCS
Directorul proiect: G. E. Iacobescu
Institutie coordonatoare: Universitatea din Craiova

8. Proprietati electrice si optice ale unor cristale lichide noi utilizate ca materiale pentru optoelectronica

Tipul contractului: A
Numarul contractului/anul: 4636/1999
Codul CNCSIS 84/1999, Tema nr. 10
Beneficiar: CNCSIS-MEC
Calitatea: membru

9. Determinarea parametrului de ordonare orientationala din studii optice pentru mezofazele unor cristale lichide nou sintetizate

Tipul contractului: A
Numarul contractului/anul: 35254/2001
Codul CNCSIS 1382/2001, Tema nr. 17
Beneficiar: CNCSIS-MEC
Calitatea: membru

10. Fenomene de suprafata si organizare in sisteme disperse cu fluide anizotrope

Tipul contractului: CERES
Numarul contractului/anul: CEx05--D11--76/2005, consortiu
Institutie coordonatoare: INCDFM, Magurele
Calitatea: membru in colectivul Partenerului 5, Universitatea "Politehnica" Bucuresti

11. TEHNOPLAT OLTENIA. Platforma de cercetare-inovare interdisciplinara, formare si transfer de cunostinte

Tipul contractului: Platforma tehnologica
Numarul contractului/anul: 39C/2006
Codul CNCSIS: 107/2006
Beneficiar: CNCSIS-MEC
Calitatea: membru

12. MIPROEN - Mini instalatie de producere a energiei din surse regenerabile -aplicatie pentru microunitati si ansambluri rezidentiale

Tipul contractului: PNII - PARTENERIATE
Numarul contractului/anul: 2738/2007
Beneficiar: MCT-ANCS
Institutie coordonatoare: ICSI Rm. Valcea
Calitatea: membru in colectivul Partenerului 1, Universitatea din Craiova

13. EFES-TREL - Studiu si implementarea unei solutii tehnologice pentru sporirea eficientei energetice, a sigurantei si securitatiiin transportu electic urban

Tipul contractului: PNII - PARTENERIATE
Numarul contractului/anul: 3743/2007
Beneficiar: MCT-ANCS
Institutie coordonatoare: Universitatea din Craiova
Calitatea: G. E. Iacobescu membru

14. HPPMSCEN: Centru de Cercetare Fundamentala si Aplicativa in Plasme de Pulverizare Magnetica Pulsata de Inalta Putere

Tipul programului: PNII - CAPACITATI, Modulul I
Perioada de derulare a contractului: 2008-2009
Numarul contractului de finantare/anul: 180/2008
Beneficiar: MCT-ANCS
Calitatea: membru

15. Titlu: Studiul electrochimic al dizolvarii monosulfurilor de fier

Tipul contractului: PNII - CAPACITATI, Modulul III
Parteneriat IFA-CEA Franta
Autoritatea contractanta: Institutul de Fizica Atomica - IFA
Contractor: Universitatea din Craiova
Perioada de derulare a contractului: 2010-2013
Numarul contractului de finantare/anul: 01.10.2010
Calitatea: membru

16. Tipul contractului: PNII - CAPACITATI, Modulul III

Parteneriat IFA-CEA Franta
Autoritatea contractanta: Institutul de Fizica Atomica - IFA
Contractor: Universitatea din Craiova
Perioada de derulare a contractului: 2010-2013
Numarul contractului de finantare/anul: 01.10.2010
Calitatea: membru

17. Titlu: AMS analyses of concentrations of hydrogen isotopes and other elements in tiles dismounted from the Toroidal Pump Limiter at Tore Supra Tokamak

Tipul contractului: Parteneriat IFA-CEA
Numarul contractului: /anul: C2-04/2011
Calitatea: membru in colectivul Universitatii "Politehnica" Bucuresti

18. Process and device for thin films deposition in highly ionized pulsed plasma (PIDESS)

Tipul contractului: PN II Parteneriate
Numarul contractului/anul:174/2012; 2012-2015
Calitatea: membru

