



<b>Personal information</b>	
Name/Surname	<b>ZENOVIA OLTEANU</b>
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Citizenship	Romanian
Date of birth	18.10.1952
<b>Desired employment/Occupational field</b>	"Alexandru Ioan Cuza" University, Faculty of Biology, Department of Biology/Education and research
<b>Thesis title, year and institution support</b>	„Implication of some enzymes in energetic metabolism to <i>Torulopsis candida</i> M1 and <i>Claviceps purpurea</i> ” species, 2003, "Alexandru Ioan Cuza" University from Iași
<b>Professional experience</b>	
Period	<ol style="list-style-type: none"> <li>1. 2007 – present</li> <li>2. 2004 – 2007</li> <li>3. 2002 – 2004</li> <li>4. 1994 – 2002</li> <li>5. 1990 – 1994</li> <li>6. 1981 – 1990</li> <li>7. 1977 – 1981</li> <li>8. 1976 – 1977</li> </ol>
Occupation or position held	<ol style="list-style-type: none"> <li>1. Associate professor</li> <li>2. Lecturer</li> <li>3. Senior researcher II</li> <li>4. Senior researcher III</li> <li>5. Senior researcher</li> <li>6. Chemical engineer</li> <li>7. Chemical engineer</li> <li>8. Chemical engineer</li> </ol>
Main activities and responsibilities	<ol style="list-style-type: none"> <li>1. Scientific research and educational activities</li> <li>2. Scientific research and educational activities</li> <li>3. Research</li> <li>4. Research</li> <li>5. Research</li> <li>6. Research</li> <li>7. Analysis of raw materials</li> <li>8. Production and analysis of dyes</li> </ol>

Name and address of the employer's	<ol style="list-style-type: none"> <li>1. „Alexandru Ioan Cuza” University from Iași</li> <li>2. „Alexandru Ioan Cuza” University from Iași</li> <li>3. Institute of Biological Research, Iași</li> <li>4. Institute of Biological Research, Iași</li> <li>5. Institute of Biological Research, Iași</li> <li>6. Institute of Biological Research, Iași</li> <li>7. “6 Martie” Company, Zărnești, Brașov</li> <li>8. “Colorom”, Company, Codlea, Brașov</li> </ol>
<b>Education and training</b>	
Period	<ol style="list-style-type: none"> <li>1. 1997 – 2003</li> <li>2. 1994-1995</li> <li>3. 1971-1976</li> <li>4. 1967-1971</li> </ol>
Qualification/Diploma obtained	<ol style="list-style-type: none"> <li>1. PhD in Biology, Biochemistry specialty/"Alexandru Ioan Cuza" University, Faculty of Biology</li> <li>2. Graduate Seminar Teacher / "Alexandru Ioan Cuza" University, Pedagogical University Seminar</li> <li>3. Degree in Chemical Engineering/ "Gh Asachi University "Iasi</li> <li>4. Baccalaureate/high school general education "Emil Racovita", Iasi</li> </ol>
Principal subjects/Occupational skills covered	<ol style="list-style-type: none"> <li>1. Biochemistry, Applied Enzymology, Biotechnology/Working with depth notions and concepts, principles and methodologies specific to working Biochemistry, investigation and interpretation of molecular and cellular basis of organization and functioning of living matter</li> <li>2. School psychology, pedagogy, methods/Use of the concepts specific educational sciences, developing skills to apply theoretical knowledge in solving practical educational situations, develop skills in design, implementation and evaluation of the educational process</li> <li>3. Organic chemistry and chemical engineering / operation with notions, concepts, regularities and specific principles of chemistry, use of models and algorithms for integration of specific knowledge inter-/transdisciplinary general chemistry, inorganic chemistry, organic chemistry, chemical engineering and management</li> <li>4. Specific areas of education cycle</li> </ol>

