

PERSONAL INFORMATION

Mariana Calin



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Sex F | Date of birth 09/09/1981 | Nationality Romanian

WORK EXPERIENCE

September 2016 – present	Senior Researcher III in Biology, Biotechnology&Bioanalysis team, INCDCP ICECHIM Bucharest, Romania
September 2010 – December 2017	Scientific research in Biology Biotechnology&Bioanalysis team, INCDCP ICECHIM Bucharest, Romania Biotechnology&Bioanalysis team, INCDCP ICECHIM Bucharest, Romania Applied microbiology Environmental biotechnology Conservation of microorganisms collection; Isolation and taxonomic characterization of microbial strains; Study of polymeric materials biodegradation; Microbial degradation of organic contaminants from wastes waters; Study of microbial antagonism mechanism
October 2009- May 2010	Scientific research in in microbiology INCDMI Cantacuzino, Bucharest, Romania, Conservation of microorganisms; Applied microbiology; Determination of fungicidal activity of disinfectants and and elaboration of evaluation reports according to the standards: SR EN 1275, SR EN 1650, SR EN 13624.
May 2006 – October 2009	Assistant researcher in microbiology, INCDMI Cantacuzino, Bucharest, Romania

EDUCATION AND TRAINING

2012 - 2018	PhD in Biological Sciences from 2018 Ph.D. student in Biology Faculty of Biology, University of Bucharest, Romania
2005 - 2007	Graduate of the Master programme “ Medical Biology ” Faculty of Biology, University of Bucharest, Romania
2001 - 2005	Bachelor ‘s Degree in Biology Faculty of Biology, University of Bucharest, Romania

PERSONAL SKILLS

Mother tongue(s)	Romanian
Other language(s)	English (basic user)
Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user Common European Framework of Reference for Languages	

Communication skills Open-minded to dialogue, listen and respect the others' ideas and points of view.
Integrate in new environments and adapt to different lifestyles

Organisational / managerial skills Replace with your organisational / managerial skills. Specify in what context they were acquired.
Example:
▪ leadership (currently responsible for a team of 10 people)

Job-related skills	<p>Expertise domains: biology, microbiology, biotechnology, environment protection Research domains: Microbiology - applied microbiology, antimicrobial susceptibility testing, preservation of microbial collection, isolation and identification of microorganisms, study of microbial antagonism mechanism. Biotechnology - environment protection, plant fungal infection biocontrol, microbial degradation</p>
Computer skills	<p>Good knowledge of Microsoft Office tools (Word, Excel, Power Point) ▪ good command of Microsoft Office™ tools</p>

ADDITIONAL INFORMATION

Publications (selection)