JURNALE COTATE ISI

1. G. Rau, G. Iacobescu, V. Meltzer, A serie of new azoderivatives -synthesis and liquid crystal properties, Rev. Roum. Chem. 50/2 (2005) 119-124
2. G. Stoenescu, G. Iacobescu, Fast electron irradiation effects on mos transistor microscopic parameters-experimental data and theoretical models, J. Optoelectron Adv M 7/3 (2005) 1629-1634
3. C. Motoc, G. Iacobescu, The influence of UV irradiation on magneto-optical effects in azo-derivative doped liquid crystals, J. Optoelectron Adv M 7/6 (2005) 3111-3120
4. C. Motoc, G. Iacobescu, Birefringence of azo-dye doped nematic liquid crystals, J. Optoelectron Adv M 8/1 (2006) 295-298
5. C. Motoc, G. Iacobescu, Magneto-optic effects in nematic liquid crystal doped with azo-dyes, Mod Phys Lett B 20/17 (2006) 1015-1022
6. C. Rosu, G. Iacobescu, C. Motoc, C. Topala, Thermally stimulated depolarization currents in a new cholesteric liquid crystal, Mod Phys Lett B 20/13 (2006) 777-786

7. C. Motoc, G. Iacobescu, Magnetic field effects on the optical properties of an azo-dye doped liquid crystal, J Magn Magn Mater 306/1 (2006) 103-107

8. N. Iutes-Petrescu, G. Iacobescu, M. Damian, T. Iutes-Petrescu, Rheological behaviour of the structure of products containing hydrocarbons with high molecular weight, Rev Chim-Bucharest 57/1 (2006) 91-95

9. C. Topala, G. Iacobescu, B. Oprescu, C. Ducu, Optical and thermo-electrical effects in newly synthesized cholesteric compounds, Mat Sci Eng C 27 (2007) 1171-1173

10. G. Rau, G. Iacobescu, S. Radu, V. Meltzer, G. D. Mogosanu, Synthesis of novel azoderivatives with mesomorphic properties, Rev Chim-Bucharest **58**/8 (2007) 782-785

11. G. Iacobescu, A. L. Paun, C. Cartoaje, Magnetically induced Freedericksz transition and relaxation phenomena in nematic liquid crystals doped with azo-dyes, J Magn Magn Mater 320/17 (2008) 180-184

12. G. Iacobescu, P. Badea, The thermo-electro-optical effect: influence of the external and material parameters on the colours' succession, Optoelectron Adv M - RC 2/4 (2008) 216-218

13. C. Topală, S. Anghel, B. Oprescu, G. Iacobescu, Optical method for studying phase transitions of thermotropic mesogeneous substances, Optoelectron Adv M - RC 2/8 (2008) 482 - 487

14. O G Pompilian, M Osiac, G. E. Iacobescu, C P Lungu, Layer coatings of Re and Re-NiCr obtained by thermoionic vacuum arc technique, J. Optoelectron Adv M 11/11 (2009) 1779 - 1782

15. I. Palarie, C. Dascalu, G. E. Iacobescu, Study on laser-induced ripple structures in dye-doped liquid crystal films in high-intensity regime, J. Optoelectron Adv M 12/1 (2010) 115 - 118

16. I. Palarie, C. Dascalu G.E. Iacobescu, Controlling the orientation of microgrooves and the depth of the ripple structure in dye-doped liquid crystal cells, Liquid Crystals 37/2 (2010) 195 - 199

17. V. Ionescu, M. Osiac, C.P. Lungu, O.G. Pompilian, I. Jepu, I. Mustata, G.E. Iacobescu, Morphological and structural investigations of Co – MgF_2 granular thin films grown by thermionic vacuum arc, Thin Solid Films (2010) 3945-3948

18. I. Palarie, C. Dascalu, G. E. Iacobescu The influence of the easy axis on laser-induced ripple structures in dye-doped liquid crystal film, Physica Scripta, 82 (6), Article Number: 065602 DOI: 10.1088/0031-8949/82/06/065602, 2010

19. Jepu I.; Porosnicu C.; Mustata I.; Lungu CP.; Kunkser V.; Osiac M.; Iacobescu G.; Ionescu V.; Tudor T.; Simultaneously Thermionic Vacuum Arc Discharges In Obtaining Ferromagnetic Thin Films, ROMANIAN REPORTS IN PHYSICS Volume: 63 Issue: 3 Pages: 804-816 Published: 2011

20. Autori: I. Palarie, C. Dascalu, G. E. Iacobescu, M.C. Varut, Surface morphology of doped nematic liquid crystals: role of dye concentration, Liquid Crystals, volume 39, issue 7, 2012, pages 833-837.

