



## Curriculum Vitae Dessislava Antonova Marinkova

### PERSONAL DETAILS

Date of Birth	28 April 1979
Place of Birth	Pleven, Bulgaria
Nationality	Bulgarian
Home Address	Hadjy Dimitar, str. Ilyo Voivoda 20, Sofia, 1510, Bulgaria
Institutional Address	University of Chemical Technology and Metallurgy (UCTM), Department of Biotechnology, Blv. Kl. Ochridski, 8 1756 Sofia, Bulgaria
Marital status	Married
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### WORK EXPERIENCE

#### **2012: currently Assistant Professor at the University of Chemical Technology and Metallurgy (UCTM), Department of Biotechnology**

Teaching subjects in: "Microbiology", "Biosensors and biosensor techniques" (in English), "Biocatalysis" (in English and French), "Technology of microbial transformation" (in English), "Fundamentals of Biotechnology", "Biotechnological processes" (in English), "Biochemistry" (in French), "Technological fundamentals of biotransformation for pharmaceutical products" (in French), Immunology

#### **2007 - 2012: PhD student and part-time assistant professor, UCTM, Department of Biotechnology**

PhD thesis: "Investigation of formation, structure and application of biofilms" – supervised by Prof. Lyubov Yotova

Teaching of laboratory exercises of Bulgarian and International students in the next subjects: "Biosensors and biosensor techniques", "Fundamentals of Biotechnology", "Biotechnological processes", "Biochemistry", "Technological fundamentals of biotransformation for pharmaceutical products"

#### **October 2006 - May 2007: Junior patent examiner**

Patent Office of Republic of Bulgaria, Section of New Plant Varieties and Animal Breeds

#### **November 2004 - January 2005: Engineer in Biotechnology**

"Eurostock" – food supplements and beverage production factory

#### **2003 - 2007: Research Engineer in Biotechnology, UCTM, Department of Biotechnology**

### EDUCATIONAL HISTORY

**2007 - 2012:** PhD in *5.11 Biotechnology* ("Bioorganic chemistry and chemistry of natural and physiological active substances"), Chemical Engineering and Biotechnology: Department of Biotechnology, Faculty of Chemical and System Engineering, University of Chemical Technology and

Metallurgy (UCTM), Sofia, Bulgaria

**2002 - 2004:** Master of Chemical Engineering and Biotechnology, UCTM, Sofia, Bulgaria

**1998 - 2002:** Bachelor of Chemical Engineering and Biotechnology, UCTM, Sofia, Bulgaria

## RESEARCH EXPERIENCE

1. **June 18 - July 18 2014:** University of Cergy-Pontoise, Paris, France, Award of Project "Science and business"
2. Lecturer, **4 - 9 July, 2013:** Lecture in title: "Bioremediation of industrial pollutants by biofilms", **Dessislava Marinkova**, Innovation and Technology Management in Medical and Pharmaceutical Biotechnology, Alma Graduated School, Bologna, Italy
3. **April 2013 - May 2013:** Invited by laboratory SATIE of the University of Cergy -Pontoise, Paris, France, research assistant
4. **June 21 - July 21 2012:** specialization in the University of Cergy Pontoise, Paris, France
5. **November 2009 – July 2010:** specialization in the University of Cergy -Pontoise, Paris, France
6. **May – October 2003:** research master graduation work as a part of the educational plan of the ERASMUS project in the Biochemistry and Environmental Technology laboratory, Department of Chemical Engineering, University of Patras, School of Engineering, supervised by Prof. Dr Gerasimos Liberatos, Greece

## LANGUAGES

English	Fluent
Russian	Fluent
French	Conversational

## RESEARCH SKILLS

Gas chromatography assay, Protein expression/Western blot/Electrophoresis, DNA fragmentation assay, RNA fragmentation assay (PCR), ELISA method, QCM (quartz crystal microbalance), SPR (Surface Plasmon Resonance), Optical microscopy, SEM (Scanning electron Microscopy), TIRM

Biochemical analysis of biofilm formation, Biocatalysts, Enzyme kinetics, Microbiological investigation, Biosensors applications

