Curriculum vitae

Personal information

First name(s) / Surname	**Dina Nicoleta Elena**
Address	Donat Street 67-103, Cluj county
Telephone(s)	(+4)0264-584037, int 182
Marital status	Married (former name **MIRCESCU**)
E-mail	**nicoleta.dina@itim-cj.ro**
Nationality	Romanian
Date of birth	6 December 1986

Work experience

April 2015 - present

Occupation or position held: **Assistant Researcher** at the National Institute of Isotopic and Molecular Technology, Cluj-Napoca, in the Research Project PN-II-ID-PCE-2012-4-0115 „Structural changes and (sub)picosecond dynamics in DNA molecules probed with ultrasensitive Raman spectroscopic tehniques”

October 2018 – present

Occupation or position held: **Research Project Manager** for the Research Project PN-III-P1-1.1-PD-2016-0475 “***Robust fuzzy set theory-based models and methods of data analysis for spectral pathology***”

September 2017 – May 2018

Occupation or position held: **Research Project Manager** for the Research Project PN-III-P2-2.1-PED-2016-0983 “***Development of a microfluidic portable device for pathogen’s rapid SERS detection***”

August 2017 – March 2018

Occupation or position held: **Postdoctoral Researcher** at the “Iuliu Haţieganu” University of Medicine and Pharmacy, Cluj-Napoca, in the Research Project ID 37_765 “**Development of a SERS-TFF based nanoscreening platform for early detection and assessment of breast disease progression using blood samples**”

July 2016 - present

Occupation or position held: **Scientific Researcher III in Physics,** Expert in ultrasensitive Raman spectroscopies with biomedical applications, National Institute of R&D of Isotopic and Molecular Technology, Cluj-Napoca

November 2015 – present

Occupation or position held: **Research Project Manager** at the National Institute of R&D of Isotopic and Molecular Technology, Cluj-Napoca, the Research Project PN-II-RU-TE-2014-4-0862 “***Pathogenic microorganisms’ rapid detection and identification using high sensitive Raman spectroscopy***”

April 2015 – September 2016

Occupation or position held: **Assistant Researcher** at the National Institute of R&D of Isotopic and Molecular Technology, in the Research Project PN-II-ID-PCE-2012-4-0115 „**Structural changes and (sub)picosecond dynamics in DNA molecules probed with ultrasensitive Raman spectroscopic techniques**”

September 2012 – February 2013

Occupation or position held: **Research Internship** at Technische Universität München, Analytical Chemistry Chair, Laser Group, Dr. Christoph Haisch. During this period, a new experimental approach based on SERS technique for rapid detection and identification of urinary tract infections’ pathogens was successfully optimized.

May 2011 – December 2011

Occupation or position held: **Research assistant** in the CNCSIS-UEFISCSU PN II RU TE 323/2010 Project, at “Babeș-Bolyai” University, Cluj-Napoca

Education and training

Dates	2010-2013
Title of qualification awarded	**PhD Degree in Physics (Summa Cum Laude)** "SERS applications – from molecules to microorganisms"
Name and type of organization providing education and training	"Babeş-Bolyai" University, Cluj-Napoca, Physics Faculty
Dates	2008-2010
Title of qualification awarded	**Master Diploma in Biophysics and Medical Physics** "SERS-based melamine detection at trace level"
Name and type of organization providing education and training	"Babeş-Bolyai" University, Cluj-Napoca, Physics Faculty
Dates	2005-2008
Title of qualification awarded	**Bachelor Diploma in Medical Physics** "DFT calculations of the optimized structures, electronic and chemical properties of peptides Ala-Gly"
Name and type of organization providing education and training	"Babeş-Bolyai" University, Cluj-Napoca, Physics Faculty

Languages

	Understanding			Speaking			Writing
	Listening	Reading	Spoken interaction	Spoken production			
English	1 advanced	advanced	advanced	advanced			independent user
French	2 advanced	advanced	average	average			Average
German	3 average	average	basic user	basic user			Average