Organisational skills and competences	<ul style="list-style-type: none"> <li>• Director of Research Department, Faculty of Biology, "Alexandru Ioan Cuza" University from Iași</li> <li>• Member of the Senate of the "Alexandru Ioan Cuza" University from Iași</li> <li>• Member of doctoral committee and advancement in higher education and scientific research</li> <li>• Member of the Editorial Board of the journal "Genetics and Molecular Biology" (new series), Scientific Annals of University "Alexandru Ioan Cuza" from Iasi</li> <li>• Member of the Editorial Board: "Oltenia. Education and communication", Natural Sciences section</li> <li>• Member of the Romanian National Society for Biochemistry and Molecular Biology</li> <li>• Member of the Society for Life Sciences "Probios"</li> </ul>
Teaching	<p><b>Teaches</b></p> <ol style="list-style-type: none"> <li>1. Biochemistry of secondary metabolites</li> <li>2. General Biochemistry</li> <li>3. Molecular mechanisms of fermentation processes (Master)</li> <li>4. Bioactive substances in plant protection (Master)</li> <li>5. Biochemical changes in food preservation (Master)</li> <li>6. Bioregulatory substances involved in the development of living organisms (Master)</li> <li>7. Chemistry of living systems</li> <li>8. Inorganic Chemistry</li> <li>9. Organic Chemistry.</li> <li>10. General Chemistry</li> <li>11. Environmental Chemistry</li> </ol> <p><b>University courses or textbooks and printed books</b></p> <ol style="list-style-type: none"> <li>1. <b>Olteanu Z.</b> – 2007, Elements of general chemistry, TEHNOPRESS Publishing House., Iași, ISBN: 978-973-702-452-7.</li> <li>2. Cojocaru D., <b>Olteanu Z.</b>, Ciornea E., Oprică L., Cojocaru S.I.-2007, <i>General Enzymology</i> TEHNOPRESS Publishing House, Iași.</li> <li>3. Surdu Șt., <b>Olteanu Z.</b>, Truță E. – 2005, <i>Genus Claviceps - biology and biotechnology</i>, vol. I, CERMI Publishing House, Iași.</li> <li>4. Zamfirache M.M., <b>Olteanu Z.</b>, Murariu A., Stratu A., Chifu T. – 1997, <i>Fundamentals of environmental protection</i>, Practical textbook. "Alexandru Ioan Cuza" University Publishing House, Iași.</li> <li>5. Zamfirache M.M., <b>Olteanu Z.</b>, Stratu A., Galeș R.C. – 2008, <i>Plant physiology - practical guide</i>, "Alexandru Ioan Cuza" University Publishing House, Iași.</li> </ol>
<b>Scientific research</b>	<p><b>Areas of competence</b></p> <ol style="list-style-type: none"> <li>1. General Chemistry</li> <li>2. Biochemistry</li> <li>3. Applied Microbiology</li> <li>4. Biotechnology</li> </ol>

	<p><b>Member of scientific societies and professional committees:</b>  Member of the Romanian Society of Biochemistry and Molecular Biology;  Member of the Society for Life Sciences 'Probios';  Member of the International Program Committee of the Proceedings of the 2nd International Conference on Waste Management, Water Pollution, Indoor Climate (WWAI'08), Corfu, Greece, 2008</p>
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## PAPERS (last five years)

### Scientific articles published in Web of Science journals

1. Grigore M.N., Toma C., Zamfirache M.M., Boscaiu M., **Olteanu Z.**, Cojocaru D., 2012. Ecological anatomy in halophytes with C4 photosynthesis: discussing adaptative features in endangered ecosystems, *Carpathian Journal of Earth and Environmental Sciences*, 7(2):261-268.
2. Ciobica A., **Olteanu Z.**, Padurariu M., Hritcu L., 2012. The effects of low-dose pergolide on memory and oxidative stress in a 6-OHDA induced rat model of Parkinson's disease. *J Physiol Biochem*. 68(1):59-69.
3. Rosu C.M., Manzu C., **Olteanu Z.**, Oprica L. Oprea A., Ciornea E., Zamfirache M.M., 2011. Some Fruit Characteristics of *Rosa* sp. Genotypes from the Northeastern Region of Romania, *Not Bot Horti Agrobo*, 39(2):203-208.
4. Truta E., Zamfirache M.M., Rosu C., **Olteanu Z.**, Mihai C., Gherghel D., 2011. Cytogenetic effects induced by 2,4-D and kinetin in radish and common bean root meristems, *Romanian Agricultural Research* 28:207-215
5. Truta E., Capraru G., Rosu C.M., Zamfirache M.M., **Olteanu Z.**, Manzu C., 2011. Morphometric pattern of somatic chromosomes in three Romanian seabuckthorn genotypes, *Caryologia* 64(2):187-194
6. Truță E., Căpraru G., Surdu Șt., Zamfirache M.M., **Olteanu Z.**, Roșu C., Oprică L., 2010. Karyotypic studies in ecotypes of *Hippophae rhamnoides* L. from Romania, *Silvae Genetica*, 59(4):175-182.
7. Stefan M., Dunca S., **Olteanu Z.**, Oprica L., Ungureanu E., Hritcu L., Mihasan M., Cojocaru D., 2010. Soybean (*Glycine max* [L] Merr.) inoculation with *Bacillus pumilus* RS3 promotes plant growth and increases seed protein yield: relevance for environmentally-friendly agricultural applications, *Carpathian Journal of Earth and Environmental Sciences*, 5(1):131 – 138.
8. Zamfirache M.M., Burzo I., Gostin I., Stefan M., Padurariu C., **Olteanu Z.**, Badea M.L., Lamban C., Truta E., Ivanescu L., Cojocaru D., 2010. Micromorphology of secretory trichomes and chemical composition of volatile oils in *Perovskia atriplicifolia* benth. from north-eastern Romania, *Carpathian Journal of Earth and Environmental Sciences*, 6 (2):261-268
9. Răcuciu M., Creangă D., **Olteanu Z.**, 2009. Water based magnetic fluid impact on young plants growing, *Romanian Reports in Physics*, 61(2): 259-268.
10. Zamfirache, M.M., Ivanescu, L; **Olteanu, Z.**, 2008. Effects of industrial pollution on species of *Populus alba* L. from Moldavian areas - Romania, *Proceedings of the 6th IASME/WSEAS International Conference on heat transfer, thermal engineering and environment (HTE'08)*, PTS I and II, 342-347, Rhodes, Greece.

