



# Europass Curriculum Vitae



## Personal information

First name / Surname **Marian PETRE**

E-mail [marian\\_petre\\_ro@yahoo.com](mailto:marian_petre_ro@yahoo.com)  
Nationality Romanian  
Gender Male

## Work experience

|                                      |   |
|--------------------------------------|---|
| Dates                                | Since the 1 <sup>st</sup> October 2007  |
| Occupation or position held          | Associate Professor, Project manager  |
| Main activities and responsibilities | Teaching courses: Environmental Biotechnology, Microbiology, Bioremediation, Microbial Biotechnology<br>Since the 1 <sup>st</sup> October 2011<br>General Manager of the Research Centre and Development for Horticultural and Environmental Biotechnology-BIOHORTING from the University of Pitesti<br>Leading Research projects:<br>Project Manager of the Research PNCDI II - Contract no. 51002/2007 entitled: "Functional ecological food produced by submerged fermentation of cereal by-products using edible and medicinal mushrooms" financed by the Romanian Ministry of Education and Research<br>Project Manager of the Research PNCDI II - Contract no. 52143/2008 entitled: "Biotechnological model of controlled cultivation and integrated processing of edible and medicinal mushrooms in modular robotic system to get ecological products in food safety and security"<br>Publishing: 8 patents, 9 scientific books(7 in Romania and 2 abroad, as Book Editor), 4 courses for students, 15 articles in international journals (7 of them ISI articles)<br>Associate Editor: Annals of Forest Research, Journal of Ecology and Natural Environment<br>Reviewer of Journal of Agricultural and Food Chemistry, Chemosphere<br>Member of PhD evaluation committees<br>Coordinator of over 20 master and bachelor in science dissertations<br>Evaluator of over 30 research projects at EU level and over 50 at national level |
| Name and address of employer         | University of Pitesti, 1 Targul din Vale Street, Pitesti 110040, Arges County, Romania  |
| Type of business or sector           | University  |
| Dates                                | October 2004 – October 2007   |
| Occupation or position held          | Senior researcher, Head of Laboratory of Microbial Biotechnology with Applications in Horticulture  |
| Main activities and responsibilities | Project Manager of Project no. 4661, Biotech Program, financed by Romanian Ministry of Research and Education, entitled: "Biotechnology for fungal conversion of lignocellulose wastes and by-products from viticulture and winery to produce protein biomass for food and feed use"<br>Co-worker in Project 06 entitled: "Researches for studying biotechnological methods to get mycelium of edible mushrooms of the genus <i>Pleurotus</i> , in ecological producing system"<br>- Attending as scientific responsible from Research & Development National Institute for Biotechnology in Horticulture Stefanesti - Arges in the FP6 project proposal FP6-030358-1, entitled "Improvement of technologies for characterization, production, food quality and packaging of the mushrooms <i>Pleurotus ostreatus</i> and <i>P. eryngii</i> ". Project acronym: Pleurotus201049<br>- Attending as scientific responsible from Research & Development National Institute for Biotechnology in Horticulture Stefanesti - Arges in the FP7 project proposal FP7-222684, having the title: "Ganoderma lucidum biomass – a platform for immunotherapeutic biomolecule production".<br>Acronym: IBAW – 2007   |
| Name and address of employer         | Research & Development National Institute for Biotechnology in Horticulture Stefanesti - Arges<br>Sos. Bucuresti-Pitesti no 38, Stefanesti-Arges, Arges County  |
| Type of business or sector           | National Institute of R&D   |

