

CURRICULUM VITAE

SOFIA MAVRIKOU

BIOTECHNOLOGIST PHD

PERSONAL INFORMATION

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Nationality	Greek
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Education

2008-2014	PhD Thesis Title: <i>"Investigation and development of mechanisms of cells genetic or membrane engineering for use in biosensors."</i> Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece
2006-2008	Master of Science in Biotechnology with Applications in Agriculture (bioactive products & protein technology). Title: <i>"Detection of agrochemicals in standard solutions and as residues in real samples by the use of cell based biosensors"</i> . Laboratory of Plant Physiology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece
2001-2006	BSc in Agricultural Biotechnology Title of Thesis: <i>"Study of glutathione S-transferase isoenzymes of Erwinia carotovora"</i> . Laboratory of Enzyme Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece

Academic & Research Career

11/2020	Appointed Assistant Professor of «Bioelectric Biosensors» Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
03/2016 – 11/2020	Post-doctoral researcher at the Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece with main research interests the development of cell-based and bio-electric biosensors.
02/2020-03/2020	Research at the company Nutritional Science, Ghent, Belgium. Research for nanomaterials development.
03/2016 – 08/2016	Research at the company iBERA AG, Hamburg, Germany with main research interests the development of biosensors applications.
02/2015 – 11/2015	Post-doctoral research at the Institute of Plant Breeding and Genetic Resources (IPB&GR) of the Hellenic Agricultural Organization-Demeter, Vardates, Greece, with main research interests the development of a cell-based biosensor for the detection of Aflatoxin B1 in pistachios and walnuts.
12/2014 – 02/2015	Agronomist at the Rural Development and Fisheries Directorate, Development of rural economy department, OPEKEPE, Athens, Greece.
02/2010 – 01/2011	Agronomist at the (6 months) Department of Apiculture, Ministry of Rural Development and Food) / (6 months) planning, organization & evaluation of controls department, Technical Controls Directorate, OPEKEPE, Athens, Greece.
05/2008 – 04/2014	PhD at the Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
06/2005 – 07/2005	Internship at the Laboratory of Enzyme Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
06/2004 –07/2004	Internship at the Laboratory of Bacteriology, Benaki Phytopathological Institute, Kifissia, Greece .

Lectureships

06/2021-up to now	«Nanotechnology and Biosensors, Pharmacognosy & Bioactive Compounds, Biomaterials Applications, Cell and Tissue culture Technology, Cell Biology» at the pre-graduate students of the Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
02/2020-09/2020	«Pharmacognosy & Bioactive Compounds» at the pre-graduate students of the Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
08/2019 -01/2020	«Biomaterials Applications» at the pre-graduate students of the Department of Biotechnology, Agricultural University of Athens, Athens,

Greece.

- 02/2019 -08/2019** «Cell and Tissue culture Technology» at the pre-graduate students of the Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
- 02/2018 -06/2018** «Cell and Tissue culture Technology» at the pre-graduate students of the Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
- 03/2017 -08/2017** «Cell and Tissue culture Technology» at the pre-graduate students of the Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
- 11/2016 -02/2017** «Agricultural Biotechnology» at the pre-graduate students of the Department of Agronomy, Technological Educational Institute of Western Greece, Amaliada, Greece.

Participation in Research Projects

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- 07/2021-today** «EU-CONEXUS RESEARCH FOR SOCIETY – EU-CONEXUS RFS» IBA-SwafS-Support-1-2020 Support for the Research and Innovation Dimension of European Universities (Part I) Grant Agreement 101017436. Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
- 04/2021-today** «Smart Agriculture & Circular Economy - SmartBIC» Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
- 04/2020- today** “ArtiSaneFood: Innovative Bio-interventions and Risk Modelling Approaches for Ensuring Microbial Safety and Quality of Mediterranean Artisanal Fermented Foods” Prima-Section-2-Multi-topics-2018, Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
- 02/2020-03/2020** “NanoFEED: Nanostructured carriers for improved cattle feed” MSCA RISE No. 778098, at the company Nutrional Science, Ghent, Belgium.
- 01/2020-σήμερα** “EU-CONEXUS: European University for Smart Urban Coastal Sustainability” Erasmus+: European Universities –EAC-A03-2018 with Grant Agreement 612599 Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
- 05/2018 – 06/2019** “STUDY OF THE ANTI-CANCER ACTION OF BIOTECHNOLOGICALLY PRODUCED LECTINS (*Viscum album*), IN GYNECOLOGICAL TUMORS WITH INNOVATIVE APPROACHES” « Support of researchers with an emphasis on young researchers » (ΕΔΒΜ34/ ΟΠΣ:1901) of the operational program «HUMAN RESOURCES DEVELOPMENT, EDUCATION AND LIFELONG LEARNING» Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.