### Scientific articles published in journals indexed in international databases

1. Truta E., Olteanu Z., Rosu M.C., Ciornea E., Zamfirache M.M., Oprica L., Astafei M., 2012. Some aspects of chemophenotype heterogeneity in *Lonicera*, *Cornus* and *Rosa*

- genotypes in relation to chromosome constitution, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XIII(2):73-80
2. Roșu C.M., **Olteanu Z.**, Truță, E., Ciornea E., Mânzu C. Zamfirache M.M., 2011. Nutritional value of *Rosa spp.* L. and *Cornus mas* L. fruits, as affected by storage conditions, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XII(4):147-157.
  3. Stratu A., Zamfirache M.M., Murariu A., **Olteanu Z.**, Oprică L., Cătălin Tănase, Vasiliță Claudiu Chinan, Ciprian Bîrsan 2011. Physiological and biochemical aspects in the macromycetes species collected from Călimani National Park (the Oriental Carpathians), *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology* XII(4):157-165.
  4. Zamfirache M.M., Burzo I., Gostin I., Badea M.L., **Olteanu Z.**, Ștefan M., Pădurariu C., Truță E., Boz I., Andro A.R. - 2011, Recherches concerning the micromorphology of secretory trichomes and chemical composition of volatile oils in some medicinal and aromatic taxa of *Lamiaceae* family, *Romanian Biological Sciences*, IX(1-4), 47-48.
  5. Truta E., **Olteanu Z.**, Zamfirache M.M., Ciornea E., Oprica L., Vochita G., 2011. Considerations on the relationship between chromosome constitution and biochemical phenotype in five ecotypes of seabuckthorn, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XII(II): 65 – 75
  6. **Olteanu Z.**, Oprica L., Truta E., Zamfirache M.M., 2011. Behaviour of antioxidative enzymes and of soluble protein in wheat seedlings after lead-induced stress, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XII(II): 75 - 87
  7. Truță E., Zamfirache M.M., **Olteanu Z.** – 2011, Caffeine induced genotoxic effects in *Phaseolus vulgaris* L. and *Raphanus sativus* L., *Botanica Serbica*, 35(1): 49-54.
  8. Truță E., Roșu C., Vochița G., Zamfirache M.M., **Olteanu Z.**, Gherghel D., Oprică L. – 2011, Estimation of potential of some Zinc and chromium-containing compounds to induce chromosome aberrations in barley, *Romanian Biological Sciences*, IX(1-4): 39-40.
  9. Pădurariu C., Zamfirache M.M., Burzo I., **Olteanu Z.**, Boz I., - 2011, Recherches regarding the chemical composition of volatile oils of some taxa belonging to the *Ocimum* genus, *Romanian Biological Sciences*, IX(1-4): 55-56.
  10. Lobiuc A., **Olteanu Z.**, Mihășan M., 2010 – Studies regarding cellulolytic enzymes production by bacterial strains isolated from natural environments, grown in liquid media with raw and pretreated sawdust, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XI(4): 25-32.
  11. Arteni O.M., **Olteanu Z.**, Oprică L., Bălan M., 2010 – Researches on the activity of oxidoreductases from tissues harvested in different stages of development at *Cyprinus carpio*, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XI(1):83-86.
  12. Truță E., Căpraru G., Zamfirache M.M., Asaftei M., Toma C., **Olteanu Z.**, Ivănescu L., 2010 - Estimation of genotoxic potential of carbendazim in fenugreek, *Studia Universitatis "Vasile Goldiș"*, Sect. Life sciences, 20(2): 39-44
  13. **Olteanu Z.**, Surdu Șt., Roșu C., Truță E., Zamfirache M.M., Oprică L., 2010 – Dynamics of alkaloid biosynthesis in correlation with lipid biosynthesis in submerged cultivated strains of *Claviceps purpurea*, 2010 - *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XI( 4): 33-40.
  14. Mihășan M., Arteni V., **Olteanu Z.**, 2010 – In-silico identification of key residues for shifting the coenzyme specificity of an aldehyde-dehydrogenase, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XI( 4): 81-86.
  15. Bădăluță N., Zamfirache M.M., **Olteanu Z.**, Oprică L., Gheorghită G., Rați I.V. 2010 – The dynamics of folliar assimilatory pigments fraction on *Hippophae rhamnoides* L.