Goethe Zertifikat A2 Start Deutsch 2 (sehr gut)
Academic Writing in English Certificate (Lector Markus Rheindorf, Wien University, Austria)
Project Management Workshop (Lector Brigit Huemer, Wien University, Austria)

33rd Course of International School of Atomic and Molecular Spectroscopy on "Nano-optics: Principles enabling basic research and applications", 4-19 July 2015, Erice, Sicily, Italy;

Workshop "Quantitative spectral analysis of nanomaterials in interaction with biological materials. Dark field hyperspectral microscope patented by Cytoviva", 22-23 March 2016, Cluj-Napoca, Romania.

Research internship "Detection and identification of microorganisms by using ultrasensitive Raman spectroscopy" at Technische Universität München (TUM), Analytical Chemistry Chair, Applied Spectroscopy group headed by Dr. Christoph Haisch, May-June 2016, München, Germany.

Personal skills and competences

Scientific skills	A very good expertise in a broad range of experimental techniques such as **Raman spectroscopy, SERS, UV-Vis spectroscopy, IR spectroscopy, TLC;**
Technical skills and competences	Academic training in the following **research domains of expertise: Physical and Chemistry Sciences - Molecular Spectroscopy; Analytical Biochemistry; Theoretical Physics and Statistics - Chemometrics; Computational modeling;** Independent usage of spectroscopic equipment specific to Raman, SERS, UV-Vis or IR spectroscopies
Computer skills and competences	Data acquisition and multivariate statistical analysis (Origin, Unscramble, CorelDraw, Irfan View), Microsoft Office, C++, molecular modelling by using DFT approach (Gaussian, Gauss View)

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APPENDIX:

Articles published as author and co-author:

- **Y. Gao, Z. Hu, …, N.E. Dina, A.M.R. Gherman, Z. Jiang, H. Zhou** „Size-tunable Au@Ag nanoparticles for colorimetric and SERS dual-mode sensing of palmatine in traditional Chinese medicine", Journal of Pharmaceutical and Biomedical Analysis, 174, 10 September 2019, 123-133 **(IF 2.983)**;
- **C.M. Muntean, N.E. Dina, M. Coroş, N. Toşa, A.I. Turza, M. Dan** „Graphene/AgNps based SERS detection platforms. application in the study of DNA molecules at low pH, Journal of Raman Spectroscopy, 2019, *in press* (**IF 2.809)**;
- **A.M.R. Gherman, N.E. Dina, V. Chiş, A. Wieser, C. Haisch** „Yeast cell wall - silver nanoparticles interaction: a synergistic approach between Surface-Enhanced Raman Scattering and computational spectroscopy tools", Spectrochimica Acta A, 222, 5 November 2019, 117223 **(IF 2.931)**;
- **D. Yang, H. Zhou, N.E. Dina, C. Haisch** „Portable bacteria-capturing chip for direct surface-enhanced Raman scattering identification of urinary tract infection pathogens", Royal Society Open Science, 5, 9, 2018, 180955 **(IF 2.515)**;
- **N.E. Dina, A.M.R. Gherman, V. Chiş, C. Sârbu, D. Bauer, A. Wieser, C. Haisch** „Characterization of Clinically Relevant Fungi via SERS Fingerprinting Assisted by Novel Chemometric Models", Analytical Chemistry, 90, 4, 2018, 2484-2492 **(IF 6.350)**;
- **T. Szöke-Nagy, A.S. Porav, C. Coman, I.B. Cozar, N.E. Dina, C. Tripon** „Characterization of the Action of Antibiotics and Essential Oils against Bacteria by Surface-Enhanced Raman Spectroscopy and Scanning Electron Microscopy", Analytical Letters, 7 Mai 2018, **(IF 1.248)**;
- **I.B. Cozar, A. Colniță, T. Szoke-Nagy, A.M.R. Gherman, N.E. Dina**, „Label-Free Detection of Bacteria using Surface-Enhanced Raman Scattering and Principal Component Analysis", Analytical Letters,7 Mai 2018, **(IF 1.248)**;
- **A.C. Moț, C. Bischin, G. Damian, A. Amr, E. Gal, N.E. Dina, N. Leopold, R. Silaghi-Dumitrescu** „Fe(III) – sulfide interaction in globins: characterization and quest for a putative Fe(IV)-sulfide species", Journal of Inorganic Biochemistry,179, 2018, 32-39 **(IF 3.224)**;
- **A.C. Moț, M. Pârvu, A.E. Pârvu, O. Roșca-Casian, N.E. Dina, N. Leopold, R. Silaghi-Dumitrescu, C. Mircea** "Reversible naftifine-induced carotenoid depigmentation in *Rhodotorula mucilaginosa* (A. Jörg.) F.C. Harrison causing onychomycosis", Scientific Reports (Nature), 7, 1, 2017, 11125 **(IF 4.259)**;
- **A. Colniță, N.E. Dina, N. Leopold, D.C. Vodnar, D. Bogdan, A.S. Porav, L. David** "Characterization and discrimination of Gram-positive bacteria using Raman spectroscopy with the aid of principal component analysis", Nanomaterials (Basel), 7, 9, 2017, E248 **(IF 3.553)**;
- **N.E. Dina, A. Leș, A. Baricz, T. Szöke-Nagy, N. Leopold, C. Sârbu, H.L. Banciu** „Discrimination of haloarchaeal genera using Raman spectroscopy and robust methods for multivariate data analysis", Journal of Raman Spectroscopy, 48, 8, 2017, 1122–1126 **(IF 2.969)**;
- **N.E. Dina, A. Colniță, T. Szöke-Nagy, A.S. Porav** „A critical review on ultrasensitive, spectroscopic-based methods for high-throughput monitoring of bacteria during infection treatment", Critical Reviews in Analytical Chemistry, 47, 6, 2017, 499-512 **(IF 4.00)**;
- **N.E. Dina, H. Zhou, A. Colniță, N. Leopold, T. Szöke-Nagy, C. Coman, C. Haisch** "Rapid single-cell detection and identification of pathogens by using surface-enhanced Raman spectroscopy", Analyst, 142, 2017, 1782-1789 **(IF 3.885)**;
- **N.E. Dina**, **C.M. Muntean, N. Leopold, A. Fălămaș, A. Halmagyi, A. Coste**, "Structural Changes Induced in Grapevine (Vitis vinifera L.) DNA by Femtosecond IR Laser Pulses: A Surface-Enhanced Raman Spectroscopic Study", Nanomaterials, special Issue – DNA-based Nanotechnologies, 2016, 6, 6, Article Number: 96 **(IF 2.076)**;
- **B. El Bali, M. Lachkar, R. Essehli, M. Dusek, J. Rohlicek, N. Mircescu, C. Haisch,** „$NaCo(H_2PO_2)_3$: Crystal structure and physical study", Journal of Molecular Structure, 1123, 2016, 30-34 (**IF 1.78**);
- **H. Zhou, D. Yang, N.P. Ivleva, N.E. Mircescu, S. Schubert, R. Niessner, A. Wieser, C. Haisch,** "Label-Free in Situ Discrimination of Live and Dead Bacteria by Surface-Enhanced Raman Scattering", Analytical Chemistry, 87, 13, 2015, 6553-61 **(IF 5.636);**
- **H. Zhou, D. Yang, N.E. Mircescu, N.P. Ivleva, K. Schwarzmeier, A. Wieser, S. Schubert, R. Niessner, C. Haisch,** "Surface-enhanced Raman scattering detection of bacteria on microarrays at single cell levels using silver nanoparticles", Microchimica Acta, 182, 13, 2015, 2259-2266 **(IF 3.741);**
- **N.E. Mircescu, H. Zhou, N. Leopold, V. Chiş, N.P. Ivleva, R. Niessner, A. Wieser, C. Haisch, "**Towards a receptor-free immobilization and SERS detection of urinary tract infections causative pathogens", Analytical and Bioanalytical Chemistry, 406, 13, 2014, 3051-8 **(IF 3.578);**
- **H. Zhou, D. Yang, N.P. Ivleva, N.E. Mircescu, R. Niessner, C. Haisch, "**SERS detection of bacteria in water by in situ coating with Ag nanoparticles", Analytical Chemistry, 86, 3, 2014, 1525-1533 **(IF 5.825 - ESI highly cited paper);**
- **L. Szabó, K. Herman, N.E. Mircescu, I.S. Tódor, B.L. Simon, R.A. Boitor, N. Leopold, V. Chiş, "**SERS and DFT investigation of 1,5-diphenylcarbazide and its metal complexes with Ca(II), Mn(II), Fe(III) and Cu(II)", Journal of Molecular Structure, 1073, 2014, 10-17 **(IF 1.599);**