|                                      |   |
|--------------------------------------|---|
| Dates                                | March 2000 – October 2004   |
| Occupation or position held          | Lecturer, senior researcher second degree   |
| Main activities and responsibilities | Teaching courses: Sanitary Ecology, Environmental Biotechnology, Ecotoxicology, Cell Biology<br>Leading laboratory works<br>Publishing: 2 book chapters in volumes printed by Marcel Dekker and Kluwer Academic Publishers,<br>5 courses for students, 7 articles in international and national journals  |
| Name and address of employer         | Ecological University of Bucharest<br>1 G Vasile Milea Avenue, sector 6, Bucharest  |
| Type of business or sector           | University  |
| Dates                                | June 1998 – March 2000  |
| Occupation or position held          | Senior researcher   |
| Main activities and responsibilities | Project Manager, RELANSIN Program, Project: „Technical and scientific study on probiotics to be used in animal breeding, environmental protection and food industry”<br>Head of Laboratory of Microbiology  |
| Name and address of employer         | National Institute of Research & Development for Biological Sciences – Bucharest<br>296 Independenței Avenue, sector 6, Bucharest   |
| Type of business or sector           | National Institute of R&D   |
| Dates                                | August 1994 – June 1998   |
| Occupation or position held          | Senior researcher, Head of Applied Biotechnology Laboratory   |
| Main activities and responsibilities | Project Manager, ORIZONT 2000 Program, Project No. 351/1995: “Researches to get protein biomass by <i>in vitro</i> cultivation of Basidiomycetes species”<br>Project Manager, ORIZONT 2000 Program, Project No. 753/1995: “Biotechnology for protein biomass producing from plant wastes”.<br>Project Manager, ORIZONT 2000 Program, Project No. 427/1996: “Researches to use immobilized fungal species to get protein biomass”<br>Project Manager, ORIZONT 2000 Program, Project No. 543/1997: “Researches for using Basidiomycetes to produce protein biomass from plant wastes”<br>Project Manager, ORIZONT 2000 Program, Project No. 71/1997: “Biotechnology for plant constituents degradation by controlled microbial composting”  |
| Name and address of employer         | Research Centre for Environmental Technologies Bucharest<br>296 Independenței Avenue, sector 6, Bucharest   |
| Type of business or sector           | Research Centre   |
| Dates                                | October 1984 – August 1994  |
| Occupation or position held          | Biologist, scientific researcher, senior researcher, Head of Laboratory of Microbiology and Biotechnology   |
| Main activities and responsibilities | Project Manager, Project No. 357/1992, financed by the Ministry of Agriculture: “Biotechnologies for cultivation of basidiomycetes species to get protein biomass from vegetable and fruit wastes”<br>Project Manager, Project No. 453/1990, financed by the Ministry of Agriculture: “Researches on protein biomass producing from vegetable and fruit wastes, by using an automatic bioreactor”<br>Project Manager, Project No. 345/1989, financed by the Ministry of Agriculture: “Designing and carrying out of 100 L bioreactor to promote Basidiomycetes cultivation for protein biomass producing”<br>Project Manager, Project No. 35/1987, financed by the Ministry of Agriculture, Forests and Waters: “Researches for biotechnology use in order to cultivate Basidiomycetes species to get protein biomass from plant wastes outcome from industrial processing of fruit and vegetables”<br>Project Manager, Project No. 51/1985, financed by the Ministry of Agriculture, Forests and Waters: “Researches for getting protein biomass from plant wastes outcome from the canned industry of fruit and vegetables” |
| Name and address of employer         | Institute of Research & Designing for Valorizing and Processing Vegetables and Fruits - Bucharest   |
| Type of business or sector           | Research Institute  |
| Dates                                | November 1983 – October 1984  |
| Occupation or position held          | Biologist   |
| Main activities and responsibilities | Head of Dry-Freezing Department of Veterinary Vaccines  |
| Name and address of employer         | Centre of Researches and Bioproducts for Birds and Small Animals “Voluntari”  |
| Type of business or sector           | Research Centre   |
| Dates                                | April 1982 – November 1983  |
| Occupation or position held          | Biologist   |
| Main activities and responsibilities | Head of Pilot Plant for Industrial Producing of Edible Mushroom Mycelia   |
| Name and address of employer         | Research Institute for Vegetables and Flowers Growing – Vidra, Giurgiu County   |
| Type of business or sector           | Pilot Plant for Industrial Producing of Edible Mushroom Mycelia   |

