

30/12.01.2016

## Declaratia de Candidatura

Subsemnata, Simona Pinzaru, Conf. dr. la Departamentul de Fizica Biomoleculara din cadrul Facultatii de Fizica, imi exprim intentia de a candida pentru pozitia de membru in Consiliul Facultatii.

Cluj-Napoca, 12.01.2016

*f. Pinzaru*

## Europass Curriculum Vitae



### Personal information

**First name(s) / Surname(s)** **Simona Cîntă Pinzaru**  
**Address(es)** Kogalniceanu 1, RO 400084 Cluj-Napoca, Romania  
**Telephone(s)** +40264-405300 **Mobile:** +4(0)745-387709  
**Fax(es)** +40-264-591906  
**E-mail** simona.cinta@phys.ubbcluj.ro  
**Nationality** Romanian  
**Gender** F

### Work experience

**Assoc. Professor of Spectroscopy and Lasers, Optoelectronics, Optics, Nanomedicine and molecular Diagnostic, IR and Rman applications,**  
**Dates** 2003-present; Associate Professor, Biomolecular Physics Dept., Babes-Bolyai University; Cluj-Napoca, Romania  
 2014-2016-Senior researcher, NEWFELPRO fellow University of Dubrovnik, Croatia  
 1998-2003; Lecturer, Molecular Spectroscopy Dept., Babes-Bolyai University  
 1995-1998 Assistant professor, Molecular Spectroscopy Dept., Babes-Bolyai University  
**Occupation or position held** Associate Professor  
**Name and address of employer** Babes-Bolyai University, Faculty of Physics, Biomolecular Physics Department, Cluj-Napoca, RO 400084

### Education and training

2003, 2004, 2005, Visiting Scientist *Bayerische Julius Maximilian Universität, Würzburg, Germany* (3 months, respectively);  
 1999, 2002, Erasmus-Socrates Fellowship, Post Doc at University of Würzburg, Germany;  
 1996- *Wissenschaftliches Mitarbeiterin an der Bayerische Julius Maximilians Universitaet Würzburg,*  
 1996- Soros fellow, PhD student, University of Würzburg, Germany;  
**Dates** 1998 Doctoral Thesis: "Raman and SERS spectroscopic studies of the metal-adsorbed complex for the biological interest molecules"  
**Title of qualification awarded** Doctor in Physics (1998) of Babes-Bolyai University Cluj-Napoca, Romania  
**Principal subjects/occupational skills covered** Scientific research & Didactic activity  
 Courses: Spectroscopy and Lasers, Optoelectronics, Nanomedicine and Molecular Diagnostic, Optics, Vibrational spectroscopy methods –Biomedical Applications; Optics (German Language), Spectroscopy (German Language) seminars, laboratories);  
 Research topic :Applied Raman spectroscopy; Raman techniques for nanomedicine, personalized diagnostic, pharmaceuticals, food control and environmental field;  
 Nano risk: investigation of the interface between living organisms and nanoparticles;

### Personal skills and competences

**Mother tongue(s)** **Romanian**  
**Other language(s)** English, German, French, Croatian

**Self-assessment**

Understanding	Speaking	Writing
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European level (*)	Listening	Reading	Spoken interaction	Spoken production	
<b>English</b>	C2	C2	C2	C2	C2
<b>German</b>	B2	C1	B2	C1	C1
<b>French</b>	B2	C2	B1	B1	B2
<b>Croatian</b>	B2	B2	B1	A2	B2

(\*) *Common European Framework of Reference for Languages*

Social skills and competences  
 Organising / Coordinator scientific meetings : **Workshop Bruker** 2002; **Workshop Witec** 2008, **Workshop Rigaku** 2013, Cluj-Napoca, **Workshop Rigaku 2014** "Shedding Laser light on the Adriatic Sea environment"- in cooperation with Rigaku Technologies Inc., 2014, **Workshop B&W TEK**, 2015, ( Dubrovnik); Member in the Organising Committee of the International Conference "Advanced Spectroscopies on Biomedical and Nanostructured Systems" **NanoSpec** Cluj-Napoca, 5 Editions: 2004, 2006, 2008, **BioNanoSpec** 2011, 2014);  
 Member in the Local Scientific and Organising Committee of the **EUCMOS 2012**, Cluj-Napoca, Romania  
 Member in the International scientific Committee of **ICOVS** (2006, 2014)  
 Very good communication skills, teaming, public relations, media;

Organisational skills and competences  
 Project manager "JADRANSERS" (2014-2016) NEWFELPRO Grant Nr. 5,- Marie Curie FP7-PEOPLE-2011-COFUND program Ministry of Science, Education. and Sports Croatia,  
 Coordination of research projects: PN\_IL\_ID\_2284/ 2008-2011; Grant Director  
 Member in other projects grants teams - 2005, 2004, 2003, 2002;  
 World Bank Grant for Young Researcher: BM-T Grant Director 1999-2002;  
 Grant Director CNCSIS –AT – 2000-2002.  
 NEWFELPRO co-financed through the Marie Curie FP7-PEOPLE-2011-COFUND program –fellow as senior 3 international bilateral and institutional agreements , 4 interdepartmental agreements;