- varieties grown under controlled conditions, *Studies and research - Biology*, Bacău University, 18: 65-69
16. Bădăluță N., **Olteanu Z.**, Oprică L., Gheorghită G., 2010 – The content variations of the carotenoid pigments and total lipids in seabuckthorn false fruit and fruit, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XI( 4): 117-122.
  17. Bădăluță N., Zamfirache M.M., Oprică L., **Olteanu Z.**, Gheorghită G., 2010 – The monthly dynamics of the protein biosynthesis in the leaves harvested from *Hippophae rhamnoides* L. varieties, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XI( 4): 123-128.
  18. **Olteanu Z.**, Scutaru M., Mihășan M., 2010 – Chemical and biochemical indicators in the characterization of polluted waters from the Bahlui river, Iasi city sector, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, XI( 4): 233-244.
  19. Truță E., Zamfirache M.M., **Olteanu Z.** - 2009, Pattern of hemp plant growth in different phenophases, in relation to sexual phenotype, *Annals of the "Alexandru Ioan Cuza" University Sect. Plant biology*, LV(1): 72-81.
  20. Zamfirache M.M., **Olteanu Z.**, Gostin I., Galeș R., Pădurariu C., Berciu I., Ivănescu L., Truță E., Oprică L., 2009 - Micromorphological, anatomical and biochemical research *Hyssopus officinalis* L. (*Lamiaceae*), *Rev. Med. Chir. Soc. Med. Nat.*, Iași, 113(2), supl. 4: 488-492.
  21. Zamfirache M.M., Burzo I., Gostin I., **Olteanu Z.**, Stefan M., Badea M.L, Padurariu C., Gales R., Adumitresci L., Lamban C., Truta E., Stănescu I. – 2009, Glandular trichomes and essential oil constituents of *Perovskia atriplicifolia* Benth., *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, X(4): 73-80.
  22. **Olteanu Z.**, Oprică L., Truță E., Zamfirache M.M., 2009 - Response of barley seedlings to oxidative stress generated by treatments with growth hormones, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, X(1): 29-37.
  23. Truta E., Zamfirache M.M., **Olteanu Z.**, Oprică L., Galeș R., 2009 - Cytogenetic damage induced by magnesium in wheat root meristems, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, X(3): 5-11.
  24. Stratu A., **Olteanu Z.**, Peptanariu M., Murariu A.– 2009, The influence of the ultrasound treatment on some physiological and biochemical parameters in *Spinacia oleracea* L seeds, *Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology*, X(2): 5-11.
  25. Oprică L., **Olteanu Z.**, Dunca S., Stefan M., 2008 - Research regarding the tillage impact on soil acid and alkaline phosphatase activity, *Natura Montenegrina*, Podgorica, 7(2): 449-456.
  26. **Olteanu Z.**, Zamfirache M.M., Oprică L., Dunca S., Stefan M., Surdu St., Truta E., Rosu C.M., 2008 - Effect of agrotechnical methods from maize crop on soil dehydrogenase activity, *Natura Montenegrina*, Podgorica, 7(2): 441-458.
  27. Zamfirache M.M., Burzo I., Toma C., **Olteanu Z.**, Ivănescu L., Dunca S., Surdu St., Truta E., Rosu C.M., Ștefan M., 2008 – Researches concerning the volatile oils produced by some species of aromatic plants cultivated in the northern area of Romania and their possible phytotherapeutic effects, *Natura Montenegrina*, Podgorica, 7(2): 593-604
  28. Truță E., **Olteanu Z.**, Oprică L., Surdu Șt., Zamfirache M.M., Căpraru G., Roșu M.C., 2008 – Effects of plant growth regulators on seedlings elongation and on cytogenetic