## Education and training

|                                    |   |
|------------------------------------|---|
| Dates                              | 14 – 19 September 2007  |
| Title of qualification awarded     | Postdoctoral course   |
| Principal subjects/ skills covered | „Bioprocess Engineering Course”, Supetar, Croatia   |
| Education and training provider    | European Federation of Biotechnology  |
| Dates                              | October 1995 – June 2001  |
| Title of qualification awarded     | Ph.D. in Biological Sciences  |
| Principal subjects/ skills covered | “The use of micro-organisms immobilized on radiopolymerized hydrogels for degradation and conversion of plant constituents” |
| Education and training provider    | Romanian Academy, Biology Institute of Romanian Academy   |
| Dates                              | 27 April – 5 May 1997   |
| Title of qualification awarded     | International Training Course “Modern Techniques for Identification of Bacteria and Filamentous Fungi”                      |
| Principal subject/ skills covered  | Post-university training  |
| Education and training provider    | PCR, DNA extraction, RAPD's, RFLP, PFGE<br>International Mycological Institute, Egham, England                              |
| Dates                              | October 1977 – June 1981  |
| Title of qualification awarded     | B.Sc.   |
| Principal subject/ skills covered  | The Role of Karyotype in Preventing Human Genetic Diseases  |
| Education and training provider    | University of Bucharest, Faculty of Biology   |

## Awards, Membership, Honours

Gold Medal and Diploma awarded at the 6<sup>th</sup> International Exhibition of Inventions SuZhou – China, organized by the International Federation of Inventors Associations for the invention: “Biotechnology to produce *Lentinula edodes* biomass with immunomodulatory, antitumoral and antiinfection properties”. Author: Marian Petre

Silver Medal and Diploma awarded at Salon International des Inventions - Geneve 2009 for the invention: „Procede biotechnologique pour obtenir la biomasse fongique de *Lentinula edodes*”. Author: Marian Petre

Silver Medal and Diploma awarded at the International Exhibition of Innovation, Research and New Technology – INVENTIKA 2009 for the invention entitled: „Growing process of macromycete species *Pleurotus ostreatus* to get immunostimulatory, antitumoral and antiinfection bioproducts”. Author: Marian Petre

Silver Medal and Diploma awarded at the 55th World Exhibition of Innovation, Research and New Technology – EUREKA 2006, organized at Brussels for the invention: „Growing process of macromycete species *Pleurotus ostreatus* to get immunostimulator, antitumoral and antiinfection bioproducts”. Author: Marian Petre

Bronze Medal and Diploma awarded at the International Exhibition of Innovation, Research and New Technology – INVENTIKA 2009 for the invention: “Proceeding and installation for cultivation of edible and medicinal mushrooms”. Authors: Marian Petre, Adrian Nicolescu, Marcel Dobre

Silver Medal and Diploma awarded at Salon International des Inventions - Geneve 2011 for the invention: “Proceeding and installation for cultivation of edible and medicinal mushrooms”. Authors: Marian Petre, Adrian Nicolescu, Marcel Dobre

Who's Who in the World 1998, 1999, 2000, 2001 Editions  
Assistant Editor, Journal of Ecology and Natural Environment  
Editorial board member, Annals of Forest Research

Member of International Societies  
- British Mycological Society, since 1996;  
- International Society on Environmental Biotechnology, since 1997  
- The Science Advisory Board, since 2004  
- World Society for Mushroom Biology and Mushroom Products, since 2006  
- Balkan Environmental Association, since 2007

Member of National Societies:  
- Romanian Society of Inventors, since 1997;  
- Romanian Society of Mycology, since 2005  
- Romanian Society of Ecology, since 2008  
- Romanian Association of Inventors, since 2008

## Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s) **English**  
**French**

| Self-assessment<br><i>European level (*)</i> | Understanding |                 |         |                 | Speaking           |                 |                   |                 | Writing |                 |
|--|---------------|-----------------|---------|-----------------|--------------------|-----------------|-------------------|-----------------|---------|-----------------|
|  | Listening     |                 | Reading |                 | Spoken interaction |                 | Spoken production |                 |         |                 |
| <b>English</b>                               | C2            | Proficient user | C2      | Proficient user | C1                 | Proficient user | C1                | Proficient user | C2      | Proficient user |
| <b>French</b>                                | C2            | Proficient user | C2      | Proficient user | C1                 | Proficient user | C1                | Proficient user | C1      | Proficient user |

(\*) [Common European Framework of Reference for Languages](#)

**Social skills and competences** Verbal and non-verbal professional interaction, communication, socialization based on excellence by personal example, transparency, fairness, equal opportunity  
Responsible, detail-organized, problem-solving, end-goal oriented, self-respectful, self-reliant, excellent relations in multi-cultural environments, served and succeeded in hardship situations  
Acquired throughout family-school education, professional environment, specialized training and employed as win-win scenarios to motivate and encourage peers

**Professional skills and competences**

- scientific research in the fields of environmental biotechnology, sanitary ecology, agro-ecology, food microbiology;
- drawing up research project proposals in the fields of fungal biotechnology environmental biotechnology, sanitary ecology, agro-ecology;
- teaching courses and laboratory works in environmental biotechnology, ecosystem microbial biotechnology for renewable resources, sanitary ecology, ecotoxicology and agro-ecology;
- coordination and monitoring activity of the Romanian work group „Ro-Plants”, set up as an inner part of the Technological Platform „Plants for the Future” in Framework Program 7;
- national expert in scientific assessment of the research & development projects applied for national competitions in the frame-work of MAKIS program;
- national expert in scientific assessment of research project proposals in the national contests organized by the Ministry of Education and Research as well as National Agency of Scientific Research;
- national expert in scientific assessment of research project proposals in the national contests organized by the National Council of Scientific Research in Universities

**Organizational skills and competences**

- Project Leader of over 20 national projects won national competitions
- Chairman of the International Exploratory Workshop: “New challenges and achievements in ecological biotechnology of edible and medicinal mushrooms producing” Pitesti, 2011
- Chairman of 7 international conferences
- Member of the Scientific Committee of the International Conference on Mushroom Biology and Mushroom Products – 2011, Arcachon, France
- Member of the International Jury of the EU Contest for Young Scientists, Lisbon 2010
- Member of the organizing committees of 5 national conference with international participation
- Chairman of “The International School of Advanced Studies on Mushroom Biotechnology and Bioengineering” organized by The University of Pitesti, September 23-27, 2012

**Computer skills and competences** MS Office, Word, Corel Draw, Photo Paint, Excel, Power Point;

**Annexes** See the attached lists of:  
Books  
Book Chapters  
Articles  
Patents

## **1. PUBLISHED BOOKS**

### **1.1. PUBLISHED BOOKS ABROAD**

**PETRE, M.**, 2013. Environmental Biotechnology - New Approaches and Prospective Applications, edited by Marian Petre, InTech Open Access Publisher, 301 pages (ISBN: 978-953-51-0972-3)

**PETRE, M.**, 2012. Advances in Applied Biotechnology, edited by Marian Petre, InTech Open Access Publisher, 287 pages (ISBN: 978-953-307-820-5)

### **1.2. PUBLISHED BOOKS IN ROMANIA**

**PETRE, M.**, 2013. Microbial Biotechnology with Applications in Bioremediation. CD Press Publisher, Bucharest, 210 pages (ISBN: 978-606-528-166-0)

**PETRE, M.**, 2012. Manual for Practical Works in Microbiology. CD Press Publisher, Bucharest, 184 pages (ISBN: 978-606-528-160-8)