- 06/2018-07/2018** “EXPERIMENTAL VALIDATION OF A 2,4,6-TRICHLORANISOL (2,4,6-TCA) DETECTION METHOD IN BARREL EXTRACTS” Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece in collaboration with the company Toneleria Limitada LTD (TN Coopers).
- 03/2016 – 08/2016** “Evaluation of susceptibility of various fungal strains” Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece in collaboration with the company iBERA.
- 02/2015 – 11/2015** “Development and optimization of a cell biosensor for the detection of aflatoxin B1 in pistachios and walnuts” στο πλαίσιο της Πράξης με τίτλο «Preparation of plans for Research and Development Innovation projects» of the Hellenic Agricultural Organization-Demeter, co-funded by the European Social Fund within the operational program " Human Resources Development " budget 9.000.000 euros/ΕΣΠΑ 2017-2013.
- 09/2010-04/2013** “Heraclitos II (ΕΠΕΑΕΚ II): Strengthening the Human Research Resources through the implementation of Doctoral Research of the Agricultural University of Athens» of the pillar: « Strengthening human capital to promote research and innovation in the 3 Phasing Out regions » of the Operational Program « Education and Lifelong Learning », co-funded by the European Union (European Social Fund) and National Funds /ΕΣΠΑ 2017-2013 στο Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
- 06/2008 – 07/2008** “Transfer of biosensors know-how with the aim of analyzing the safety and quality of tobacco" prepared in collaboration with the company Cooperative Union of Tobacco Producers of Greece at the Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.
- 10/2007 – 12/2007** “Accelerating life and health science partnerships in the EU” (SPIDERA OF LIFE – LSSG – CT – 2007 -037207, FP6-LIFESCIHEALTH) Laboratory of Cell Technology, Department of Biotechnology, Agricultural University of Athens, Athens, Greece.

PERSONAL SKILLS

Native Language		Greek	
Other			
UNDERSTANDING		SPEAKING	
Oral	Written (reading)	Communication	Oral expression

English	C2	C2	C2	C2
	Certificate of proficiency in english (cpe) of the University of Michigan C2 (2006) Graduate Management Admission Test® (GMAT®) Score: 660 (2009)			
French	C1	C1	C1	C1
	Certificat pratique de langue française 1er degré (sorbonne 1) C1 (1999)			
Russian	B2	B2	B2	B2
	СЕРТИФИКАТ «Русский язык – Пороговый уровень B2» (2015)			
Digital skills	ECDL Expert In Progress Certificate (2010)			

Microsoft Office (word, excel, powerpoint)
ImageAnalysis Software (ImageJ)
 Bioinformatics analysis with **BLAST** and **CLUSTALW**

OTHER SKILLS

- Piano degree – Very Good (Tournaviti Conservatory) **2008**
- 2nd Prize at the competition of the Infectious Diseases Society of America (IDSA) **IDEA INCUBATOR** for a Cell-Based Bio-Electric Biosensor for the Detection of the SARS-CoV-2 S1 Spike Protein Antigen Team, **2021**.

SEMINARS

- **RIIP regional course.** TRANSGENIC TECHNOLOGIES in MODELING HUMAN DISEASES: Principles, Associated Technologies, Animal Management and Ethics. Hellenic Pasteur Institute, 05-13 June 2017.
 - **LAS-RIIP course Program.** Laboratory Animals in Biomedical Research: theory and practice. Hellenic Pasteur Institute, 18-22 May 2015.
 - **1st SUMMER SCHOOL** of the program **CycloN Hit 2014, “Nanomaterials for Bioapplications: focus on antimicrobial research”**, National Center for Scientific Research “Demokritos”/ Hellenic Pasteur Institute, 30 September-2 October 2014
 - **SUMMER SCHOOL 2008**, National Center for Scientific Research “Demokritos”, 7-18 Ιουλίου 2008.
 - **Educational Seminar in LC-MS** from the company restek Corp., 2007.
 - **Educational Seminar in Entrepreneurship**, Agricultural University of Athens, 2006.
- (Business planning, strategic marketing, management, marketing research, financial planning and financial statement analysis, venture capital and business evaluation)