- **O.M. Buja, N.E. Mircescu, N. Leopold, "**Raman scattering enhancement of PEG coated gold nanoparticles of defined size"**,** Journal of Applied Spectroscopy, 81, N 3, 2014 **(IF 0.514);**
- **D. Yang, N.E. Mircescu**, **H. Zhou, N. Leopold, Y. Ying, C. Haisch,** "DFT Study and Quantitative Detection by Surface-Enhanced Raman Scattering (SERS) of Ethyl Carbamate", Journal of Raman Spectroscopy, 44, 11, 2013, 1491-1496 **(IF 2.519);**
- **N. Leopold, V. Chiş, N.E. Mircescu, O.T. Marişca, O.M. Buja, L.F. Leopold, C. Socaciu, C. Braicu, A. Irimie, I. Berindan-Neagoe,** "One step synthesis of SERS active colloidal gold nanoparticles by reduction with polyethylene glycol", Colloids and Surfaces A: Physicochemical and Engineering Aspects, 463, 2013, 133-138 **(IF 2.354);**
- **K. Herman, N.E. Mircescu, L. Szabó, L.F. Leopold, V. Chiş, N. Leopold**, "In situ silver spot preparation and on-plate surface-enhanced Raman scattering detection in thin layer chromatography separation", Journal of Applied Spectroscopy, 80, 2, 2013, 317-320 **(IF 0.514);**
- **N.E. Mircescu, M. Oltean, V. Chiș, N. Leopold**, „FTIR, FT-Raman, SERS and DFT study on melamine", Vibrational Spectroscopy, 62, 2012, 165-171 **(IF 1.747);**
- **L. Szabó, K. Herman, N.E. Mircescu , A. Fălămaş, L.F. Leopold, N. Leopold, C. Buzumurgă, V. Chiş**, "SERS and DFT investigation of 1-(2-pyridylazo)-2-naphthol and its metal complexes with Al(III), Mn(II), Fe(III), Cu(II), Zn(II) and Pb(II)", Spectrochimica Acta A, 93, 2012, 266– 273 **(IF 1.977);**
- **N.E. Mircescu, A. Varvescu**, **K. Herman, V. Chiş, N. Leopold**, "Surface-enhanced Raman and DFT study on zidovudine", Spectroscopy-An International Journal: Biomedical Applications, 26, 2011, 311–315 **(IF 0.805).**

Non-ISI articles:

- **N.E. Mircescu, G.S. Mile, M. Oltean, V. Chiș**, „Surface-enhanced Raman detection of melamine at trace level", STUDIA UBB PHYSICA, LVI, 1, 2011 (**BDI);**
- **L. Szabó, K. Herman, N.E. Mircescu, A. Fălămaş, L.F. Leopold, N. Leopold, V. Chiş**, "Vibrational and DFT study of calcon and its metal complexes", STUDIA UBB PHYSICA, LVI, 2, 2011 **(BDI);**
- **A. Colniță, N.E. Dina, D. Vodnar; et al.** „The discrimination of Gram-positive bacteria using Raman and SERS spectroscopies", EUROPEAN BIOPHYSICS JOURNAL WITH BIOPHYSICS, 44, 2015, S153 (**ISI IF=0 – conference paper**);
- **N.E. Dina (Mircescu), C.M. Muntean, N. Leopold** „Discrimination of Grapevine Genomic DNA using urface-enhanced Raman Spectroscopy and PCA", NANO-OPTICS: PRINCIPLES ENABLING BASIC RESEARCH AND APPLICATIONS Book Series: NATO Science for Peace and Security Series B-Physics and Biophysics, p.499-500, 2017 (**non ISI – conference paper**);
- **N.E. Dina, A. Colniță, N. Leopold, C. Haisch** „Rapid Single-cell Detection and Identification of Bacteria by Using Surface-enhanced Raman Spectroscopy", PROCEDIA TECHNOLOGY, 27, 2017, 203-207 (**non ISI – conference paper**);
- **K. Yuan, J. Zheng, … N.E. Dina, J. Jian, Z. Bao, Z. Hu, Z. Liang, H. Zhou, Z. Jiang** „Self-assembly of Au@Ag nanoparticles on mussel shell to form large-scale 3D supercrystals as natural SERS substrates for the detection of pathogenic bacteria", ACS OMEGA, 3, 2018, 2855-2864 (**non ISI – new ACS journal**).

Book Chapters:

- "The intricate nature of SERS - real life applications and challenges" in „Raman Spectroscopy and Applications", ISBN 978-953-51-2907-3, edited by Khan Maaz, Publisher InTech - open science, Croatia, **N.E. Dina and A. Colniță**, 15 February 2017, DOI: 10.5772/62717.
- "Finding new tools for old issues – novel strategies for bacterial ultrasensitive detection" in „Biophysics and Biomedical and Environmental Sciences" IC-ANMBES 2016, ISBN 978-606-19-1768-7, Pages 177-186, **N.E. Dina,** Transylvania University of Brasov Press, December 2016.

National and international conferences:

- Poster presentation: "Surface-enhanced Raman and DFT study on zidovudine", **N.E. Mircescu, A. Varvescu, N. Leopold, V. Chiș, 14th E**uropean **C**onference on the **S**pectroscopy of **B**iological **M**olecules (**ECSBM**), 29th August - 3rd September 2011, **Coimbra University, Coimbra, Portugal**;
- Poster presentation: "A new approach for TLC separation and on-plate SERS detection", **N.E. Mircescu, K. Herman, L. Szabó, V. Chiș, N. Leopold**", **4th** Conference on the Advanced **Spec**troscopies on **Bio**medical and **Nano**structured Systems (**BioNanoSpec**), 4 - 7th September 2011**, Cluj-Napoca, Romania;**

