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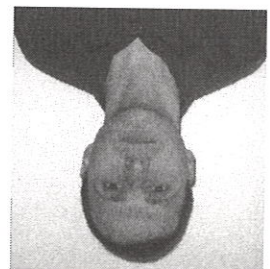
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Sexul M | Data nașterii 16/10/1974 | Naționalitatea română

INFORMAȚII PERSONALE



EXPERIENȚA PROFESIONALĂ

1999-2000

Asistent universitar

Universitatea „Alexandru Ioan Cuza” din Iași

2000-2007

Studii doctorale și postdoctorale

Universitățile Konstanz și Freiburg, Germania

2007-2016

Lector universitar

Universitatea „Alexandru Ioan Cuza” din Iași (www.uaic.ro)

2016-prezent

Conferențiar universitar

Universitatea „Alexandru Ioan Cuza” din Iași

EDUCAȚIE ȘI FORMARE

1989-1993

Studii liceale: Liceul teoretic „Roman-Vodă”, Roman

1993-1997

Studii de licență: Facultatea de Chimie, Universitatea „Alexandru Ioan Cuza”, Iași

1997-1999

Studii de master: Facultatea de Chimie, Universitatea „Alexandru Ioan Cuza”, Iași

2000-2005

Studii doctorale: Facultatea de Biologie, Universitatea Konstanz, Germania

Izolarea și purificarea, studii de cinetică și activitate enzimatică a unor enzime umane

2006-2007

Studii postdoctorale: Facultatea de Medicină, Institutul de Biochimie și Biologie moleculară,

Universitatea din Freiburg, Germania

Clonarea și studiul interacțiunii unor chaperoni din *N. Crassa*.

Septembrie 2013

Bursa DAAD

Specializarea Biofizică, Facultatea de Biologie, Universitatea din Konstanz, Konstanz, Germania

23-29 Septembrie 2014

Bursa de predare LLP-Erasmus

Universitatea de Tehnologie Chimică și Metalurgie, Sofia, Bulgaria

COMPETENTE PERSONALE

limba maternă

româna

limba străină

engleză și germană

Competențe digitale

Utilizarea unor programe de birou (office), software-uri specifice (chemdraw, origin, kaledagrap, curvfit) și a unor baze de date specifice (genomică, proteomică)

Competențe dobândite la locul de muncă

Tehnici de amplificarea (PCR), separare (electroforeză în geluri de agaroză), manipulare și analiză a ADN-ului. Tehnici de clonare în procarionți utilizând plasmizi. Expertiză în multiplicarea bacteriilor și drojdiilor la scară mică sau cu ajutorul fermentatorului. Studii antimicrobiene pe bacterii gram-negative.

Tehnici de fracționare și purificare a proteinelor sau enzimelor: precipitare, dializă, centrifugare și ultracentrifugare purificarea acestora prin cromatografie (de schimb ionic, de interacții hidrofobe, de afinitate, de permeabilitate). Analiza purității proteinelor: electroforeză în condiții native sau denaturante. Expertiză în domeniul enzimologiei respective în imunodectia proteinelor sau complexilor proteici prin tehnica ELISA sau Western blot

Efectuarea de teste rapide pentru depistarea substanțelor toxice.

Tehnici de analiză spectrală și de spectrometrie de masă aplicate în studiul biomoleculilor.

Proiecte de cercetare științifică

Director de proiect: Tinere Echipe RP7/2007, Investigarea aci-CoA dehidrogenazelor umane și mecanismelor de reacție catalizate de acestea.

Membri în 8 proiecte: 1451/2005, GAR 241/2007, PC 2746/2007, PC 4300/2008, 2023/2008, PN-II-PTPCA-2013-4-1149, PN-III-P4-ID-PC-E-2016-0377, PN-III-P2-2-1-PED-2016-0869.