OTHER SCIENTIFIC ACTIVITIES

Editorial	<p>Topic editor: Biosensors (MDPI) https://www.mdpi.com/journal/biosensors/topic_editors</p> <p>Guest Editor: Biosensors (MDPI): Special Issue “Bio-Electric and Electrochemical Biosensors for Respiratory Viruses Detection” https://www.mdpi.com/journal/biosensors/special_issues/bio_electr_ic_electrochemical_biosensors_viruses</p> <p>Co-editor: Aflatoxins: Biochemistry, Toxicology, Public Health, Policies and Modern Methods of Analysis, Spyridon Kintzios and Sofia Mavrikou (Editors), 2019, Nova Science Publishers, New York. ISBN: 9781536167863</p> <p>Guest Editor: Sensors (MDPI): Special Issue “Point of Care Sensors” https://www.mdpi.com/journal/sensors/special_issues/PointofCare</p> <p>Guest Editor: Biosensors (MDPI): Special Issue “Cell-based Biosensors” https://www.mdpi.com/journal/biosensors/special_issues/cell_biogenesis</p> <p>Guest Editor: Biosensors (MDPI): Special Issue “Bioelectric Impedance Technology for Next Generation Point-of-care Biomedical Biomarkers and Diagnostics” https://www.mdpi.com/journal/biosensors/special_issues/bioelectric</p>
Reviewer	<p>Biosensors (MDPI), Molecules (MDPI), Beverages (MDPI), Toxins (MDPI), Biotechnology & Bioengineering (Wiley), Journal of Biotechnology and Biomedicine (Fortune Journals), Asian Pacific Journal of Tropical Biomedicine, Critical Reviews in Biotechnology (Taylor & Francis), SPRINGER NATURE, ELSEVIER</p>

ADDITIONAL INFORMATION

Publication in Journals (25)^{1,2}

- 1) Hatziagapiou, K.; Nikola, O.; Marka, S.; Koniari, E.; Kakouri, E.; Zografaki, M.-E.; **Mavrikou, S.**; Kanakis, C.; Flemetakis, E.; Chrousos, G.P.; Kintzios, S.; Lambrou, G.E.; Kanaka-Gantenbein, C.; Tarantilis, P. The Use of Saffron ‘s Phytochemicals as Potential Anti-Cancer Agents: An in Vitro Study. *Nutrients*, Under Review.
- 2) **Mavrikou, S.**; Tsekouras, V.; Hatziagapiou, K.; Tsalidou, A.; Bakakos, P.; Rovina, N.; Koutsoukou, A.; Michos, A.; Nikola, O.; Koniari, E.; Papaparaskevas, J.; Chrousos, G.P.;

¹ The name of the corresponding author is underlined

² The symbol * suggests that the authors participated equally in the study

Kanaka-Gantenbein, C.; Kintzios, S. Angiotensin-Converting Enzyme 2 (ACE2) As a Novel Biorecognition Element in A Cell-Based Biosensor for the Ultra-Rapid, Ultra-Sensitive Detection of the SARS-CoV-2 S1 Spike Protein Antigen. *Chemosensors* 2021, 9, 341. <https://doi.org/10.3390/chemosensors9120341>

3) Paivana, G.; Barmpakos, D.; **Mavrikou, S.**; Kallergis, A.; Tsakiridis, O.; Kaltsas, G.; Kintzios, S. Evaluation of Cancer Cell Lines by Four-Point Probe Technique, by Impedance Measurements in Various Frequencies. *Biosensors* 2021, 11, 345. <https://doi.org/10.3390/bios11090345>.