- parameters in *Hordeum vulgare* L. Cv *Madalin.*, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(4): 17-24.
29. Zamfirache M.M., Rugină R., Toma C., **Olteanu Z.**, Truță E., Galeș R., Oprică L., 2008 – Researches regarding the germination process at species of alimentary plants in experimental conditions, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(4): 37-46.
  30. **Olteanu Z.**, Zamfirache M.M., Oprică L., Truță E., 2008 – Comparative study of behaviour of some biochemical parameters in different phenophases of seabuckthorn cultivars, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(4): 47-54.
  31. Oprică L., **Olteanu Z.**, Cojocaru D., Zamfirache M.M., Tănase C., Chinan V., 2008 – Oxydoreductase activity of some fungi harvesting from Călimani National Park areas, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(4): 55-59.
  32. Roșu C.M., Surdu Șt., Mihășan M., **Olteanu Z.**, Oprică L., 2008 – The decolorization mechanisms of residual effluents from textile industries by *Candida inconspicua* ICB-5, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(4): 69-75.
  33. Zamfirache M.M., Burzo I., Ivanescu L., Toma C., **Olteanu Z.**, Galeș R.C. – 2008, Researches concerning the structure of aerial vegetative organs and volatile oils composition at *Ocimum basilicum* L., Rev. Med. Chir. Soc. Med. Nat., Iași, 112(2), suppl. 1: 467-471.
  34. Truță E., Zamfirache M.M., **Olteanu Z.**, Surdu Șt., Căpraru G., Oprică L., Mihai C., Gherghel D. – 2008, Estimation of roundup action on genetic material of *Trigonella foenum graecum* L., Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(2): 69-75.
  35. Roșu C.M., Surdu Șt., **Olteanu Z.** – 2008, *Effect of pollution with cement dust upon superoxid – dismutase activity at different plant species*, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(3): 83-86.
  36. **Olteanu Z.**, Toma C., Oprică L., Zamfirache M.M., Galeș R., Truță E., Surdu Șt., Axente M.F., 2008 – Modificări biochimice și morfo-anatomice induse de tratamentul cu diquat la plantule de *Trigonella foenum graecum* L., Annals of the "Alexandru Ioan Cuza" University Sect. Plant Biology, LIV(1): 108-116.
  37. Stratu A., Murariu A., Zamfirache M.M., **Olteanu Z.**, Oprică L., Tănase C., Chinan V., Bârsan C., 2008 – Physiological and biochemical aspects in the lignicolous species *Gloeophyllum odoratum* (Wulfen) Imazeki and *Fomitopsis pinicola* (Sw.) P. Karst. (Fungi, Basidiomycota) collected from Călimani National Park (The Oriental Carpathians), Annals of the "Alexandru Ioan Cuza" University Sect. Plant Biology, LIV(2): 97-103.
  38. Zamfirache M.M., Toma C., Duca M., Dunca S., **Olteanu Z.**, Ștefan M., Galeș R., Pădurariu C.– 2008, A comparative study regarding the morphology and anatomy of the vegetative apparatus in two *Ocimum basilicum* L. breeds, Annals of the "Alexandru Ioan Cuza" University Sect. Plant Biology, LIV(2): 38-47.
  39. Dunca S., Ștefan M., **Olteanu Z.**, Oprică L. – 2008, Impact of tillage systems on the microbiota of cambic chernozem soils in the moldavian plateau, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(3): 121-128.
  40. Zamfirache M.M., Burzo I., **Olteanu Z.**, Dunca S., Surdu Șt., Truță E., Ștefan M., Roșu C.M.– 2008, Research regarding the volatile oils composition for *Ocimum basilicum* L. and their possible phytotherapeutic effects, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(2): 35-40.