- Lucrări indexate ISI publicitate**
1. Zaharia, M., Mihailescu, M., Roman, T., Zbanic, G., Pui, A., Grădinaru, V.R., Logigan, C., Drochioiu, G. (2020). Unusual ferrite induced photohydrolysis of dinitrophenols to nonaromatic and nontoxic derivatives. *J. Photochem. Photobiol. A*, 394, 1 mai 2020, 112497.
 2. Ilieva, D.M., Argirova, M., Angellova, L.Y., Grădinaru, V.R., Drochioiu, G., Surveva, A. (2020). Application of chemical and biological tests for estimation of current state of a tailing dump and surrounding soil from the region of Tarnița, Suceava, Romania. *Environ Sci Pollut Res*, 27, 1388–1396.
 3. Habasescu, L., Jurcschi, M., Petre, B.-A., Mihailescu, M., Drochioiu, G. (2020). Histidine-Lacked Ag(1-16) Peptides: pH-Dependent Conformational Changes in Metal Ion Binding. *Int. J. Pept. Res. Ther.*, article in press.
 4. Murariu, M., Habasescu, L., Ciobanu, C.I., Grădinaru, V.R., Pui, A., Drochioiu, G., Mangalagiu, I. (2019). Interaction of amyloid Aβ (9-16) peptide fragment with metal ions: CD, FT-IR, and fluorescence spectroscopic studies. *Int. J. Pept. Res. Ther.*, 25(3), 897-909.
 5. Necula, R., Gilie, E., Dirtu, A.C., Sandu, I., Grădinaru, V.R., Petcu, A., Drochioiu, G. (2018). Heavy metal-induced cuticular alkane changes of tall fescue (*Festuca arundinacea*) plants. *Rev. Chim. (Bucharest)*, 69 (7), 1682-1686.
 6. Pintilie, O., Ion, L., Surveva, A., Zaharia, M., Grădinaru, V.R., Drochioiu, G., Balan, A., Sandu, I. Monitoring methods which influence plants viability in genetic conservation: enzymatic assay. *Rev. Chim. (Bucharest)*, 67(4), 687-691, 2016.
 7. Andries, C., Manea, M., Pocanschi, C.L., Pui, A., Drochioiu, G., Grădinaru, V.R. (2017). Coordination behavior of Coenzyme A towards gold ions: Spectroscopic, mass spectrometric and microbiological studies. *Bulg. Chem. Commun.*, 49(3), 621-628.
 8. Ciobanu, C.I., Ștefănescu, R., Niculaea, M., Teslaru, T., Grădinaru, V.R., Drochioiu, G. (2016). Letter: Mass spectrometric evidence for iron binding to the neuroprotective peptide NAF and its Cys5 mutant. *Eur. J. Mass Spectrom.*, 22, 97-104.
 9. Zaharia, M., Tudorachi, L., Pintilie, O., Drochioiu, G., Grădinaru, V.R., and Murariu, M. (2016). Banned dinitrophenols still trigger both legal and forensic issues. *Environ Forensics*, 17(1), 120-130.
 10. Surveva, A., Zaharia, M., Pintilie, O., Sandu, I., Tudorachi, L. and Grădinaru, V.R. (2016). Improved ninhydrin based reagent for spectrophotometric determination of ppb levels of cyanide. *Environ Forensics*, 17(1), 48-58.
 11. Drochioiu, G., Ciobanu, C.I., Băncilă, S., Ion, L., Petre, A.B., Andries, C., Grădinaru, V.R., and Murariu, M. (2016). Ultrasound-based protein determination in maize seeds. *Ultrasonics Sonochemistry*, 29, 93-103.
 12. Ion, L., Ciobanu, C.I., Murariu, M., Grădinaru, V.R., and Drochioiu, G. (2016). SDS-induced peptide conformational changes: From Triglycyl-glycine to Amyloid-β Oligomers Associated with Alzheimer's Disease. *Int. J. Pept. Res. Ther.*, 22, 45-55.
 13. Băncilă, S., Pintilie, O., Grădinaru, V.R., Sandu, I., Drochioiu, G., Balan, A. G. (2016). Interaction of heavy metal ions with glycy-L-tyrosine in the presence of amyloid-β-peptides. *Rev. Chim. (Bucharest)*, 67 (5), 974-977.