4) **Mavrikou, S.**; Tsekouras, V.; Hatziagapiou, K.; Paradeisi, F.; Bakakos, P.; Michos, A.; Koutsoukou, A.; Konstantellou, E.; Lambrou, G.I.; Konari, E.; Tatsi, E.B.; Papaparaskevas, J.; Iliopoulos, D.; Chrousos, G.P.; **Kintzios, S.** Clinical Application of the Novel Cell-Based Biosensor for the Ultra-Rapid Detection of the SARS-CoV-2 S1 Spike Protein Antigen: A Practical Approach. *Biosensors (Basel)*. **2021**, 11(7):224. doi: 10.3390/bios11070224.

5) **Mavrikou, S.**; Kintzios, S. Keeping up with the spread of SARS-CoV-2: a review of the global response to the need for innovative tests for global population screening. *Journal of Molecular Biochemistry*, **2021**.

6) Misyri, V.; Tsekouras, V.; Iliopoulos, V.; **Mavrikou, S.**; Evergetis, E.; Moschopoulou, G.; Kintzios, S.; **Haroutounian, S.A.** Farm or lab? Chamazulene content of *Artemisia arborescens* (Vill.) L. essential oil and callus volatile metabolites isolate. *Industrial Crops and Products*, **2021**, 160, 113114

7) Kaminiaris, M.D.; **Mavrikou, S.**; Georgiadou, M.; Paivana, G.*; Tsitsigiannis, D.I.; Kintzios, S. An impedance based electrochemical immunosensor for aflatoxin B1 monitoring in pistachio matrices. *Chemosensors*, **2020**, 8, 121. <https://doi.org/10.3390/chemosensors8040121>

8) Fotopoulou, E.*; Lykogianni, M.*; Papadimitriou, E.; **Mavrikou, S.***; Machera, K.; Kintzios, S.; **Thomaidou, D.**; **Aliferis, K.A.** Mining the effect of the neonicotinoids imidacloprid and clothianidin on the chemical homeostasis and energy equilibrium of primary mouse neural stem/progenitor cells using metabolomics. *Pesticide Biochemistry and Physiology*, **2020**, 168, 104617. <https://doi.org/10.1016/j.pestbp.2020.104617>

9) **Mavrikou, S.**; Moschopoulou, G.; Tsekouras, V.; **Kintzios, S.** Development of a Portable, Ultra-Rapid and Ultra-Sensitive Cell-Based Biosensor for the Direct Detection of the SARS-CoV-2 S1 Spike Protein Antigen. *Sensors*, **2020**, 20, 3121. <https://doi.org/10.3390/s20113121>

10) Tsekouras, V.; **Mavrikou, S.**; Vlachakis, D.; Makridakis, M.; Stroggilos, R.; Zoidakis, J.; Termentzi, A.; Moschopoulou, G.; Kintzios, S. Proteome analysis of leaf, stem and callus in *Viscum album* and identification of lectins and viscotoxins with bioactive properties. *Plant Cell, Tissue and Organ Culture (PCTOC)*, **2020**, 41, 167–178. <https://doi.org/10.1007/s11240-020-01777-7>

11) **Mavrikou, S.**; Tsekouras, V.; Karageorgou, M.-A.; Moschopoulou, G.; Kintzios, S. Anticancer and biochemical effects of *Viscum album* L. protein extracts on *HeLa* cells. *Plant Cell, Tissue and Organ Culture (PCTOC)*, **2020**, 140, 369–378. <https://doi.org/10.1007/s11240-019-01733-0>

12) **Roussos, P.A.**; Denaxa, N.K.; Ntanos, E.; Tsafouros, A.; **Mavrikou, S.**; Kintzios, S. Organoleptic, nutritional and anti-carcinogenic characteristics of the fruit and rooting

performance of cuttings of black mulberry (*Morus nigra* L.) genotypes. Journal of Berry Research, **2020**, 10(1), 77-93, <https://doi.org/10.3233/JBR-190422>

13) Apostolou, T.; **Mavrikou, S.**; Denaxa, N.-K.; Paivana, G.; Roussos, P.A.; Kintzios, S. Assessment of Cypermethrin Residues in Tobacco by a Bioelectric Recognition Assay (BERA) Neuroblastoma Cell-Based Biosensor. Chemosensors, **2019**, 7, 58. <https://doi.org/10.3390/chemosensors7040058>