41. Rotinberg P., Gherghel D., Mihai C., Căpraru G., Truță E., Surdu Șt., **Olteanu Z.**, Rotinberg H.- 2008, Metabolic behaviour of the Hep-2p neoplastic cells to the action of a bioactive fungal exopolysaccharidic extract, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(2): 23-30.
42. **Olteanu Z.**, Stratu A., Murariu A., Costică N. - 2008, The influence of some heavy metals on *Medicago sativa* seed germination and seedling growth, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(1): 55-61.
43. Mihai C., Rotinberg P., Gherghel D., Căpraru G., Truță E., Surdu Șt., **Olteanu Z.**, Rotinberg H.- 2008, In vitro selection of some potential cytostatic agents from new fungal exopolyglucidic extracts, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(1): 35-40.
44. **Olteanu Z.**, Roșu C.M., Mihășan M., Surdu Șt., Oprică L. – 2008, Preliminary consideration upon oxido-reductive system involved in aerobic biodegradation of some textile dyes, Annals of the "Alexandru Ioan Cuza" University Sect. Genetics and Molecular Biology, IX(2): 41-46.
45. Mihai C., Rotinberg P., Truță E., Gherghel D., Căpraru G., Surdu S., **Olteanu Z.**, Rotinberg H. – 2008, *Highlighting and reproducibility of the antitumoral pharmacodynamic effect of an autochthonous glucanic biopreparation, of fungal origin*, Scientific papers USAMV Iasi, Sect. Veterinary Medicine, 51: 341-347.
46. Gherghel D., Rotinberg P., Mihai C., Truță E., Căpraru G., Surdu Șt., **Olteanu Z.**, Rotinberg H. – 2008, *The in vivo assessment of the preclinical oncochemotherapeutic effectiveness of the polysaccharidic biopreparation*, Scientific papers USAMV Iasi, Sect. Veterinary Medicine, 51: 108-116.
47. Rotinberg P., Gherghel D., Mihai C., Truță E., Căpraru G., Surdu Șt., **Olteanu Z.**, Rotinberg H. – 2008, *Comportamentul unor parametrii hematologici □i al unor constante biochimice plasmatice la tratamentul citostatic experimental cu produsul glucanic EglClp*, Scientific papers USAMV Iasi, Sect. Veterinary Medicine, 51: 152 – 158.
48. Zamfirache M.M., Rugină R., **Olteanu Z.**, Ivănescu L., Truță E., Galeș R., Toma C. – 2008, Research regarding the germination process in species of alimentary interest under the influence of some biologically active substances, Studia Univ. Vasile Goldiș, Sect. Life sciences, 18: 9-15.

## PATENTS

- Surdu Șt., **Olteanu Z.**, Zamfirache M.M) - „*Use of growth factors to alter biosynthetic potential in *Claviceps purpurea* Fr. (Tul.)*”.
- Roșu C.M., Rotinberg P., **Olteanu Z.**, Surdu St., Truță E., Mihai C.T, Hrițcu L., Gherghel D., Hăncianu M., Miron A., Aprotosoia C.A., Cioacă O.) - „*Antineoplastic clavinic alkaloid type product of veterinary use and preparation process thereof*”.

## RESEARCH-DEVELOPMENT-INNOVATION ON CONTRACT/GRANT

1. 2010-2013, Post-doctoral research contract funded by the Sectoral Operational Programme Human Resources Development POSDRU/89/1.5/S/49944 the project "Developing innovation capacity and increasing the impact of post-doctoral research programs (long-term expert).
2. 2010-2013, Post-doctoral research contract funded by the Sectoral Operational Programme Human Resources Development in POSDRU/89/1.5/S/63663 project "Transnational network of integrated postdoctoral research in the field of science communication. Institution building (postdoctoral school) and fellowships program (CommScie)"(short-term expert



3. 2008-2011, PN II no. 52142/2008, "Improving the genetic potential and complex characterization of plant biotypes group future impact on ecological and sustainable development in horticulture" (responsible UAIC).
4. 2008-2011, PN II no. 62065/2008, "Complex characterization of cytostatic active extracts of *Claviceps purpurea* strains obtained by parasexual hybridization biotechnology, to capitalize on veterinary therapeutics" (responsible UAIC).
5. 2006 - 2008, CEEEX-BIOTECH Program, Contract no. 110/2006, "Getting submerged strains of *Claviceps purpurea* with high and preferential glucanosynthetic capacity and establish areas of biomedical recovery of native glucan preparations" (responsible UAIC)
6. 2006 - 2008, CEEEX-BIOTECH Program, Contract no. 109/2006, "Harnessing the biotechnological productive potential of *Hyppophae rhamnoides* ssp *Carpathica* by complex characterization of varieties, source of organic crops for sustainable agriculture" (responsible UAIC)
7. 2006 - 2008, CEEEX-MENER Program, Contract no. 730/2006, "Research on decolorization of dye solutions through new oxidative processes, microbiological and sorption to rehabilitation and recycling wastewater from the textile industry" (responsible UAIC).
8. 2008, Romantan Academy Grant (GAR) - Contract 279/2008, 71/2008 Theme, "Phyllosphere complex study of plant species grown in the Botanical Garden of Iasi - premise for the foundation of new opportunities in the care and protection of anthropogenic ecosystems" (collaborator).
9. 2007-2010, PN II Contract no. 51-017/14.09.2007, "Management of soil and water resources in excessive drought affected agricultural ecosystems to maintain biodiversity" (collaborator).
10. 2007-2008, CNCSIS Grant, Contract no. 1420/2007, "Substantiation variability amplification methodologies species gene pool *Phaseolus vulgaris* L". (collaborator).
11. 2006-2008, Grant CNCSIS, Contract no. 1174/2006, "Polluted soils micoremediation from areas considered environmentally critical" (collaborator).
12. 2006 - 2008, CEEEX - BIOTECH Program, Contract no. 128/2006, "Ecological reconstruction by micoremediation processes of the degraded soil mining", (collaborator).
13. 2005 - 2007, CEEEX - AGRAL Program, Contract no. 15/2005, "Characterization of bioactive principles of plant and fungal origin with cytostatic, immunomodulatory, metabolic and neurotropic action and its application in functional food" (collaborator).
14. 2005 - 2007, CEEEX-MENER Program, Contract no. 640/2005, "The use of some morphological, structural, ultrastructural and biochemical biomarkers in assessment of human impact on biodiversity Ceahlau National Park and adjacent area" (collaborator).
15. 2004-2006, PNCDI - BIOTECH, Contract no. 4591/2004, "The use of natural electromagnetic non-ionizing radiation (infrared radiation in combination with ultraviolet radiation) in modulating metabolism cellulolytic species *Alternaria alternata* to optimize growth conditions biosynthesis of cellulases in the forest industry waste" (collaborator).
16. 2004 - 2006, CNCSIS Grant, Contract no. 642/2004, "Phytoremediation of contaminated soils from household waste Tomești - Iași buffer area " (collaborator).
17. 2003-2005, GRANT A type, "Inquiries on the response of wild and cultivated plant species in greenhouse stressful environmental factors" (collaborator).
18. 2003 - 2005, PNCDI - BIOTECH, Contract no. 3341/2003 - "Optimization of biosynthetic efficiency of some strains of *Claviceps purpurea* by somatic hybridization biotechnology and establish new areas of biomedical and biopesticides use of ergoline alkaloids" (collaborator).