21. Lungu, C.P., Marcu, A., Porosnicu, C., Jepu, I., Lungu, A.M., Chiru, P., Luculescu, C., Banici, R., Ursescu, D., Dabu, R., Feraru, I.D., Grigorescu, C.E.A., Iacobescu, G., Osiac, M., Kovač, J., Nemanič, V., Hinkov, I., Farhat, S., Gicquel, A., Brinza, O., Terawatt laser system irradiation of carbon/tungsten bilayers, Physica Status Solidi (A) Applications and Materials Science, Volume 209, Issue 9, September 2012, Pages 1732-1737

22. G. E. Iacobescu, M. Balasoiu, I. Bica, Investigation of Surface Properties of Magnetorheological Elastomers by Atomic Force Microscopy, Journal of Superconductivity and Novel Magnetism, on-line December 2012, (DOI) 10.1007/s10948-012-1903-8

Principal subjects/occupational skills covered	Physical
Name and type of organisation providing education and training	Institute for Atomic Physics
Level in national or international classification	
Dates	from: 1968- 1973
Title of qualification awarded	Engineer
Principal subjects/occupational skills covered	Chemistry
Name and type of organisation providing education and training	Faculty of Technologycal Chemistry, IPGG Bucharest
Level in national or international classification	

Personal skills and competences

Mother tongue(s): Romanian

Other language(s)

Self-assessment	Understanding		Speaking		Writing
European level (*)	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	C1	C1	C1	C1	C1
Italian	C1	C1	C1	C1	C1
Russian	C1	C1	C1	C1	C1

(*) Common European Framework of Reference for Languages

Social skills and competences

- Award in Physics of the Romanian Academy named "Dragomir Hurmuzescu", received in 1977
- Granted fellowship from the EC-Italy (invited stages)-ENEA-Frascati, Rome (in 1989-1990-3 months, in 1991-4 month and in 1994-3 months)
- Intergovernmental German-Romanian cooperation, fellowships 1997 (1 month), 1999 (2 weeks), 2001(2 weeks), 2002 (2 weeks)
- Fellowships Univ.Lisabona PRAXIS XIII.3 month 1996
- Fellowships JSPS Japan,1month 2001
- Star of Romania Order of,,Knight" 2001

Organisational skills and competences: Coordination and administration of people, projects and budgets.
Led a team of 15 workers in a research team head. Organized the work and ensured the necessary logistics and manage the institute with 250 workers.

Technical skills and competences: IR spectrometry and UV-Vis, mechanisms of energy transfer in laser-induced reactions in gaseous environments, development of national development programs of research in the field of laser photochemistry;
Laser synthesis of nanoscale powder and composites (Si/C/N, Al_2O_3, Si/C/Ti, TiO_2, TiC, Fe, FeC, FeO etc) from gaseous precursors; design of different flowing systems, installations and various reactors; study of the laser-induced reaction efficiency at medium- laser power; parametric dependence of particle composition and morphology
Thin films and coatings by laser-induced chemical deposition (LCVD)

Computer skills and competences	Good command of Windows, Microsoft Office(Word, Excel, PowerPoint, Publisher, Project, Access); Primavera; CAD software (AutoCAD, ChemCAD); Mathcad, MathLab; Graphic design applications (Corel, Adobe Photoshop, SmartDraw); E-Learning; CBT (Computer Based Training) courses
Artistic skills and competences	Different analytical methods for nanostructure characterization (transmission and scanning electron microscopy, high resolution electron microscopy, X-ray diffraction, Moessbauer spectroscopy)
Other skills and competences	Romanian accounting Hobbies: reading, swimming, traveling, listening to music, fishing
Driving licence	Driving License category B
Additional information	• Member of the professional associations(Member of SPIE (the International Society for Optical Engineering), Member of EOS (European Optical Society), Member of the Romanian Physical Society, Member of the Scientific Program Committee ROMOPTO Bucharest) • Number of papers in refereed journals(115 in international journals and 42 in Romanian journals) • Number of communications to scientific meetings: (63 International Conferences and Meetings, including 22 with invited lectures and 41 with contributions (oral, posters); 48 “Bio-imaging with Smart Functional Nanoparticles” – no. LSHB-CT-2006-037639 - Romanian Director - 2006-2010; • NATO SfP 974214 “Carbon Ceramic National Conferences and Meetings) • FP7 collaborative Project MagPro2Life “Advanced Magnetic and structured nanoparticles deliver smart Products for Life Sciences with industrial Processes by Linking innovative manufacturing efforts”- No. 229335, 2009- KMPT – Director - 2009-2013; • FP6 STREP project BONSAI _Composite Materials for Electrical Engineering Aplications” Romanien Director -1999-2004 • Romanian SCOPE Project “Combinatorial libraries of TiO2-doped nanostructures for photocatalysis and solar cells” (funded by SNSF) – Romanian Director - 2006-2008 • COST Action 523 "Nanostructured Materials" – Romanian Director - 1999-2004
Annexes	Publication List