14) Paivana, G.; **Mavrikou, S.**; Kaltsas, G.; Kintzios, S. Bioelectrical Analysis of Various Cancer Cell Types Immobilized in 3D Matrix and Cultured in 3D-Printed Well. Biosensors, **2019**, 9, 136. <https://doi.org/10.3390/bios9040136>

15) **Mavrikou, S.**; Tsekouras, V.; Karageorgou, M.-A.; Moschopoulou, G.; Kintzios, S. Detection of Superoxide Alterations Induced by 5-Fluorouracil on HeLa Cells with a Cell-Based Biosensor. Biosensors, **2019**, 9, 126. <https://doi.org/10.3390/bios9040126>

16) Paivana, G.; Apostolou, T.; **Mavrikou, S.**; Barmpakos, D.; Kaltsas, G.; Kintzios, S. Impedance Study of Dopamine Effects after Application on 2D and 3D Neuroblastoma Cell Cultures Developed on a 3D-Printed Well. Chemosensors, **2019**, 7, 6. <https://doi.org/10.3390/chemosensors7010006>

17) Moschopoulou, G.; **Mavrikou, S.**; Valdes, D.; Kintzios, S. Comparative Study of a Cell-Based and Electrochemical Biosensor for the Rapid Detection of 2,4,6-Trichloroanisole in Barrel Water Extracts. Beverages, **2019**, 5, 1. <https://doi.org/10.3390/beverages5010001>

18) Theoharaki, C.; Chronopoulou, E.; Vlachakis, D.; Ataya, F.S.; Giannopoulos, P.; **Maurikou, S.**; Skopelitou, K.; Papageorgiou, A.C.; Labrou, N.E. Delineation of the functional and structural properties of the glutathione transferase family from the plant pathogen *Erwinia carotovora*. Functional & Integrative Genomics, **2019**, 19, 1–12, <https://doi.org/10.1007/s10142-018-0618-8>

19) **Mavrikou, S.**; Kintzios, S. Biosensor-Based Approaches for Detecting Ochratoxin A and 2,4,6-Trichloroanisole in Beverages. Beverages, **2018**, 4, 24. <https://doi.org/10.3390/beverages4010024>

20) **Mavrikou, S.**; Moschopoulou, G.; Zafeirakis, A.; Kalogeropoulou, K.; Giannakos, G.; Skevis, A.; Kintzios, S. An Ultra-Rapid Biosensory Point-of-Care (POC) Assay for Prostate-Specific Antigen (PSA) Detection in Human Serum. Sensors, **2018**, 18, 3834. <https://doi.org/10.3390/s18113834>

21) Flampouri, E.; Sotiropoulou, N.-S.D.; **Mavrikou, S.**; Mouzaki-Paxinou, A.-C.; Tarantilis, P.A.; Kintzios, S. Conductive polymer-based bioelectrochemical assembly for in vitro cytotoxicity evaluation: Renoprotective assessment of *Salvia officinalis* against carbon tetrachloride induced nephrotoxicity. Biochimica et Biophysica Acta (BBA) - General Subjects, **2017**, 1861(9), 2304–2314. <https://doi.org/10.1016/j.bbagen.2017.06.021>

22) **Mavrikou, S.**; Flampouri, E.; Kintzios, S.; Iconomou, D. Development of a cellular biosensor for the detection of aflatoxin B₁, based on the interaction of membrane engineered Vero cells with anti-AFB₁ gold nanoparticle screen printed electrodes. Food Control, **2017**, 73(A), 64-70. <https://doi.org/10.1016/j.foodcont.2016.06.002>

23) Flampouri, E.; **Mavrikou, S.**; Mouzaki-Paxinou, A.-C.; Kintzios, K. Alterations of cellular redox homeostasis in cultured fibroblast-like renal cells upon exposure to low doses of cytochrome bc1 complex inhibitor kresoxim-methyl. Biochemical Pharmacology, **2016**,

113:97-109. <https://doi.org/10.1016/j.bcp.2016.06.002>

24) Flampouri, K.; **Mavrikou, S.**; Kintzios, S.; Miliadis, G.; Aplada Sarlis, P. Development and validation of a cellular biosensor detecting pesticide residues in tomatoes. *Talanta*, **2010**, 80(5), 1799-804. <https://doi.org/10.1016/j.talanta.2009.10.026>