**PETRE, M.**, **PETRE, V.**, 2012. New Biotechnologies Used in Environmental Protection. CD Press Publisher, Bucharest, 102 pages (ISBN: 978-606-528-159-2)

**PETRE, M.**, **BEROVIC, M.**, 2012. Mushroom Biotechnology and Bioengineering, M. Petre and M. Berovic Editors, CD Press, Bucharest, 216 pages (ISBN: 978-606-528-146-2)

**PETRE, M.**, 2011. Biotechnology for continuous controlled cultivation of edible and medicinal mushrooms. CD Press, Bucharest, 264 pages (ISBN: 978-606-528-116-5)

**PETRE, M.**, **TEODORESCU, A.**, 2010. Handbook of submerged cultivation of eatable and medicinal mushrooms. CD Press Publishing House, București, 167 pages (ISBN: 978-606-528-087-8)

**PETRE, M.**, **TEODORESCU, R.I.**, 2010. Dictionary of Biotechnology. CD Press Publishing House, București, 304 pages (ISBN: 978-606-528-083-0)

**PETRE, M.** & **PETRE, V.**, 2009. Explanatory Dictionary of Ecology. CD Press Publishing House, București, 351 pages (ISBN: 978-606-528-046-5)

**PETRE, M.**, **TEODORESCU, A.**, 2009. Biotechnology of environmental protection. Vol. I, 2<sup>nd</sup> Edition, CD Press Publishing House, București, 270 pages (ISBN: 978-606-528-040-3; 978-606-528-041-0)

**PETRE, M.**, **TEODORESCU, A.**, 2009. Biotechnology of environmental protection Vol. II, 2<sup>nd</sup> Edition, CD Press Publishing House, București, 234 pages (ISBN: 978-606-528-040-3; 978-606-528-042-7)

**PETRE, M.**, **TEODORESCU, A.**, 2008. Biotechnology of Environmental Protection. Vol. II, CD Press Publishing House, Bucharest, 224 pages (978-973-1760-54-4 ; 978-973-1760-56-8)

**PETRE, M.**, **TEODORESCU, A.**, 2007. Biotechnology of Environmental Protection. Vol. I, CD Press Publishing House, Bucharest, 224 pages (978-973-1760-54-4; 978-973-1760-55-1)

**PETRE, M.**, 2006. Environmental biotechnology with applications in horticulture and viticulture (M. Petre, coordinator). Didactica & Pedagogica Publishing House, Bucharest, 228 pages (ISBN: 973-30-1664-0; 978-973-30-1664-9)

**PETRE, M.**, 2006. Handbook for using of environmental biotechnology to cultivate edible mushrooms. Didactica & Pedagogica Publishing House, Bucharest, 208 pages (ISBN 973-30-1174-6)

**PETRE, M.** & **PETRE, V.**, 2004. Dictionary of Ecology. Printech Publishing House, Bucharest, 253 pages (ISBN 973-652-951-7)

**PETRE, M.**, 2004. Cellular Biology. Printech Publishing House, Bucharest, 210 pages (ISBN 973-652-911-8)

**PETRE, M.**, **BORDUZ, L.**, 2003. Medicinal Mushrooms Used in Prevention and Therapy of Serious Human Diseases. Printech Publishing House, Bucharest, 64 pages (ISBN 973-652-758-1)

**PETRE, M.**, 2003. Ecotoxicology. Didactica and Pedagogica Publishing House, Bucharest, 201 pages (ISBN 973-30-2788-X)

**PETRE, M.**, 2002. Sanitary Ecology. Didactica and Pedagogica Publishing House, Bucharest, 207pages (ISBN 973-30-2283-7)

**PETRE, M.**, 2002. Biotechnology for microbial degradation and conversion of plant constituents. Didactica & Pedagogica Publishing House, Bucharest, 204 pages (ISBN 973-30-2295-0)