Technical skills and competences  
 Experimental vibrational spectroscopy – Developing Raman spectroscopy applications in biomedical, environmental and conservation-restoration field ; Pure and Applied SERS; (Nanomedicine; Pharmaceuticals; Food control; Environment, Cultural Heritage –assessment for conservation-restoration

Prizes /Awards  
 The Prize of Babes-Bolyai University for the Excellence in Research, 2011  
 Poster prize, 5<sup>th</sup> Summit of Clinical Nanomedicine, Clinam 2012, Basel;  
 Nomination for Dhamelincourt prize, Paris, 2007

Computer skills and competences  
 User; Microsoft office, Specific scientific software spectral data analysis;

Artistic skills and competences  
 Photography, holography, cultural heritage

**Additional information**  
**Publications:** 73 articles in ISI journals; 4 books/ book chapters; 48 published papers in Romanian national journals; More than 180 contributions in proceedings / book of abstracts; 13 invited lectures; 39 talks and oral presentations to conferences and meetings;  
**Researcher ID:** **A-4543-2011**; Profile URL: <http://www.researcherid.com/rid/A-4543-2011>  
 ORCID: <http://orcid.org/0000-0001-8016-4408>  
 Researcher ID: [https://www.researchgate.net/profile/Simona\\_Cinta\\_Pinzaru](https://www.researchgate.net/profile/Simona_Cinta_Pinzaru)  
**H index 14** (Scopus) (self-citations excluded); **Google Scholar: H-index: 16**;  
**Research topics:** Nanomedicine: nanosciences for the benefit of patient. Early cancer diagnostic using optical spectroscopy techniques, including Raman, SERS, combined with complementary techniques;  
 Marine biotoxins; Food control, aquaculture and seafood characterization and monitoring, using ultrasensitive Raman techniques; Pharmaceuticals;  
**Member** of the European Technology Platform-Nanomedicine (ETPN); International Association of Physical Chemists (IAPC), European Physical Society (EPS); Romanian Society for Pure and Applied Biophysics (RSPAB);  
 Member in the Editorial Board of the Journal of Spectroscopy.  
 Scholarly Contributions [Data Provided by scopus: <http://www.hindawi.com/28456802/>]  
**Reviewer** in more than 10 ISI journals

Cluj-Napoca, 11.01.2016

Simona Cîntă Pinzaru



## Listă cu cele mai semnificative producții științifice și didactice



### a) Științifice (selecție publicații din 2011-2015):

1. Surface Enhanced Raman Spectroscopy Used for the Identification and Characterization of Melanoma Mice Skin Tissues

Falamas, A.; Dehelean, C.; Chis, V.; **S. C. Pinzaru** et al.

European Journal of Cancer Volume: 47 Pages: S660-S660 Published: 2011

DOI: 10.1016/j.toxlet.2010.03.605

I. F. 5.417

2. Evaluation and differentiation of the Betulaceae birch bark species and their bioactive triterpene content using analytical FT-vibrational spectroscopy and GC-MS

**Simona Cîntă-Pinzaru**, Cristina A Dehelean, Codruta Soica, Monica Culea and Florin Borcan  
Chemistry Central Journal 2012, 6:67 doi:10.1186/1752-153X-6-67

I.F. 2.5

3. Study of the betulin enriched birch bark extracts effects on human carcinoma cells and ear inflammation

Dehelean, Cristina A.; Soica, Codruta; Ledeti, Ionut; **S. Cinta Pinzaru**.

Chemistry Central Journal, 6, 2012

<http://journal.chemistrycentral.com/content/6/1/137>

I.F. 2.5

4. Double Amino Functionalized Ag Nanoparticles as SERS Tags in Raman Diagnostic

**S. Cinta Pinzaru**, A Falamaș, C Dehelean, C Morari, M Venter

Croatica Chemica Acta 86 (3), 233-244, 2013

I.F. 0.76

5. Detection of thiabendazole applied to organic fruit by near infrared surface-enhanced Raman spectroscopy, Cs. Muller, L. David, **Simona Cîntă Pinzaru**

Spectroscopy Europe 25 (4), 2013

6. A characterization of four B16 murine melanoma cell sublines molecular fingerprint and proliferation behavior

Corina Danciu, Alexandra Falamas, Cristina Dehelean, Codruta Soica, Heinfried Radeke, Lucian Barbu-Tudoran, Florina Bojin, **Simona Cîntă Pinzaru**, Melania F Munteanu,

Cancer Cell International, 2, 1, 2013, doi:10.1186/1475-2867-13-75

I. F. 2.77

7. Surface-enhanced Raman scattering (SERS) and complementary techniques applied for the investigation of an Italian cultural heritage canvas

OM Gui, A Fălămaș, L Barbu-Tudoran, M Aluăș, B Giambra, **S. Cinta Pinzaru**

Journal of Raman Spectroscopy 44 (2), 277-282, 2013

I.F. 2.68

8. Molecular conformation changes along the malignancy revealed by optical nanosensors

**S. Cinta Pinzaru**, A Falamas, CA Dehelean

Journal of Cellular and Molecular Medicine 17 (2), 277-286, 2013

I.F. 4.75

9. Detection of thiabendazole applied on citrus fruits and bananas using surface enhanced Raman scattering

C Müller, L David, V Chiş, **S C Pinzaru**

Food Chemistry 145, 814-820, 2014

I.F. 3.33

10. Amnesic shellfish poisoning biotoxin detection in seawater using pure or amino-functionalized Ag nanoparticles and SERS

Müller C, Glamuzina B, Pozniak I, Weber K, Cialla D, Popp J, **Cîntă Pinzaru S**

Talanta, 130, 108-116, 2014;

doi: 10.1016/j.talanta.2014.06.059.