- Poster presentation: "Benzylpenicillin and Ceftriaxone: Theoretical and Experimental Investigation" **N.E. Mircescu, K. Herman, N. Leopold, V. Chiş,** "Processes in isotopes and molecules" (**PIM**), 29th September – 1st October 2011, National Institute for Research and Development of Isotopic and Molecular Technologies (INCDTIM), **Cluj-Napoca, Romania;**
- Poster presentation: "Polyethylene glycol reduced gold nanoparticles for doxorubicin drug delivery", **N. Leopold, O.T. Marişca, N.E. Mircescu, O.M. Buja, C. Braicu, V. Chiş, A. Irimie, I. Berindan-Neagoe**, 31st **E**uropean **C**ongress on **M**olecular **S**pectroscopy (**EUCMOS**), 26 - 31st August 2012, **Cluj-Napoca, Romania;**
- Poster presentation: "One step synthesis of gold nanoparticles using polyethylene glycol", **N. Leopold, O.M. Buja, N.E. Mircescu, O.T. Marişca, V. Chiş,** 31st **E**uropean **C**ongress on **M**olecular **S**pectroscopy (**EUCMOS**), 26 - 31st August 2012, **Cluj-Napoca, Romania;**
- Oral presentation: "Label-free detection of *E. coli* by using in situ prepared silver nanoparticles", **N.E. Mircescu, H. Zhou, N. P. Ivleva, R. Niessner, C. Haisch, ANAKON**, 4 - 7th March 2013, **Duisburg-Essen University, Essen, Germany;**
- Poster presentation: "Characterization of Gram Positive Bacteria Using Raman Spectroscopy", IC-ANMBES 2014 - **ANALYTICAL AND NANOANALYTICAL METHODS FOR BIOMEDICAL AND ENVIRONMENTAL SCIENCES, A. Colniță, N.E. Dina, D. Vodnar, N. Leopold, V. Chiș, L. David,** June 2014, **Brașov, Romania;**
- Poster presentation: The Use Of Raman Spectroscopy In Gram Positive Bacteria Detection And Characterization", **A. Colniță, N.E. Mircescu, D. Vodnar, N. Leopold, V. Chiș, L. David, 5th Conference on the Advanced Spectroscopies on Biomedical and Nanostructured Systems (BioNanoSpec)**, 7 - 10th September 2014, **Cluj-Napoca, Romania;**
- Oral presentation: "Label-free detection of bacteria by using in situ prepared silver nanoparticles", **N.E. Mircescu, N. Leopold, A. Leș, A. Colniță V. Chiș, BioNanoSpec**, 7 - 10th September 2014, **Cluj-Napoca, Romania;**
- Poster presentation: "Discrimination of grapevine genomic DNA using surface-enhanced Raman spectroscopy and PCA", **N.E. Dina, C.M. Muntean, N. Leopold,** 33rd Course of International School of Atomic and Molecular Spectroscopy on "**Nano-optics: Principles enabling basic research and applications**", 4 - 19th July 2015, **Erice, Sicily, Italy**.
- Poster presentation: "Influence of microwaves on the structure of genomic DNA from leaf tissues monitored by vibrational spectroscopy", **C. Tripon, C.M. Muntean, E. Surducan, A. Coste, A. Halmagyi, N.E. Dina**, 8th International Conference on Advanced Vibrational Spectroscopy, **ICAVS8**, 12 - 19th July 2015, **Vienna, Austria**, Book of Abstracts Poster, Poster B074, p.398.
- Poster presentation: "Discrimination of haloarchaeal genera using Raman spectroscopy and PCA", **A. Leș, N.E. Dina, A. Baricz, H.L. Banciu, N. Leopold**, 8th International Conference on Advanced Vibrational Spectroscopy, **ICAVS8**, 12 - 19th July 2015, **Vienna, Austria**, Book of Abstracts Poster, Poster B093, p.436.
- Poster presentation: "Bacteria and Archaea discrimination at strain level by PCA analysis based on the SERS spectra**", N.E. Dina, A. Colniță, A. Leș, N. Leopold, V. Chiș and H.L. Banciu,** 10th International Conference PROCESSES IN ISOTOPES AND MOLECULES **(PIM),** 23 - 25th September 2015**, Cluj-Napoca, Romania,** Book of Abstracts, Poster T2-8, page 33.
- Poster presentation: "Structural changes of plant genomic DNA: A surface-enhanced Raman scattering assessment**", C.M. Muntean, N. Leopold, C. Tripon, N.E. Dina,** 10th International Conference PROCESSES IN ISOTOPES AND MOLECULES **(PIM),** 23 - 25th September 2015**, Cluj-Napoca, Romania,** Book of Abstracts, Poster T2-17, page. 38.
- Oral presentation: "Surface-enhanced Raman Spectroscopy in Microbiology", **Christoph Haisch, H. Zhou, N.E. Mircescu, N.P. Ivleva, R. Niessner, ANALYTICA,** 10 - 13th May 2016, Internationales Congress Center München**, Messe München, Germany.**
- Poster presentation: "Rapid single-cell detection and identification of pathogens by using surface-enhanced Raman spectroscopy", **N.E. Dina, A. Colniță, N. Leopold, C. Haisch,** 26th Anniversary World Congress in Biosensors (BIOSENSORS 2016), 25 - 27th May 2016, **Gothenburg, Sweden**.
- Poster presentation: **"**Surface Enhanced Raman Spectroscopy and PCA Study of Grapevine Genomic DNA**", N. Dina, C. Tripon, C. Muntean, 14th** National Conference of Biophysics **CNB 2th - 4th June 2016, Cluj-Napoca, Romania, Book of Abstracts, p. 63 (Poster T4-P4).**
- Poster presentation: "Surface Enhanced Raman Substrate Optimization for Label-free Bacterial Detection", **N.E. Dina, A. Colniță, O.T. Marișca, O.M. Buja, N. Leopold, 14th** National Conference of Biophysics **CNB 2th - 4th June 2016, Cluj-Napoca, Romania, Book of Abstracts, p. 62 (Poster T4-P3).**
- Poster presentation: "Evaluation of Gold Nanoparticles-Based Electrochemical Sensors for Bioactive Substances Detection", **M. Florescu, A. Șerban, N.E. Dina, O.T. Marișca, O.M. Buja, A. Colniță, N. Leopold, 14th** National Conference of Biophysics **CNB 2 - 4th June 2016, Cluj-Napoca, Romania, Book of Abstracts, p. 51 (Poster T3-P6).**