25) **Mavrikou, S.**; Flampouri, K.; Moschopoulou, G.; Mangana, O.; Michaelides, A.; Kintzios, S. Assessment of Organophosphate and Carbamate Pesticide Residues in Cigarette Tobacco with a Novel Cell Biosensor. *Sensors*, **2008**, 8, 2818-2832. <https://doi.org/10.3390/s8042818>

Book Chapters (3)

Mavrikou S. Role of nitric oxide in adventitious root formation. In: Husen A. (eds), Elsevier, (Under Review)

Tsekouras V., **Mavrikou S.**, Kintzios S. (2021) Trends in Biosensors and Current Detection Methods for Stress Monitoring of Plants Growing in Adverse Environmental Conditions. In: Husen A. (eds) Harsh Environment and Plant Resilience. Springer, Cham. https://doi.org/10.1007/978-3-030-65912-7_17

Mavrikou S., Kintzios S. (2019) Ecotoxicological Effects of Nanomaterials on Growth, Metabolism, and Toxicity of Nonvascular Plants. In: Husen A., Iqbal M. (eds) Nanomaterials and Plant Potential. Springer, Cham, https://doi.org/10.1007/978-3-030-05569-1_16

International Conferences (15)

1) Christoforides, E.; **Mavrikou, S.**; Papaioannou, A.; Andreou, A.; Moschopoulou, G.; Kintzios, S.; Bethanis, K. Structural and functional investigation reveal augmented solubility and improved therapeutic index against SK-N-SH and HT29-MTX-E12 cells for Piperine inclusion complexes in native and modified beta-Cyclodextrins. Proceedings of the 10th International Conference of the Hellenic Crystallographic Association (HeCrA). October 15-17, **2021**, Athens, Greece

2) Marka, S.; Zografaki, M.E.; Mitsou, E.; Karamanou, K.; **Mavrikou, S.**; Flemetakis, E.; Moschopoulou, G.; Kintzios, S. Development of an oil-in-water colloidal nanodispersion with antibacterial and anticancer properties: The case of lemon essential oil, Proceedings of the 10th International Conference of the Hellenic Crystallographic Association (HeCrA). October 15-17, **2021**, Athens, Greece

3) **Mavrikou, S.**; Moschopoulou, G.; Tsekouras, V.; Kintzios, S. A rapid and sensitive bioelectrical biosensor for the detection of the SARS-CoV-2 S1 spike protein based on membrane-engineered cells. Proceedings of the Biosensors for Pandemics. May 6, **2020**, Conference On Line, 24.

4) Paivana, G.; Barmpakos, D.; **Mavrikou, S.**; Karavasilis, C.; Tsakiridis, O.; Kaltsas, G.; Kintzios S. Evaluation of various cancer cells lines by four-point probe measurements. 45th International Conference on Micro & Nano Engineering. PD38, September 23 – 26, **2019**, Rhodes, Greece.