Annex 1

PUBLICATIONS LIST

1. Morjan I, Dumitrache F, Alexandrescu R, Fleaca C, Birjega R, Luculescu CR, Soare I, Dutu E, Filoti G, Kuncser V, Prodan G, Popa NC, Vekas L, "Laser synthesis of magnetic iron-carbon nanocomposites with size dependent properties", Advanced Powder Technology Volume 23, Issue 1 Pages 88–96 January 2012
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5. Dumitrache, F.; Morjan, I.; Fleaca, C.; Birjega, R.; Vasile, E.; Kuncser, V.; Alexandrescu, R.; Parametric studies on iron-carbon composite nanoparticles synthesized by laser pyrolysis for increased passivation and high iron content, Applied Surface Science Volume: 257 Issue: 12 Pages: 5265-5269 Published: APR 1 2011
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10. Alexandrescu. R, Morjan. I, Scarisoreanu. M, Birjega. R, Fleaca. C, Soare. I, Gavrila. L, Ciupina. V, Kylberg. W, Figgemeier. E, Development of the IR laser pyrolysis for the synthesis of iron-doped TiO2 nanoparticles: Structural properties and photoactivity, INFRARED Physics & Technology Volume: 53 Issue: 2 Pages: 94-102 Published: MAR 2010
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-2006-prezent: profesor universitar, Facultatea de Farmacie, Universitatea de Medicină şi Farmacie din Craiova.

-2008-prezent: conducător de doctorat în domeniul Farmacie (Biofarmacie și chimia fizică a medicamentului).

ACTIVITATE DE CERCETARE

Publicații in reviste de specialitate:

- peste 40 de lucrări publicate în reviste de specialitate din țară și străinătate;
- peste 30 de participări la conferințe naționale și internaționale;
- peste 20 de citări în reviste cotate ISI, indice H=3;

Articole in extenso publicate în reviste ISI şi BDI:

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- **J. Neamțu,** I.N. Mihăilescu, Carmen Ristoscu, J. Hermann, *"Theoretical modelling of phenomena in pulsed-laser deposition process"*, JOURNAL OF APPLIED PHYSICS (Ed .American Institute of Physics), **86** (11), 6096 (1999);

- I.N. Mihăilescu, Eniko Gyorgy, V.S. Theodorescu, G. Steinbrecher, **J. Neamțu,** A. Perrone, A. Luches, *"Characteristic features of the laser radiation – target interactions during reactive pulse laser ablation of Si targets in ammonia"* JOURNAL OF APPLIED PHYSICS (Ed. American Institute of Physics) **86** (12), 7123 (1999);

- I.N. Mihăilescu, N. Chitica, Eniko Gyorgy, V.S. Theodorescu, G. Marin, A. Luches, A. Perrone, M. Martino, **J. Neamțu,** *"A parametric studies of the deposition of the TiN thin films by laser reactive ablation of titanium targets in nitrogen"*, JOURNAL OF MATERIALS SCIENCE (Ed. Chapman & Hall) **31**, 2909 (1996).