19. 2003 – 2004, PNCDI - BIOTECH, Contract no. 3340/2003, "Optimizing biodegradation of forest industry waste by cellulolytic microorganisms using physical push factors (magnetic and electromagnetic fields)" (collaborator).
20. 2003 – 2004, NUCLEU Program, Contract no. 29/5 05 2003, "Modulation of fungal cell reactivity by using stimulatory factors to optimize the biosynthesis of biologically active substances" (collaborator).
21. 2002 - 2004, PNCDI – RELANSIN, Contract no. 1709/2003. „Modernization of technology to combat pests and diseases at pear tree by studying the effectiveness of pesticides in relation with their influence on physiological and biochemical processes in plants and on some soil biochemical parameters in order to obtain high quality products” (collaborator).
22. 2001-2002, ORIZONT 2000, Contract no. 668/2001, "Study of fundamental metabolic parameters at *Chaetomium globosum* and *Alternaria alternata* species in cultivation conditions on media containing wastes from forestry ((sawdust from paper industry)" (collaborator).
23. 2001 – 2002, Contract, „Research on interaction microorganism - host plant in some forms of parasitism and symbiosis” (collaborator).
24. 2001 – 2002, PNCDI - RELANSIN, Contract no. 1199/2001, „Research on the role of some pesticides in combating major diseases in different varieties of apple and cherry study correlated with histological and physiological changes in plants and the accumulation of these substances in fruits” (collaborator).
25. 2001, GRANT A type, „ Research on resistance of wild and cultivated plant species to the action of stress factors: climate, soil, biological, pollutants” (collaborator).
26. 2000 – 2002, ORIZONT 2000 Program, Contract no. 568/2000, A.7 Theme, „ Enzymes and isoenzymes involved in the metabolism of microorganisms producing biologically active substances” (director).
27. 2000 – 2002, ORIZONT 2000 Program, Contract nr. 568/2000, Theme A.8, „ The study of metabolic processes that occur in the microbiological degradation of textile dyes”, (director).
28. 2000, Contract, „ Research on phenotypic and genetic aspects on producer of vitamin B12 using molasses in terms of different origins” (collaborator).
29. 2000 – 2002, ORIZONT 2000 Program, Contract nr. 567/2000, „ Obtaining some Ergot alkaloids by submerged cultivation of *Claviceps purpurea* strains” (colaborator).
30. 2000 – 2002, GRANT A type, „Research on the biology of some type forms of heterotrophic nutrition interrelations in the living world” (collaborator).
31. 2000, GRANT A type, „The Dynamic of enzyme systems, proteins, and nucleic acids biosynthesis in cellulolytic *Chaetomium globosum* species under the influence of physical factors (magnetic liquid, low intensity microwave)” (collaborator).
32. 2000, GRANT A type, Research histo-anatomical, physiological and biochemical in comparative approach of ontogenetic process *in vivo* and *in vitro* of some medicinal plants”, (collaborator).
33. 2000, Contract, „Influence of magnetic fluid on cellulolytic species *Chaetomium globosum* Kunze: Fr. metabolism” (colaborator).
34. 1999 – 2000, Contract no. 11/1999, „RNA role in determining the period of transfer of vegetativelor (laboratory and industrial) producers of vitamin B12, nystatin and penicillin G” (collaborator).
35. 1999, GRANT C type, Contract no. 5124/1999, „Research on interaction microorganism - host plant in some forms of parasitism and symbiosis” (collaborator).
36. 1998 – 1999, Contract no. 4125/1998, „Research on fungal biodiversity” (collaborator).