IF. 3.5

11. **Cîntă Pinzaru, S.**, Müller, Cs., Tomšić, S., Venter, M. M., Cozar, B. I., and Glamuzina, B. (2015)

New SERS feature of  $\beta$ -carotene: consequences for quantitative SERS analysis.

J. Raman Spectrosc., 46 (7): 597–604. doi: 10.1002/jrs.4713.

I.F. 2.671; Accession Number: WOS:000358082000001

12. Analytical Study of Gallstones in Patients From Transylvania, Romania.

Ioana Brezestean, Nicolae Har, Alina Tantău, Maria Gorea, Monica M. Venter, **Simona Cîntă Pinzaru**

Studia Univ. Babes-Bolyai, Chemia, 1, (LX 1): 29-43 2015

I.F. 0.191

13. NIR-Raman spectrum and DFT calculations of okadaic acid DSP marine biotoxin microprobe

**S. Cîntă Pinzaru**, Cs. Müller, I. S. Tódor, B. Glamuzina, V. Chis

J. Raman Spectrosc. Accepted Dec. 2015.

I. F. 2.671

#### b) Didactice:

Indrumator de laborator:

Simona Cinta Pinzaru, Lucrari practice de Spectroscopie, 2015;

#### Carti:

1. T. Iliescu, **S. Cîntă Pinzaru**, D. Maniu, R. Grecu, S. Aştilean,

“Aplicații ale spectroscopiei vibraționale”,

Ed. Casa Cărții de Știință, Cluj-Napoca (ISBN 973-686-292-5), 2002.

2. T. Iliescu, **Simona Pinzaru**

Spectroscopia Raman și SERS cu aplicații în biologie și medicină

First edited by M. Trifu, 11/2011; Casa Cartii de Stiinta,

ISBN: 978-973-133-887-3

3..Recent Research Developments in Organometallic Chemistry, Vol. 4 (2001) Managing Editor S. G. Pandalay, (ISBN:81-7736-064-7), Research Signpost, Trivandrum, India:

Cap.: “Vibrational Spectroscopy and Theoretical Studies on organometallic complexes”,

D. Moigno, I. Pavel, **S. Cîntă** and W. Kiefer, P.11-39.

4. Surface Enhanced Raman Spectroscopy - Analytical, Biophysical and Life Science Applications, Ed. S. Schluecker, WILEY-VCH Verlag ;

Chapter 6, „SERS and Pharmaceuticals”,

**Simona Cîntă Pinzaru**, I. Pavel, pp129-154, Wiley-VCH, 12/2010;

DOI:10.1002/9783527632756.ch6; ISBN: 9783527632756 pp.129 – 154

## **Proiect privind dezvoltarea, managementul și inițiativele pe care doresc să le promovez la nivelul Consiliului Facultății**

Consider ca este imperios necesară o relansare și o constientizare a importanței pregătirii superioare în domeniul fizicii. De aceea, importanța constientizării la toate nivelele de reprezentare a Facultății de Fizică este:

- Necesitatea desfășurării unei activități științifice și didactice de înaltă calitate;
- Cultivarea unui spirit de echipă la nivelul facultății și descurajarea concurenței între membri aceluși departament/grup;
- Promovarea reală a performanțelor științifice la toate nivelurile;
- Evaluarea reală a implicării ca instituție în programul Horizon2020 și luarea măsurilor ce se impun;
- Plata taxelor instituționale de membru în organizații și platforme europene și transnaționale de cercetare;
- Construirea unei imagini pozitive și creșterea a facultății;
- Promovarea realizărilor științifice în mediu economic;
- Construirea unei relații viabile cu parteneri din mediul de afaceri (relație ce presupune reciprocitate);
- Măsuri concrete pentru atragerea și stimularea studenților în activitatea de cercetare;
- Premierea și recunoașterea activităților de cercetare de succes atât în rândul studenților cât și în cadrul colectivului facultății;
- Atragerea studenților străini la nivel master și implicit, propunerea obligativității programelor de master ale facultății într-o limbă accesibilă studenților străini (engleză);
- Încheierea de noi parteneriate internaționale cu universități, institute de cercetare din lume și relansarea colaborării internaționale în conformitate cu noile call-uri europene;
- Traducerea cunoașterii științifice către aplicații atractive pentru mediul de afaceri;
- Îmbunătățirea comunicării și transparenței la toate nivelurile;

reprezintă o prioritate actuală la care pot contribui cu succes.

Simona Cinta Pinzaru