Lucrări publicate în baze de date internaționale (BDI)

- Rodica Cristescu, G.Socol , I.N. Mihăilescu, I.Morjan , I.Soare ,M. Popescu F.Sava . C.Morosanu, **J.Neamțu,** *"Pulsed Laser Deposition of Poly (methyl methacrylate) "Thin Films: Experimental evidence by XRD, XPS, AFM, Optical Microscopy, Raman Spectroscopy and FTIR"* , Proceedings of SPIE vol :5147, pp. 87-94, 2003;

- **J. Neamțu**, Carmen Ristoscu, I.N. Mihăilescu, *"Theoretical and experimental parametric study of the synthesis process of TiN by reactive pulsed laser deposition"*, Proceedings of SPIE, vol. 4397, 300-304, (2001);

- **J. Neamțu**, I.N. Mihăilescu, Carmen Ristoscu , *"Monte Carlo simulation of transit of ablated atoms trough ambient gas"*, Proceedings of SPIE vol. 4430, 275-278, (2001);

- **J. Neamțu**, I.N. Mihăilescu, *"Absorbtion mecanism in UV laser plasma"*, Proceedings of SPIE, vol. 4430, 279-282, (2001);

- **J. Neamțu**, I.N. Mihăilescu,*"Theoretical model for the RPLD process: application to the case of the ablation of Ti target in low pressure N_2"*, Proceedings of SPIE, vol 3405, 305-310, (1998);

- I.N. Mihăilescu, E. Gyorgy, V.S. Teodorescu, G. Marin, D. Pantelica, A. Andrei, **J. Neamțu** ,*"New studies of reactive pulsed laser deposition"* , Proceedings of SPIE, vol 3405, 182-187, (1998);

- C. Șarpe-Tudoran, Margareta Socaciu, Mariana Ursache, **J. Neamțu**, G. Bratulescu, S. Radu *„Determination of phase transitions in liquid crystals by optical absorbtion spectroscopy"*, Proceedings of SPIE, vol. 3405, 619-622 (1998);

- **J. Neamțu**, I.N. Mihăilescu, Carmen Ristoscu, C. Șarpe-Tudoran, *„Studies of the heat transfer and propagation of plumes in laser reactive ablation process"*,Proceedings of SPIE, vol. 3571, 339-343 (1998);

- Margareta Socaciu, C. Șarpe-Tudoran, **J. Neamțu**, G. Iacobescu, Cristina Șarpe, *„Studyes of the absorbtion spectra changing with temperature for new synthesys liquid crystals"*, Proceedings of SIOEL, 189-190 (1998).

Proiecte de cercetare-dezvoltare-inovare

1.Proiecte naționale

- *Noi metode pentru îmbunătățirea bioactivității și biofuncționalității implanturilor* , 2004-2006 , VIASAN-director de proiect;

- *Mecanisme moleculare ale adeziunii osteoblastelor diferențiate din celule STEM și a explantelor de țesut osos la biomateriale ortopedice*, 2006-2008 , Program Cercetare de Excelentă – responsabil științific proiect , UMF Craiova;

- *Proiect integat privind noi metode pentru corelări în vitro-in vivo în scopul*

reducerii numărului experimentelor de bioechivalență (IN VIVO (IVIV CORREL), Program Cercetare de Excelenţă, membru;

2. Proiecte internaționale:

- CORINT- *Surface Improvement of Metal Implants :New Preparation Methods and New Material* ,SIMI nr. 2/07 II 2002, 2002 – 2004, membru;

3. Proiecte din fonduri structurale:

- *Proiect pentru dezvoltarea de programe doctorale cu dimensiuni europene în medicină și științele vieții* - responsabil proiect UMF Craiova.

Organizare de manifestări ştiinţifice naţionale şi internaţionale:

- membru în comitetul de organizare a peste 10 manifestări ştiinţifice locale și 3 simpozioane naționale .

EXPERIENŢA ŞI ACTIVITATEA MANAGERIALĂ

- 1997-1998 -șef catedră, Facultatea de Medicină;
- 1999-2003 - secretar ştiinţific, Facultatea de Farmacie din Craiova;
- 2004–2007- prodecan ,Facultatea de Farmacie din Craiova;
-2008-prezent - decan, Facultatea de Farmacie din Craiova;

Craiova,
10 februarie 2012,

Prof.univ dr. ***Johny*** Neamţu

CURRICULUM VITAE

First name: ***Andrei***
Last name: ***ROTARU***
Date of birth: 09.08.1983; **Age**: 33
Place of birth: Craiova, Romania. **Citizenship**: of Romania.
e-mail: **andrei.rotaru@inflpr.ro** **Telephone:** +40745379205

MAIN FIELDS OF INTEREST

Physical chemistry. Thermophysical properties of solids.