37. 1996 – 1999, ORIZONT 2000, Contract no. 101/1996, „Research on optimization of propagating material production technology in application for obtaining sclerotia of *Claviceps purpurea*” (collaborator).
38. 1996 – 1998, Contract, „Research morpho-anatomical, physiological and biochemical on wild and cultivated plants in normal and altered conditions under the effect of biotic and abiotic factors (pollutants, fertilizers, pesticides, radiation, retardants, etc.)” (collaborator).
39. 1996 – 1998, Contract no. 1055/1996, „Studies on the ability of microorganisms to produce biodegradable polymer mixtures” (colaborator).
40. 1996, Contract, „Microbial protein production with yeasts feed use etilotrofe” (colaborator).
41. 1995-1999, ORIZONT 2000, Contract no. 61 A1/1995, „ Studies on amylytic and lignocellulosolytic microorganisms in view to get of some microbial strains producing biologically active substances” (collaborator).
42. 1995 –1998, Contract no. 61 B/1995, „Research on the cellular differentiation in some species of fungi producing active ingredients and specific markers” (collaborator).
43. 1994, Contract no.188B/1994, „Research on biosensors based on enzyme-elements in modern biotechnological analytical” (collaborator).
44. 1993 – 1994, Contract no. 959B/1993, “Biology of strains of *Claviceps purpurea* ergot alkaloid-producing (ergotamine, ergocristină, ergocriptină) in vivo and in vitro” (colaborator).
45. 1993, Contract, „Study of termoactinomicete strains, yeasts and filamentous fungi producing riboflavin and pectinolytic enzyme complex” (collaborator).
46. 1993, Contract, „Microbiological and biochemical study of yeasts capable of bioconversion of lactose and synthesis of carotenoid pigments” (collaborator).
47. 1993, Contract no.959B/1993, „Research study on microbial biosensors, basics in modern biotechnological analytical” (collaborator).
48. 1992, Contract, „Microorganisms producing biologically active substances (antibiotics, vitamins, enzymes)” (collaborator).
49. 1991 – 1992, Contract no. 194/1991, „Biology of symbiotic and parasitic organisms *in vivo* and *in vitro*” (collaborator).
50. 1991, Contract, „Mixobacterii, termoactinomicete and other microorganisms producing biologically active substances” (collaborator).
51. 1990, Contract, „Study on impure chemical wastewater by microbiological” (collaborator).
52. 1990, Contract de cercetare științifică no. 34/1990, „Preliminary Research on discoloration of wastewater from Department II, CFS-Iasi by chemical treatments” (director).
53. 1988, Contract, „Behavior of the species *Claviceps purpurea* (Fr.) Tul. in submerged culture conditions on various forms of environmental” (collaborator).
54. 1987 – 1990, Contract no. S22/1987, „Production and annual insurance propagating material necessary to obtain rye ergot by the selection and improvement of ergotaminic and ergotoxinic *Claviceps purpurea* strains in the experimental field of SCA Suceava” (collaborator).
55. 1987, Contract, „Research on variability in ergot alkaloid biosynthesis capacity, depending on the material preparation technology of infestation” (collaborator).
56. 1986 – 1987, Contract, „ Research to establish a method for analysis and control the inoculum of *Claviceps purpurea* (Fr.) Tul. used to infestation in field crops to produce of rye ergot” (collaborator).
57. 1983 – 1987, Contract nr. 1689/1983, “Research on the selection, improvement and development of new strains valuable for breeding stock to produce sclerotia of *Claviceps purpurea* in ergotoxinic type (ergocristină, ergocornină, ergocriptină) and

ergotamine. Testing them by artificial infection pathogenic field in terms of vigor and content of alkaloids" (collaborator).

58. 1983, Contract, „Research on biological rhythms change and adaptation of organisms to new environmental pollutants" (collaborator).
59. 1982, Contract, „Research on the action of pesticides on animal body" (collaborator).
60. 1981, Contract, „Research on the carcinogenic action of  $\alpha$ - naphthol technical products" (collaborator).

Iași, January, 2013

Associate professor dr. Zenovia OLTEANU