1. Radu Nicoleta, Ana Chirvase, Băbeanu Narcisa, Popa Ovidiu, Cornea Calina Petruta, Pirvu Lucia, Bostan Marinela, Cîric Alexandru, Mathe Endre, Radu Elena, Badea Doni Mihaela, **Constantin Mariana**, Raut Iuliana, Gurban Ana-Maria, Begea Mihaela. (2020). Study Regarding the Potential Use of a Spent Microbial Biomass in Fertilizer Manufacturing. 299. 10.3390/agronomy10020299.
2. M. Caramihai, N. Radu, M. Bostan, G. Ion, A. A. Chirvase, **M. Constantin**, M. Doni, N. Babeau. 2019. Fuzzy Predictions Regarding In Vitro Behavior of Cells Line Under Cytostatic Treatment. IEEE Xplore, 27 January 2020, p 1-5. Electronic ISSN: 2575-5145, Print on Demand (PoD) ISSN: 2575-5137. **I.F. 4.463**. DOI: [10.1109/EHB47216.2019.8970088](https://doi.org/10.1109/EHB47216.2019.8970088)
3. **M Calin**; I Raut; ML Arsene; L Capra; AM Gurban; M Doni; L Jecu, 2019, Applications of Fungal Strains with Keratin-Degrading and Plant Growth Promoting Characteristics, Agronomy (Basel), 9(9), 543.doi.org/10.3390/agronomy9090543.
4. **M Calin**, I Raut, M Doni, E Alexandrescu, G Macovescu, M L Arsene, AM Gurban, G Vasilescu, L Jecu, 2019, The potential of keratinolytic fungi for biotechnological applications in leather manufacture, Revista de Chimie (Bucharest), 9, 3152-3157.
5. I Raut, **M Calin**, Z Vuluga , E Alexandrescu, ML Arsene,V Purcar, CA Nicolae, AM Gurban , M Doni, L Jecu, 2019, Comparative Study on the Behavior of Virgin and Recycled Polyolefins–Cellulose Composites in Natural Environmental Conditions, J. Compos. Sci., 3, 60. doi:10.3390/jcs3020060.
6. Varasteanu, Dana & Chican, Irina & Doncea, Sanda & **Raut**, Iuliana & Calin, Mariana & Jecu, Luiza. (2019). Nickel (II) and Cobalt (II) Complexes of Some Amino Acid-based Surfactants with Antimicrobial Activity. Revista de Chimie. 70. 361-364. 10.37358/RC.19.2.6917.
7. **Călin Mariana**, Diana Constantinescu-Aruxandei, Elvira Alecsandrescu, Iuliana Răut, Mihaela Badea Doni, Melania-Liliana Arsene, Florin Oancea, Luiza Jecu, Veronica Lazăr, 2017, Degradation of keratin substrates by keratinolytic fungi, 101-112, Electronic Journal of Biotechnology, 28: 101–112 doi.org/10.1016/j.ejbt.2017.05.007. Impact Factor 1,527.
8. **Călin Mariana**, Iuliana Răut, Diana Constantinescu-Aruxandei, Mihaela Badea Doni, Melania-Liliana Arsene, Nicoleta-Olguta Corneli, Gelu Vasilescu, Luiza Jecu, Mariana Ștefania Bucur, and Veronica Lazăr, 2017, Influence of culture conditions on growth of keratinophilic fungal strains. Scientific Bulletin Series F. Biotechnologies, pp.173-178, Volume XXI, 2017, CERES publishing House. ISSN 2285-1364, CD-ROM ISSN 2285-5521, ISSN Online 2285-1372, ISSN- 2285-1364.
9. Răut Iuliana, Tatiana Eugenia Şesan, Rocio Macias, Mihaela Badea-Doni, Florin Oancea, **Călin Mariana**, Melania-Liliana Arsene, Vasilescu Gelu, Luiza Jecu, 2016. Study on the Effectiveness of Antagonistic Trichoderma spp. on the Growth of Some Vegetables Under Laboratory and Greenhouse Conditions, Revista de Chimie, 67(8): 1504-1507.
10. **Călin Mariana**, Olguta Dracea, Iuliana Răut, Gelu Vasilescu, Mihaela Badea-Doni, Melania Liliana Arsene, Elvira Alexandrescu, Diana Constantinescu-Aruxandei, Luiza Jecu, Veronica Lazăr, 2016, *In vitro* biodegradation of keratinized substrates by keratinophilic fungi. Scientific Bulletin. Series F. Biotechnologies, Vol. XX, pp. 248-253, ISSN online 2285-1364, ISSN online 2285-1372.

Book chapters

- Book Trichoderma spp. – Applications in agriculture and horticulture, 2016, Editura Universitatii din Bucuresti (Coordinator Prof. Dr. TE Sesan), ISBN 978-606-16-0900-0. Chapter 3. Chemical structure of secondary metabolites, Arsene M.L., Badea-Doni M., Jecu L., Răut I., **Călin M**; Chapter 4. Bioactivity and biological role of secondary metabolites produced by Trichoderma spp, Arsene M.L.*, Jecu L., Badea-Doni M., Raut I., Oancea F., **Călin M**; Chapter 5. Volatile and non-volatile metabolites of Trichoderma with biocontrol implications, Răut I., Şesan T.E., Arsene M.L., Badea-Doni M., Jecu L., **Călin M**, Vasilescu G., Oancea F.; Chapter 8 - Formulation of the Multifunctional Trichoderma Strains, F. Oancea, I. Raut, T.E .Sesan, M. Doni, M. Popescu, V. Zamfiropol-Cristea, L. Jecu.