- *Thermophysical aspects of spectroscopic methods (dielectric, calorimetric, compositional, electronic, magnetic, topographic, acoustic & mechanic) for condensed matter: in volume, on surfaces & at interfaces.*
- *Thin film processing of advanced materials by laser-assisted (MAPLE, PLD) techniques.*
- *Heterogeneous kinetics: isokinetic relation, compensation effect and advanced kinetic methods (linear incremental procedures used as model-free and as single heating rate methods).*
- *Thermal analysis of soft complex inorganic materials & organic (liquid crystals, dyes) compounds.*
- *Electroceramics: relxaors, ferroelectrics & multiferroics.*
- *Structure-properties in tetragonal tungsten bronzes (TTBs) and perovskite-related ceramics.*
- *Dynamic processes in materials: modelling the relaxation of dielectric dipoles.*
- *Characterisation techniques: thermal analysis & calorimetry (TGA, DSC, DMA), immittance spectroscopy (IS), resonant ultrasound spectroscopy (RUS), microstructural analyses (XRD, SEM, AFM, neutron diffraction).*

SCIENTIFIC CONTRIBUTION

Invited lectures	Papers in scientific journals	Conference works	Citations	Hirsch Index
20	**38** (**32** ISI)	**> 80**	**376** (**346** ISI & **30** IDB)	**14**

EDUCATION

2013	**Doctor of Philosophy** in **Chemistry**	**University of St Andrews,** School of Chemistry, St Andrews, United Kingdom Thesis title: *"**Novel polar dielectrics with the tetragonal tungsten bronze structure**"* First year report title: *"**Tungsten-bronze oxides as potential multiferroic materials**"*
2006	**Bachelor of Science** in **Chemistry** & **Physics**	**University of Bucharest**, Faculty of Chemistry, Bucharest, Romania Thesis title: "***Thermal stability and non-isothermal decomposition kinetics of some aromatic azomonoether dyes***" (GPA: **9.02**; Graduation avrg.: **10**; **Valedictorian**)

PROFESSIONAL EXPERIENCE

August 2014-present day	**Senior Researcher II**, Photonic Processing of Advanced Materials Laboratory **INFLPR (National Institute for Laser, Plasma & Radiation Physics)**, Bucharest, Romania
April 2014-August 2015	**Postdoctoral Researcher** at the Faculty of Mathematics and Natural Sciences **University of Craiova**, Craiova, Romania
November 2010-August 2014	**Scientific Researcher III**, Photonic Processing of Advanced Materials Laboratory **INFLPR (National Institute for Laser, Plasma & Radiation Physics)**, Bucharest, Romania
February 2009-May 2009	**Demonstrator** in Inorganic and Physical Chemistry at the **University of St Andrews**, St Andrews, United Kingdom
November 2006-November 2010	**Scientific Research Assistant**, Photonic Processing of Advanced Materials Laboratory **INFLPR (National Institute for Laser, Plasma & Radiation Physics)**, Bucharest, Romania

VISITING AND INVITED PROFESSOR/RESEARCHER

01.03.2015 –31.03.2015 **01.09.2015 –30.09.2015**	**University of Cambridge**, Department of Earth Sciences, UK (Visiting Researcher)
09.06.2014 –12.06.2014	**University of Catania**, Department of Chemical Sciences, Italy (Invited Professor)
03.10.2012 –12.10.2012	**University of Palermo**, Department of Physics & Chemistry, Italy (Invited Researcher)
14.05.2007 –22.05.2007	**Gdansk University of Technology**, Chemical Faculty, Poland (Invited Researcher)

EDITORIAL & REVIEWING ACTIVITY

Editor	**Journal of Thermal Analysis and Calorimetry** (*Member of the Editorial Board; since Jan. 2012*) **European Journal of Chemistry** (*Member of the Editorial Board; since March 2015*) **Journal of Thermal Analysis and Calorimetry** (*Guest Editor: special issues in 2012, 2014, 2016)*
Reviewer (22)	*Journal of Physical Chemistry (A,B), Journal of the American Ceramic Society, Inorganic Chemistry, Energy & Fuels, Applied Energy, Journal of Thermal Analysis & Calorimetry, Thermochimica Acta, Applied Surface Science, Applied Physics A-Materials Science & Processing, Materials Chemistry & Physics, Journal of Nano Research, Chemical Engineering Journal, Industrial & Engineering Chemistry Research, Chemometrics & Intelligent Laboratory Systems, Pedosphere, Polyhedron, Journal of Applied Polymer Science, Dyes & Pigments, International Journal of Pharmaceutics, Acta Chimica Slovenica, Chemical Papers, Chemical Industry & Chemical Engineering Quarterly.*