- Oral presentation: "Spectroscopic Characterization of Nonsymbiotic Plant Hemoglobins using UV-vis, Raman and EPR Techniques", **A. C. Moț, C. Bischin, G.N. Leția, G. Damian, N. Dina, N. Leopold, R. Silaghi-Dumitrescu, 14th** National Conference of Biophysics **CNB 2 - 4th June 2016, Cluj-Napoca, Romania, Book of Abstracts, p. 58 (T4-O2).**
- Poster presentation: **"**(Sub)picosecond relaxation process in nucleic acids constituents and in DNA molecules: a Raman and surface-enhanced Raman spectroscopy assessment**", C. M. Muntean, I. Bratu, C. Tripon, N. Dina, 4th** Edition of **I**nternational **C**onference on **A**nalytical and **N**anoanalytical **M**ethods for **B**iomedical and **E**nvironmental **S**ciences **IC-ANMBES 2016, 29th June – 1st July 2016, Brașov, Romania, Book of Abstracts, p. 100 (Poster PSp5).**
- Poster presentation: "Fabrication of Nanostructured Au Films as Promising SERS Substrates for the Detection of Pathogenic Bacteria**", A. Colniță, D. Marconi, N. E. Dina, I. B. Cozar, N. Leopold, I. Turcu, 4th** Edition of **I**nternational **C**onference on **A**nalytical and **N**anoanalytical **M**ethods for **B**iomedical and **E**nvironmental **S**ciences **IC-ANMBES 2016, 29th June – 1st July 2016, Brașov, Romania, Book of Abstracts, p. 96 (Poster PSp1).**
- Poster presentation: "Optimized label-free detection of most common pathogens based on SERS mapping"**, A. Colniţă, N.E. Dina, I.B. Cozar, N. Leopold, 33rd E**uropean **C**ongress on **M**olecular **S**pectroscopy **(EUCMOS 2016), 30th July – 4th August 2016, Szeged, Hungary, Book of Abstracts, p.110.**
- Poster presentation: "Resonant Raman investigation of the ROS generated stress interference with the carotenogenesis of R. mucilaginosa**", N.E. Dina, A. Colniţă, C. Mircea, A. Moţ, M. Parvu, R. Silaghi-Dumitrescu, 33rd E**uropean **C**ongress on **M**olecular **S**pectroscopy **(EUCMOS 2016), 30th July – 4th August 2016, Szeged, Hungary, Book of Abstracts, p.117.**
- Poster presentation: "Bacterial cell membrane barcoding, a SERS mapping methodology for identification and detection of potential pathogenic bacteria", **T. Szöke-Nagy, N.E. Dina, A. Colniţă, I.B. Cozar**, 7th Congress of European Microbiologists (**FEMS 2017**), **9-13 July 2017, Valencia, Spain**.
- Poster presentation: "Raman technique and Density Functional Theory - the R&D in Research and Development of antibiotics", **A.M.R. Gherman, N.E. Dina, I.B. Cozar, V. Chiş, 11th Triennial Congress of the World Association of Theoretical and Computational Chemists (WATOC 2017), 27 August - 1 September 2017, München, Germany.**
- Poster presentation: "Bacterial barcoding - a SERS mapping technique for ultrasensitive detection of pathogens", **N.E. Dina, A. Colniţă, I.B. Cozar, T. Szöke-Nagy, 3rd International Conference on Enhanced Spectroscopies (ICES 2017), 4 - 7 September 2017, München, Germany.**
- Poster presentation: "Antibiotic susceptibility of *Aeromonas hydrophilia* monitored through SERS mapping methodology", **T. Szöke-Nagy, A.M.R. Gherman, A. Colniţă, I.B. Cozar, N.E. Dina, 11th International Conference on Processes in Isotopes and Molecules (PIM 2017), 27-29 September 2017, Cluj-Napoca, Romania.**