 14. Andries, C., Manea, M., Drochioiu, G. and Grădinaru, V.R. (2015). New insights into coenzyme A interaction with mercury ions provided by mass spectrometric and circular dichroism spectroscopic approaches. *Eur. J. Mass Spectrom.*, 21, 97-102.
 15. Grădinaru, V.R., and Apell, H. J. (2015). Probing the Extracellular Access Channel of the Na,K-ATPase. *Biochemistry*, 54 (15), 2508-2519.
 16. Zaharia, M., Grădinaru, V.R. (2015) Interaction of Human Hemoglobin with Methotrexate. *Journal of Applied Spectroscopy*, 82(2), 285-292.
 17. Zaharia, M., Borhan, A., Gherca, D., Pui, A., Grădinaru, V.R., Zbanic, G. and Drochioiu, G. (2014). Letter: Study on the mechanism of ferrite-induced dinitrophenol photodegradation. *Eur. J. Mass Spectrom.*, 20, 193-197.
 18. Asaftei, I.V., Alexandroaei, M., Birsa, M. L., Luca, A.C., Grădinaru, V.R. (2014). The action of a penicillinase with attenuated activity on a penicillin G substrate. *Rev. Chim. (Bucharest)*, 65 (8), 903-906.
 19. Zaharia, M., Jurcăne, S., Matfei, D., Dumitras-Hutanu, C. A. and Grădinaru, V.R. (2013) Yeast biodegradation of some pesticide dinitrophenols. *Rom. Biotech. Lett.*, 18 (2), 814-8151.
 20. Habasescu, L., Zbanic, G., Grădinaru, V.R., Murariu, M., Ferenț, L., Drochioiu, G. (2013) Copper binding to SG and HbA_{1c} peptides as a function of pH: Implication for understanding amyloidogenesis. *Rev. Roum. Chim.*, 58(6), 501-509.
 21. Zaharia, M., Matfei, D., Dumitras-Hutanu, C. A., Pui, A., Lagob, Z.C., Pintilie, O. and Grădinaru, V.R. (2013) Biodegradation of pesticides DINOCP and DNOX by yeast suspensions in a batch system. *Rev. Chim. (Bucharest)*, 64 (4), 388-392.
 22. Tanase, C., Volf, I., Vintu, S., Grădinaru, V.R. and Popa, V. I. (2013) Potential applications of wastes from energy and forestry industry in plant tissue culture. *Cellulose Chem. Technol.*, 47 (7-8), 553-563.
 23. Cozacu, I. A., Postolachi, R., Grădinaru, V.R. and Pui, A. (2012) Synthesis and characterization of uranyl (VI) chiral Schiff-base complexes derived from salicylaldehyde and L-aminoacids. *J. Coord. Chem.*, 65(12), 2170-2181.
 24. Ciobanu, C., Grădinaru, V.R., Pui, A., Drochioiu, G. (2012) Water soluble elastin adsorption onto UV-activated green polyurethane surfaces. *Dig. J. Nanomater. Bios.*, 7(1), 97-106.
 25. Copcia, V.-E., Grădinaru, V.R., Mihailescu, M., Sandu, I. (2012). Antibacterial Activity of Nanosized ZnO Hosted in Microporous Clinoptilolite and Mesoporous Silica SBA-15 Matrices. *Rev. Chim. (Bucharest)*, 63 (11), 1124-1131.
 26. Grădinaru, V.R., Ion, A., Pui, A., Zbanic, G., Drochioiu, G. (2011). Interaction of inorganic mercury with CoA-SH and acyl-CoAs. *Biomaterials*, 24, 1115-1121.
 27. Murariu, M., Grădinaru, V.R., Mihailescu, M., Jurcăne, S., Drochioiu, G. (2011). Unexpected effect of nickel complexes of some histidine-containing peptides on *Escherichia coli*. *Roum. Biotechnol. Lett.*, 16(3), 6242-6246.
 28. Vlad, S., Ciobanu, C., Grădinaru, V.R., Grădinaru, L.M., Nistor, A. (2011) Antibacterial evaluation of some polyurethane membranes modified by zinc oxide nanoparticles. *Dig. J. Nanomater. Bios.*, 6(3), 921-930.
 29. Ciobanu, C., Grădinaru, L.M., Grădinaru, V.R., Drobova, M., Vlad, S. (2011) Bovine serum albumin adsorption onto UV-activated green polyurethane surfaces. *Dig. J. Nanomater. Bios.*, 6(4), 1751-1761.