MEMBERSHIP AT PROFESSIONAL ASSOCIATIONS

President	Central and Eastern European Committee for Thermal Analysis and Calorimetry (CEEC-TAC)
VicePresident	European Society for Thermal Analysis and Calorimetry (ESTAC), between 2014-2018
Chairman & Next President	12th European Symposium on Thermal Analysis and Calorimetry (ESTAC12), in 2018; European Society for Thermal Analysis and Calorimetry (ESTAC), between 2018-2022
Councillor	International Confederation for Thermal Analysis and Calorimetry (ICTAC)
Councillor	European Symposium on Thermal Analysis and Calorimetry (ESTAC)
VicePresident	Commission of Thermal Analysis and Calorimetry of the Romanian Academy (CATCAR)
Member	Kinetics Committee at ICTAC
Member	Serbian Ceramic Society

AWARDS, PRIZES & RECOGNITION

1	**2016**	ICTAC Young Scientist Award of the International Confederation for Thermal Analysis and Calorimetry
2	**2014**	Who is Who in Thermal Analysis and Calorimetry, Akademiai Kiado, Budapest
3	**2008**	ICTAC International Travel Grant Program - Award for Young Scientists, ICTAC14, Sao Pedro, Brazil
4	**2007**	Fellowship of the Roberto Rocca Educational Program, Romania/Argentina/United Kingdom
5	**2007**	Honourable Prize – International Conference Students for Students, Cluj-Napoca, Romania
6	**2006**	Best scientific contribution – International Conference Students for Students, Cluj-Napoca, Romania
7	**2002**	Ist Prize-County Chemistry Contest (Craiova) & Participant at the National Chemistry Contest, Romania

ABILITIES

Scientific equipments and techniques	Thermal analysis techniques (TGA, Hi-ResTGA, DSC, MDSC, Dilatometry, NanoTA, Scanning Thermal Microscopy); Thermal diffusivity and conductivity measurements. Sample controlled thermal analysis (SCTA): group of unconventional techniques for separating complex processes, kinetically driven, etc. and for enhancing materials processing (*i.e.* CRTA, SIA). Impedance spectroscopy (IS) and dielectric analysis (DEA). Resonant Ultrasound Spectroscopy (RUS). Manipulating furnaces & materials processing at high temperatures. Scanning electron microscopy (SEM) for ceramics and solid fuels, X-Ray and Neutron Diffraction.
Software	Thermal and Kinetic Software (commercial & **own developed: TKS-SP ©**); Rietvelt X-Ray refinements (ExpGui, GSAS).

LABORATORY EQUIPMENTS

	Hi-Res TGA 2950 (TA Instruments)
	MDSC 2920 (TA Instruments)
	100-Litres storage tank for liquid nitrogen with automatized transfer line (TA Instruments)
	High-Pressure DSC (Mettler-Toledo)
	Perfectly-stirred catalytic reactor with internal recirculation of gases (Home-made)
	Box furnaces up to 1250 °C

LANGUAGES

Romanian/mother tongue	**English**/excellent	**French**/very good	**German**/good