- 5) Fotopoulou, E.; Lykogianni, M.; Papadimitriou, E.; Thomaidou, D.; Kintzios, S.; **Mavrikou, S.**; Aliferis, K.A. Study of the toxicity of plant protection products to cell cultures applying metabolomics. Proceedings of the Seventh International Conference on Environmental Management, Engineering, Planning & Economics, May 19-24, **2019**, Mykonos island, Greece, 74-83.
- 6) Tsekouras, V.; Moschopoulou, G.; **Mavrikou, S.**; Karageorgou, M.A.; Kintzios, S. Evaluation of Mistletoe (*Viscum album* L.) callus and plant protein extracts against gynecological cancer cell lines. 30th International Symposium on the Chemistry of Natural Products and the 10th International Congress on Biodiversity (ISCNP30 & ICOB10), PS2-B-040, November 25-29, **2018**, Athens, Greece, 462-463.
- 7) Mouzaki-Paxinou, A.-C.; Flampouri, E.; **Mavrikou, S.**; Kintzios, S.; Arapis, G. A photosynthetic biosensor for the detection of PSII herbicides using immobilized thylakoids of the bioindicator *Lemna minor* on screen printed electrodes. 1st International Conference "AgroEcology 2016, Ecology-Agroecology-Environmental Health Monitoring and Protection", October 03-06, **2016**, Athens, Greece. (Προφορική Παρουσίαση)
- 8) **Mavrikou, S.**; Flampouri, E.; Kintzios, S.; Iconomou, D. Development of a cellular biosensor for the detection of aflatoxin B₁, based on the interaction of membrane engineered Vero cells with anti-AFB₁ gold nanoparticle screen printed electrodes. Proceedings of the 29th EFFoST International Conference, P2.093, November 10-12, **2015**, Athens, Greece.
- 9) **Mavrikou, S.**; Flampouri, E.; Iconomou, D.; Kintzios, S. Aflatoxin B₁ effects on kidney Vero cells viability and oxidative stress. Proceedings of the Conference 'Science in Technology' SCinTE 2015, Vol. 2., 194-A09-109, November 5-7, **2015**, Athens, Greece. (Προφορική Παρουσίαση)
- 10) Flampouri, E.; **Mavrikou, S.**; Kintzios, S. Electrochemical mammalian cell biosensor assembly through PEDOT biocompatibility for xenobiotic toxicity assessment. Proceedings of the Conference 'Science in Technology' SCinTE 2015, Vol. 2., 241-A06-162, November 5-7, **2015**, Athens, Greece. (Προφορική Παρουσίαση)
- 11) Flampouri, E.; **Mavrikou, S.**; Kintzios, S. PEDOT biocompatibility and electrochemical mammalian cell biosensor assembly for environmental pollutant toxicity assessment. Proceedings of the 12th International Conference on Nanosciences & Nanotechnologies (NN15), July 4-11, **2015**, Thessaloniki, Greece, 239.
- 12) **Mavrikou, S.**; Flampouri, E.; Kintzios, S. Comparative study of the electrochemical signal of neonicotinoids and tetronic acid amides on screen printed electrodes with and without the use of *N2a* cells. 2nd Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences, SPPS-2, June 21-22, **2013**, Athens, Greece.
- 13) Flampouri, E.; **Mavrikou, S.**; Kintzios, S. Study of a cell based electrochemical Biosensor for Fungicide Cytotoxicity Evaluation on Mammalian Cell Lines. 2nd International Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences, SPPS-5, June 21-22, **2013**, Athens, Greece.
- 14) **Mavrikou, S.**; Flampouri, E.; Moschopoulou, G.; Mangana, O.; Michaelides, A.; Kintzios, S. Assessment of organophosphate and carbamate pesticide residues in cigarette tobacco with a novel cell biosensor. In: Feldmann F, Alford D V, Furk C: Crop Plant Resistance to Biotic and Abiotic Factors (**2009**), 194; ISBN 978-3-941261-05-1; Deutsche Phytomedizinische

Gesellschaft, Braunschweig, Germany. From the Proceedings of the DPG-3rd International Symposium of Plant Protection and Plant Health in Europe, 3-38, May 14-16, **2009**, Berlin, Germany.

15) **Mavrikou, S.**; Flampouri, E.; Kintzios, S.; Yalouris, C. Multiple cell array biosensors based on membrane engineered cells: A revolutionary technology for the detection of pesticide residues. 1st bio-sensing technology conference, November 10-12 **2009**, Bristol, UK.

National Conferences (13)

1) Karamanou, K.; Papaioannou, G.-M.; **Mavrikou, S.**; Tsoukas, S.; Paplomatas, E.; Kintzios, S. Optimization study of the biorecognition element of a cell-based bioelectric biosensor for the detection of the SARS-CoV-2 S1 spike protein: The case of *Debaryomyces* sp. Proceedings of the 71th Conference of the Hellenic Society for Biochemistry and Molecular Biology (HSBMB), November 26-28, **2021**.

2) **Mavrikou, S.**; Tsekouras, V.; Hatziagapiou, K.; Paradeisi, F.; Bakakos, P.; Michos, A.; Koutsoukou, A.; Nikola, O.; Koniari, E.; Papaparaskevas, J.; Kanaka-Gantenbein, C.; Kintzios, S. Presentation of an innovative cell bio-electric cell sensor for the rapid detection of SARS-COV-2 S1 spike protein in clinical samples. Proceedings of the 19th Panhellenic Conference in Clinical Chemistry, 4-6 November, **2021**, Athens, Greece.

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