Lucrări

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30. Hansen, S. H., Andersen, M. L., Cornett, C., Grădinaru, R., Grunnet, N. (2010) A role for taurine in mitochondrial function, *J. Biomed. Sci.* 17 (Suppl): S23, 1-8.

31. Grădinaru, R., Luca, A.-M., Cretescu, I., Danaș, R. (2010) Fluorescent Conjugates: pH stability, dye-DNA interaction and biological activity, *Rev. Chim. Bucharest*, 61 (9), 903-906.

32. Costin, D. T., Grădinaru, R., Nemeș, G. and Popa, K. (2010) Insight on the 204Tl^+ -*Escherichia Coli* system, *Rev. Roum. Chim.*, 55 (2), 153-156.

33. Grădinaru, R., Vail, S.O., Postolache, S., Pavel, C.C., Sandu, I., Popa, K. (2009), On the influence of ETS-10 porosity and surface properties in retention of some nanions and nanomolecules, *Environ. Eng. Manag. J.*, 8, 901-905.

34. Grădinaru, R., Murariu, M., Dragan, E.-S., Drochioiu, G. (2007), Protein determination based on the buret absorption in the UV range and copper binding to peptide, *Roum. Biotechnol. Lett.*, 12(3), 3235.

35. Grădinaru, R., Schowen, R. & Ghisla, S. (2007) Solvent isotope effects in reactions of human medium-chain acyl-CoA dehydrogenase active site mutants, *Biochemistry*, 46(9): 2497-2509.

36. Drochioiu, G., Oniscu, C., Grădinaru, R., Murariu, M. (2004) The biostructural theory versus the chemiosmotic theory, *Roum. Biotechnol. Lett.*, 9(2), 1579-1586.

37. Ciungureanu, C., Murescu, E. D., Grădinaru, R. (2000) Synthesis and study of some 2-imino-1,3-thiazetidine derivatives, *Rev. Chim.-Bucharest*, 51(8), 615-620.

1. Surteva, A., Marinova, A., Ivanova, V., Grădinaru, R., Georgieva, S. (2017) Enzyme based methods for lactate determination, *Journal of Chemical Technology and Metallurgy*, 52(3), 513-525.

2. Zahara, M., Drochioiu, G., Zbanțoc, Grădinaru, R. (2016) Beyond dinitrophenol interaction with tryptophan-based compounds, *Acta Chemica Iasi*, 24(1), 43-49.

3. Pintilie, O., Zahara, M., Cisma, A., Murariu, M., Grădinaru, R., Balan, G.G., Drochioiu, G., Sandu, I. (2016) Assessment of Alcohol Production by Uncoupling Oxidative Phosphorylation on Some Pollutants, *Yeast*, 24(1), 43-49.

4. Zahara, M., Pintilie, O., Cosma, A., Grădinaru, R., Drochioiu, G., Murariu, M., Sandu, I. (2014) Toxicitatea și utilitatea compusilor dinitrofenolici ca medicament, *Revista Tehnoscopia*, 2 (11), 12-17.

5. Surteva, A., Zahara, M., Ion, L., Grădinaru, R., Drochioiu, G., Mangalagiu, I. (2013) Ninhydrin-based spectrophotometric assays of trace cyanide, *Acta Chemica Iasi*, 21, 57-70.

6. Zbanțoc, G., Grădinaru, R., Drochioiu, G., Mangalagiu, I. (2011) Nicotine and tobacco alkaloids: A GC-MS approach, *International Journal of Criminal Investigation*, 2(1), 3-10.

7. Drochioiu, G., Sandu, I., Grădinaru, R., Zbanțoc, G., Mangalagiu, I. (2011) Ninhydrin-based forensic investigations: II. Cyanide analytical toxicology, *International Journal of Criminal Investigation*, 1(4), 213-226.

8. Vițearu, C., Dascălu, A., Grădinaru, V.R., Popa, K. and Borcia, C. (2011) Liquid Scintillation Counting Applied for Studying the Influence of Microorganisms on the U(VI) to U(IV) Oxidation Process, *Acta Chemica Iasi*, 19, 117-123.