SCIENTIFIC & ORGANIZING ACTIVITY

1	***Chairman***	**ESTAC12** (**The 12th European Symposium on Thermal Analysis and Calorimetry**), 26-30 August 2018, Brasov, Romania.
2	***Co-chairman*** *(with Tudor Lupascu)*	**CEEC-TAC4** (**4th Central & Eastern European Conference on Thermal Analysis and Calorimetry**), 28-31 August 2017, Chisinau, Moldova.
3	***Co-chairman*** *(with Tudor Lupascu)*	**4th Edition of Short Summer School on Thermal Analysis and Calorimetry**, 28th of August 2017, Chisinau, Moldova.
4	***Co-chairman*** *(with Giuseppe Lazzara)*	**3rd Winter School on "Renewable Energy Systems and Green Nanotechnologies for a Clean Environment"**, 16-18 December 2016, Busteni, Romania.
5	***Member of the Scientific Committee***	**48th International October Conference on Mining and Metallurgy**, 28 Sept.-1 October 2016, Bor, Serbia.
6	***Member of the International Organizing Committee***	**15th Conference on Thermal Analysis and Calorimetry in Russia**, 19-23 September 2016, Saint Petersburg, Russia.
7	***Member of the Scientific Committee***	**47th International October Conference on Mining and Metallurgy**, 4-6 October 2015, Bor, Serbia.
8	***Member of the International Scientific Committee***	**MEDICTA 2015 – 12th Mediterranean Conference on Calorimetry and Thermal Analysis,** 17-19 June 2015, Girona, Spain
9	***Co-chairman*** *(with Romana Cerc-Korosec)*	**CEEC-TAC3** (**3rd Central & Eastern European Conference on Thermal Analysis and Calorimetry**), 25-28 August 2015, Ljubljana, Slovenia.
10	***Co-chairman*** *(with Romana Cerc-Korosec)*	**3rd Edition of Short Summer School on Thermal Analysis and Calorimetry**, 25th of August 2015, Ljubljana, Slovenia.
11	***Member of the Scientific Committee***	**46th International October Conference on Mining and Metallurgy**, 1-4 October 2014, Bor, Serbia.
12	***Co-chairman*** *(with Giuseppe Lazzara)*	**2nd Summer School on "Renewable Energy Systems and Green Nanotechnologies for a Clean Environment"**, 15-17 July 2014, Palermo, Italy.
13	***Member of the Scientific Committee***	**45th International October Conference on Mining and Metallurgy**, 16-19 October 2013, Bor, Serbia.
14	***Member of the International Organizing Committee***	**14th Conference on Thermal Analysis and Calorimetry in Russia**, 23-28 September 2013, Saint Petersburg, Russia.
15	***Co-chairman*** *(with Daumantas Matulis)*	**CEEC-TAC2** (**2nd Central & Eastern European Conference on Thermal Analysis and Calorimetry**), 27-30 August 2013, Vilnius, Lithuania. (*> 310 participants*).
16	***Co-chairman*** *(with Daumantas Matulis)*	**2nd Edition of Short Summer School on Thermal Analysis and Calorimetry**, 27th of August 2013, Vilnius, Lithuania.
17	***Co-chairman*** *(with Giuseppe Lazzara)*	**1st Winter School on "Renewable Energy Systems and Green Nanotechnologies for a Clean Environment"**, 14-16 December 2012, Drobeta-Turnu Severin, Romania.
18	***Co-chairman*** *(with Crisan Popescu)*	**CEEC-TAC1** (**1st Central & Eastern European Conference on Thermal Analysis and Calorimetry**), 7-10 September 2011, Craiova, Romania, (*> 300 participants*).
19	***Co-chairman*** *(with Crisan Popescu)*	**1st Edition of Short Summer School on Thermal Analysis and Calorimetry**, 7th of September 2011, Craiova, Romania.
20	***Member of the Scientific Committee***	**14th International Congress on Thermal Analysis and Calorimetry (ICTAC)**, 14-18 September 2008, Sao Pedro, Brazil.

COLLABORATIONS:

Assoc. Prof. Dr. **Finlay D. Morrison** (University of St Andrews, UK)
Prof. Dr. **Michael A. Carpenter** (University of Cambridge, UK)
Prof. Dr. **Juras Banys** (Vilnius University, Lithuania)
Assoc. Prof. Dr. **Donna C. Arnold** (University of Kent, UK)
Prof. Dr. **Crisan Popescu** (KAO Technologies, Germany / University "Haute Alsace", France)
Assoc. Prof. Dr. **Jiri Kucerik** (University Koblenz-Landau, Germany)
Prof. Dr. **Luis A. Perez-Maqueda** (University of Sevilla/CSIC Institute for Materials Science, Spain)
Assoc Prof. Dr. **Giuseppe Lazzara** (University of Palermo, Italy)
Prof. Dr. **Stefana Milioto** (University of Palermo, Italy)
Prof. Dr. **Katarina Gyoryova** (University "P.J. Safarik" in Kosice, Slovakia)