Curriculum Vitae

Replace with First name(s) Surname(s)

Cap. 5. Microbial deterioration of textile and wood artifacts, In: Valorization of cultural heritage through archaeometry studies using nuclear techniques and other scientific methods. General considerations and short literature survey, I Raut, **M Calin**, ML Arsene, M Doni, AM Gurban, L Jecu

Cap. 4. Isolation and identification of microorganisms involved in the biodeterioration of cultural heritage artifacts In: Practical examples regarding the valorization of cultural heritage through archaeometry studies using nuclear techniques and other scientific methods, **M Calin**, I Raut, ML Arsene, M Doni, AM Gurban, L Jecu

Honours and awards

▪ **Best Poster Award, 2013**, Biotechnology In Veterinary Medicine section, International Conference of the University of Agronomic Science and Veterinary Medicine of Bucharest Agriculture for Life, Life for Agriculture, Bucharest, june 2013, for paper: Fungal strains isolated from several cases of human dermatophytoses, **Mariana Călin**, Iuliana Răut Olguta Drăcea, Luiza Jecu, Veronica Lazăr

▪ First Prize Phd and students section International Symposium Priorities of Chemistry for a Sustainable Development PRIOCHEM, Edition, 27-28 October 2016, Bucharest, for paper: Morphological aspects of keratin substrates biodegraded by keratinolytic fungi, autori: **Mariana Călin**, Diana Constantinescu-Aruxandei, Iuliana Răut, Elvira Alexandrescu, Olguta-Nicoleta Cornelii, Gelu Vasilescu, Luiza Jecu, Mihaela Badea-Doni, Mihaela-Liliana Arsene, Maria-Angela Antemir, Veronica Lazăr.

Conference (selection)

M Calin, I Raut, Ana Maria Gurban, Mihaela Badea Doni, G Vasilescu, ML Arsene, Luiza Jecu. Valorization of inexpensive and abundant by products from agro-industry through specialized microorganisms. The International Conference of the University of Agronomic Sciences and Veterinary Medicine of Bucharest, Agriculture for Life, Life for Agriculture, June 4-6, 2020, Bucharest, Romania
I Răut, **M Călin**, AM Gurban, M Doni, MI Arsene, E Alexandrescu, G Vasilescu , L Jecu^{*}, Preferential utilization of keratin substrates by different myco-keratinophiles, International Conference of the University of Agronomic Science and Veterinary Medicine of Bucharest « Agriculture for Life, Life for Agriculture », June 4-, 2020, Bucharest, Romania; Book of abstracts Section 6: Biotechnology,

Mariana Călin, Diana Constantinescu-Aruxandei, Iuliana RĂUT, Florin OANCEA, Luiza JECU, Gelu VASILESCU, Ana-Maria GURBAN, Mihaela Badea Doni, Melania-Liliana Arsene, Veronica LAZĂR. Screening of filamentous fungi for biosynthesis of selenium nanoparticles with potential applications in agricultura. The International Conference of the University of Agronomic Sciences and Veterinary Medicine of Bucharest", Agriculture for Life, Life for Agriculture, June 7-9, 2018, Bucharest, Romania, Book of Abstract, Section 6: Biotechnology, pp.39.

Mariana Călin, Iuliana Răut, Florin Oancea, Diana Constantinescu- Aruxandei¹, Mihaela Badea Doni¹, Melania- Liliana Arsene,Gelu Vasilescu, Ana-Maria Gurban, Luiza Jecu, Investigation of a sustainable alternative for plant growth promoting by endophytic fungi. The International Conference of the University of Agronomic Sciences and Veterinary Medicine of Bucharest", Agriculture for Life, Life for Agriculture, June 7 - 9, 2018, Bucharest, Romania, Book of Abstract, Section 6: Biotechnology, pp.69.