9. Zbanțoc, G., Moldoveanu, C., Grădinaru, R., Drochioiu, G., Oltanu, G., Mangalagiu, I. (2011) The metabolism of drugs / toxins in the body: BZP, *International Journal of Criminal Investigation*, 1(1), 17-24.

10. Drochioiu, G., Adochitei A., Habasescu, L., Zbanțoc, G., Pui, A., Grădinaru, R., Rusu, E. (2009) CD and FT-IR study of some adducts of albumin with toxic dinitrophenyl derivatives, *Bull. Polytechnic Inst. Iasi*, 55 (4), 23-28.

11. Grădinaru, R., Drochioiu, G., Grădinaru, L., Ghisla, S. (2007), Human medium-chain acyl-CoA dehydrogenase. Charge transfer complexes studies with E99G-, E376G- and E99G/E376G-MCAD mutants, *Analele Stiintifice ale Universitatii Al I Cuza din Iasi*, 15 (1), 106-110.

12. Grădinaru, R., Damoc, N. E., Grădinaru, L., Mangalagiu, I., Drochioiu, G. (2004) UV Protein Assay Based on the Buret Reaction, *Analele Stiintifice ale Universitatii Al I Cuza din Iasi*, Chimie, 12, 5-10.

13. Sunel, V., Basu, C., Ciungureanu, C., Grădinaru, R. (1999) Syntheses of new antimetabolites with α -amino acids support, *Analele Stiintifice ale Universitatii Al I Cuza din Iasi*, Chimie, 7(2), 335-340.

14. Nicolescu, T., Simion, C., Barabula, D., Dorohoi, D., Grădinaru, R. (1998) Synthesis and physico-chemical characterization of some 4-styryl-coumarin derivatives, *Analele Stiintifice ale Universitatii Al I Cuza din Iasi*, Chimie, 6, 23-28.

1. Drochioiu, G., Cioșcă, C.-M., Ion, L., Pelin, I., Grădinaru, R.-V. (2019), Bacteriorhodopsin from *Halobacterium Salinarum* is a key compound of bioenergetics (Conference paper) International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology (SGEM), 19 (6), 575-582.

2. Mihai, A.I., Drochioiu, G., Murariu, M., Grădinaru, R.-V., Zahara, M. (2018), Evaluation of nutrient pollution in red. Bătea Doamnei and Izvorul Muntei lakes in Neamț county, Romania (Conference paper) International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology (SGEM), 18 (5), 1), 353-360.

3. Drochioiu, G., Surteva, A., Iacoban, C., Halim, E.M., Grădinaru, R. (2017) Eco-friendly methods for heavy metal removing from Tarnița mining area, *Metal ions in biology and medicine*, SGM, 17(51), 297-304.

4. Surteva, A., Marinova, A., Ivanova, V., Grădinaru, R. and Georgieva, S. (2017) Enzyme based methods for lactate determination, *Journal of Chemical Technology and Metallurgy*, 52(3), 513-525.

5. Zahara, M., Drochioiu, G., Zbanțoc, Grădinaru, R. (2016) Beyond dinitrophenol interaction with tryptophan-based compounds, *Acta Chemica Iasi*, 24(1), 43-49.

6. Zahara, M., Pintilie, O., Cosma, A., Grădinaru, R., Drochioiu, G., Murariu, M., Sandu, I. (2014) Toxicitatea și utilitatea compusilor dinitrofenolici ca medicament, *Revista Tehnoscopia*, 2 (11), 12-17.

7. Grădinaru, R., Grădinaru, R., Drochioiu, G., Mangalagiu, I. (2013) Ninhydrin-based spectrophotometric assays of trace cyanide, *Acta Chemica Iasi*, 21, 57-70.

8. Zbanțoc, G., Grădinaru, R., Drochioiu, G., Mangalagiu, I. (2011) Nicotine and tobacco alkaloids: A GC-MS approach, *International Journal of Criminal Investigation*, 2(1), 3-10.

9. Drochioiu, G., Sandu, I., Grădinaru, R., Zbanțoc, G., Mangalagiu, I. (2011) Ninhydrin-based forensic investigations: II. Cyanide analytical toxicology, *International Journal of Criminal Investigation*, 1(4), 213-226.