## HONOURS, AWARDS AND SCIENTIFIC MEMBERSHIPS

Honours and awards	honorary diploma for prominent young scientist in polymers researching Area from Union of Chemists in Bulgaria, 4 March 2014
Memberships	Member of the Union of Scientists in Bulgaria from January 2014 Member of the European Peptide Society from February 2014

## IMPORTANT PUBLICATIONS (last 5 years)

1. Investigation of formation, development and application of *Arthrobacter Oxydans* 1388 biofilm, L. Yotova, **D. Marinkova**, V. Mironova and R. Dulgerova, *Biotechnology & Biotechnological Equipment*, 23, 823-826, 2009
2. Smart Biosensors for Determination of Mycotoxines, Lyubov Yotova, Ivo Grabchev, Rossica Betcheva, and **Dessislava Marinkova**, M.V. Magni (ed.), *Detection of Bacteria Viruses*,

*Parasites and Fungi*, NATO Science for Peace and Security Series A: Chemistry and Biology, DOI 10.1007/978-90-481-8544-3\_17, © Springer Science+Business Media B.V. 2010

3. Total internal reflection imaging of microorganism adhesion using an oil immersion objective, Velinov T, Asenovska Y, **Marinkova D**, Yotova L, Stoitsova S, Bivolarska M, Stavitskaya L., *Colloids Surf. B. Biointerfaces*, 2011 Nov 1; 88 (1): 407-12. Epub 2011 Jul 18
4. Characterization of New Titanium oxide polymer hybrid membranes for biofilm formation, **D. Marinkova**, D. Danalev, S. Serfaty, L. Yotova, E. Caplain, P.Griesmar, *Phosphorus, Sulfur, and Silicon*, 187:926–936, 2012
5. L.Yotova, **D.Marinkova**, Investigation of the formation, structure and application of biofilms (REVIEW), *Journal of the University of Chemical Technology and Metallurgy*, 47, 3, 243-250, 2012
6. Design of poly(N-acryloylglycine) materials for bioincorporation, J.-M. Ringear, E. Caplain, M. Michiel, **D. Marinkova**, L. Yotova, S. Serfaty, J.-Y. Le Huerou and P. Griesmar, *Journal of Applied Polymer Science*, Volume 130, Issue 2, pages 835–841, October 15, 2013
7. Lyubov Yotova, SpaskaYaneva, **Dessislava Marinkova**, Stephan Serfaty, Coimmobilization of peroxidase and tyrosinase onto hybrid membranes obtained by the sol gel method for the construction of an optical biosensor, *Biotechnology & Biotechnological Equipment*, 27 (3), 3885-3889, 2013
8. D. Marinkova, L. Yotova, D. Danalev, D. Stoykov, J.-M. Ringear, M. Michiel, S. Serfaty, P. Griesmar, Investigation of newly synthesized biocompatible materials as biofilm carriers, *Bulgarian Chemical Communications*, Volume 45, Number 4 (pp. 530–535), 2013
9. “Influence of Ni<sup>2+</sup> onto urease activity produced by biofilms of *Arthrobacter oxydans* 1388, **Marinkova D.**, Yotova L., Ringear J.-M, Griesmar P, *Biotechnology and Biotechnological equipment*, 2014

## REFERENCES

1. Prof. Ph.D Lyubov Yotova, UCTM, Bulgaria, [lubov@uctm.edu](mailto:lubov@uctm.edu)
2. Prof. Ivan Ivanov, Ph.D., D.Sc, Bulgarian Academy of Science, Institute of Molecular Biology, Sofia, Bulgaria, [iivanov@bio21.bas.bg](mailto:iivanov@bio21.bas.bg)
3. Prof. Ph.D Pascal Griesmar, laboratory SATIE (UMR 8029) University of Cergy-Pontoise, Paris, France, [pascal.griesmar@u-cergy.fr](mailto:pascal.griesmar@u-cergy.fr)
4. Prof, Ph.D Stéphane Serfaty, Vice-rector of University of Cergy-Pontoise, Head of Information and Multiscale Analysis Systems Department of SATIE Lab, [stephane.serfaty@u-cergy.fr](mailto:stephane.serfaty@u-cergy.fr)