Patent:

- **Patent request „ One step synthesis of SERS active colloidal gold nanoparticles by reduction with polyethylene glycol" (N. Leopold, V. Chiş, R. Știufiuc, N.E. Mircescu, O.M. Buja, O.T. Marişca) at** OSIM A00483/29.06.2012, Research Project IDF20120002, intellectual property of **NextPhase S.A. Romania**).
- **Patent request „SERS-based detection method via microfluidic system by using a silver spot as SERS substrate" (N.E. Dina, A. Colniță, D.S. Marconi, T. Szöke-Nagy, A.M.R Gherman, N. Leopold, A. Ștefancu)** at OSIM A00976/28.11.2018, as research activity in Research Project PN-III-P2-2.1-PED-2016-0983.

Organization Team member (Registration Desk)

- 31st **E**uropean **C**ongress on **M**olecular **S**pectroscopy (**EUCMOS**), 26th – 31st August 2012, **Cluj-Napoca, Romania**
- 10th International Conference **P**rocesses in **I**sotopes and **M**olecules (**PIM**), 23th - 25th September 2015, **Cluj-Napoca**
- 14th **Romanian Society of Pure and Applied Biophysics' National Conference**, 2nd – 4th June 2016, **Cluj-Napoca**
- 11th International Conference **P**rocesses in **I**sotopes and **M**olecules (**PIM**), 27 - 29 September 2017, **Cluj-Napoca**

In **2012,** Dr. Dina (Mircescu) won by competition (by interview selection) **Deutsche Bundesstiftung Umwelt (DBU)** Fellowship, a Programme which sustains research internship activities at institutions in Germany.

In **2013** Dr. Dina (Mircescu) won by competition the **Award** of 10.000 RON for PhD students enrolled in the **POSDRU/107/1.5/S/76841** project for outstanding results and for the successful fulfillment of the contractual liabilities.

Since **2015**, Dr. Dina is a member of the **Romanian Society of Pure and Applied Biophysics** (RSPAB).

Since **2017**, Dr. Dina is Guest Editor at Hindawi, International Journal of Analytical Chemistry, Open Access Journal (IF=0.719).

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