10. Vițearu, C., Dascălu, A., Grădinaru, V.R., Popa, K. and Borcia, C. (2011) Liquid Scintillation Counting Applied for Studying the Influence of Microorganisms on the U(VI) to U(IV) Oxidation Process, *Acta Chemica Iasi*, 19, 117-123.

11. Zbanțoc, G., Moldoveanu, C., Grădinaru, R., Drochioiu, G., Oltanu, G., Mangalagiu, I. (2011) The metabolism of drugs / toxins in the body: BZP, *International Journal of Criminal Investigation*, 1(1), 17-24.

12. Grădinaru, R., Damoc, N. E., Grădinaru, L., Mangalagiu, I., Drochioiu, G. (2004) UV Protein Assay Based on the Buret Reaction, *Analele Stiintifice ale Universitatii Al I Cuza din Iasi*, Chimie, 12, 5-10.

13. Sunel, V., Basu, C., Ciungureanu, C., Grădinaru, R. (1999) Syntheses of new antimetabolites with α -amino acids support, *Analele Stiintifice ale Universitatii Al I Cuza din Iasi*, Chimie, 7(2), 335-340.

14. Nicolescu, T., Simion, C., Barabula, D., Dorohoi, D., Grădinaru, R. (1998) Synthesis and physico-chemical characterization of some 4-styryl-coumarin derivatives, *Analele Stiintifice ale Universitatii Al I Cuza din Iasi*, Chimie, 6, 23-28.

7. Surteva, A., Zaharia, M., Ion, L., Grădinaru, R., Drochioiu, G., Mangalagiu, I. (2013) Ninhydrin-based spectrophotometric assays of trace cyanide, Acta Chimica Iasi, 21, 57-70.
8. Zbancioc, G., Grădinaru, R., Drochioiu, G., Mangalagiu, I. (2011) Nicotine and tobacco alkaloids: A GC-MS approach, International Journal of Criminal Investigation, 2(1), 3-10.
9. Drochioiu, G., Sandu, I., Grădinaru, R., Zbancioc, G., Mangalagiu, I. (2011) Ninhydrin-based forensic investigations: II. Cyanide analytical toxicology, 1(4), 213-226.
10. Vițelaru, C., Dascălu, A., Grădinaru, V.R., Popa, K. and Borcia, C. (2011) Liquid Scintillation Counting Applied for Studying the Influence of Microorganisms on the U(VI) to U(IV) Oxidation Process, Acta Chimica Iasi, 19, 117-123.
11. Zbancioc, G., Moldoveanu, C., Grădinaru, R., Drochioiu, G., Oltéanu, G., Mangalagiu, I. (2011) The metabolism of drugs / toxics in the body. Case study: BZ, International Journal of Criminal Investigation, 1(1), 17-24.
12. Drochioiu, G., Adochitei, A., Habasescu, L., Zbancioc, G., Puil, A., Grădinaru, R., Rusu, E. (2009) CD and FT-IR study of some adducts of albumin with toxic dinitrophenyl derivatives, Bulletin of the Polytechnic Institute of Jassy, 55(4), 23-28.
13. Drochioiu, G., Jurcoane, S., Muraru, M., Danac, R., Grădinaru, R. (2008) Biodegradation of some dinitrophenyl derivatives used as herbicides and metabolic inhibitors, European BioRemediation Conference, 4, 1-3.
14. Drochioiu, G., Manea, M., Muraru, M., Popa, K., Grădinaru, R., Przybylski, M. (2008) Metal-induced changes of amyloid proteins associated with neurodegenerative diseases, Metal ions in biology and medicine, 10, 664-669.
15. Grădinaru, R., Kieweg, V., Kuchler, B., Ghisla, S. (2002) On the role of the 376-functional group in catalysis by medium chain acyl-CoA-dehydrogenase, Flavins and Flavoproteins, 14, 193-198.

Brevete obținute

Zaharia, M., Grădinaru, R., Zaharia E. A., Muraru, M., Drochioiu, G. (2015) Metodă spectrofotometrică de determinare a activității agenților decuplanți ai fosforilării oxidative, A/00057/27.01.2015, OSIM București.

Conf. dr. Vasile Robert Grădinaru

Data
30.07.2020