Mariana Călin, Iuliana Răut, Diana Constantinescu-Aruxandei, Florin Oancea, Mihaela Badea Doni, Melania- Liliana Arsene,Gelu Vasilescu, Luiza Jecu, Ana-Maria Gurban, Olguta-Nicoleta Cornelii³, Veronica Lazăr, Useful application of fungi producing keratinase and chitinase in plant growth and protection. The International Conference of the University of Agronomic Sciences and Veterinary Medicine of Bucharest", Agriculture for Life, Life for Agriculture, June 7 - 9, 2018, Bucharest, Romania, Book of Abstract, Section 6: Biotechnology, pp.85.

Diana Constantinescu-Aruxandei, **Mariana Călin**, Iuliana Răut, Gelu Vasilescu, Mihaela Badea-Doni, Melania- Liliana Arsene, Ana-Maria Gurban, Luiza Jecu, Florin Oancea, Veronica Lazăr, 2017, Common pathway to unpack the bundle – integrative hypothesis in keratin and polysaccharides biodegradation. International Symposium Priorities of Chemistry for a Sustainable Development PRIOCHEM 13th Edition, 25-27 October 2017, Programme pp.10.

Mariana Călin, Diana Constantinescu-Aruxandei, Iuliana Răut, Mihaela Badea-Doni, Melania- Liliana Arsene, Gelu Vasilescu , Florin Oancea, Violeta Purcar, Luiza Jecu, Nicoleta-Olguta Cornelii, Veronica Lazăr, 2017, Evaluation of keratinaceous substrate biodegradation by FTIR analysis, International Symposium "THE ENVIRONMENT AND THE INDUSTRY", SIMI 2017, 28-29 Septembrie, Bucureşti, Programme pag. 43.

Mariana Călin, Diana Constantinescu-Aruxandei, Iuliana Răut, Elvira Alexandrescu, Violeta Purcări, Gelu Vasilescu, Luiza Jecu, Mihaela Badea-Doni Melania- Liliana Arsene, Ana-Maria Gurban, Florin Oancea, Olguta- Nicoleta Cornelii, Veronica Lazăr, 2017, Qualitative and quantitative evaluation of fungal wool fibers digestion. International Symposium Priorities of Chemistry for a Sustainable Development PRIOCHEM 13th Edition, 25-27 October 2017. Programme pp.10

Mariana Călin, Diana Constantinescu-Aruxandei, Elvira Alexandrescu, Iuliana Răut, Violeta Purcări, Mihaela Badea-Doni, Melania- Liliana Arsene, Gelu Vasilescu, Luiza Jecu, Veronica Lazăr, 2017, Evaluation of horse hair degradation by keratinolytic fungi, International Symposium Priorities of Chemistry for a Sustainable Development PRIOCHEM 13th Edition, 25-27 October 2017, Programme pp.10.

Mariana Călin, Iuliana Răut, Diana Constantinescu-Aruxandei, Mihaela Badea Doni, Melania- Liliana Arsene, Nicoleta-Olguta Cornelii, Gelu Vasilescu, Luiza Jecu Mariana Ştefania Bucur, Veronica Lazăr, 2017, Influence of culture conditions on growth of keratinophilic fungal strains. International Conference of the University of Agronomic Science and Veterinary Medicine of Bucharest Agriculture for Life, Life for Agriculture', June 8-10, 2017, Bucharest, Conference Programme pp.114.

I Raut, M Calin, A Roseanu, M Badea-Doni, M L Arsene, G Vasilescu, F Oancea, Luiza Jecu*, T E Sesan, 2016, Preparation and evaluation of *Trichoderma* – microcapsules for biological