## 2. PUBLISHED BOOK CHAPTERS

### 2.1. PUBLISHED ABROAD

- PETRE, M.**, Petre, V., 2013. Environmental Biotechnology for Bioconversion of Agricultural and Forestry Wastes into Nutritive Biomass. In: Environmental Biotechnology - New Approaches and Prospective Applications, (M. Petre Editor), InTech Open Access Publisher, p. 3-23 (ISBN: 978-953-51-0972-3)
- PETRE, M.**, TEODORESCU, A., 2012. Biotechnology of Agricultural Wastes Recycling Through Controlled Cultivation of Mushrooms. In: Advances in Applied Biotechnology (M. Petre Editor), InTech Open Access Publisher, p. 3-23 (ISBN: 978-953-307-820-5)
- PETRE, M.**, ZARNEA, G., ADRIAN, P., GHEORGHIU, E., SULARIA, M., 2001. Biocontrol of cellulose waste pollution by using immobilized filamentous fungi. In: Environmental Monitoring and Biodiagnostics of Hazardous Contaminants (Healy, M., Wise, D.L. Moo-Young, M, eds), Kluwer Academic Publishers, The Netherlands, p. 227-241 (ISBN: 0-7923-6869-X)
- PETRE, M.**, ZARNEA, G., ADRIAN, P., GHEORGHIU, E., 2000. Biodegradation of cellulosic wastes using immobilized bacterial and fungal cells. In: Bioremediation of Contaminated Soils (Wise, D.L., Trantalo, D.J., Cichon, E.J., Inyang, C., Stottmeister, U., eds) 1<sup>st</sup> Edition, Marcel Dekker, Inc, New York, p.95–120 (ISBN: 0-8247-0333-2)

### 2.2. PUBLISHED IN ROMANIA

- PETRE, M.**, TEODORESCU, A., GIOSANU, D., 2012. Advanced Biotechnological Procedures of Mushroom Cultivation. In: Mushroom Biotechnology and Bioengineering, M. Petre and M. Berovic Editors, CD Press, Bucharest, p. 1-21 (ISBN: 978-606-528-146-2)
- PETRE, M.**, RADU, G.L., LITESCU, S., CUTAS, F., 2003. Accumulation of Heavy Metal Ions by Using Immobilized Microorganisms. In: G.L. Radu (ed), Actual Trends in Bioanalysis. Printech Publishing House, Bucharest (ISBN 973-652-882-0)
- PETRE, M.**, RADU, G.L., ADRIAN, P., GHEORDUNESCU, V., 2002. Bioreactors usable for microbial degradation of plant constituents. In: Progresses in Bioanalysis. Ed. Ars Docendi, Univ. București, p. 297-314 (ISBN: 973-558-015-2)

## 3. PUBLISHED ARTICLES

### 3.1. Full-Length Research Papers in Referred International Journals:

- PETRE, M.**, PETRE, V., DUȚĂ, M., 2014. Mushroom Biotechnology for Bioconversion of Fruit Tree Wastes into Nutritive Biomass. *Romanian Biotechnological Letters* (Accepted for publication – Published on-line ahead of print) (ISSN: 1224-5984)
- PETRE, M.**, PETRE V., RUSEA, I, 2014. Microbial composting of fruit tree wastes through controlled submerged fermentation. *Italian Journal of Agronomy* (in press)
- PETRE, M.**, PETRE V., RUSEA, I, 2014. Ecotechnology for fully recovery of fruit tree wastes through controlled cultivation of eatable mushrooms. *Scientific Bulletin. Series F. Biotechnology*, Vol. XVIII, p. 48-54 (ISSN: 2285-1364)
- PETRE, V., **PETRE, M.**, DUȚĂ, M., 2014. Biotechnological producing of natural fertilizers through microbial composting of fruit wastes. *Scientific Papers. Series B. Horticulture*, Vol. LVIII, p. 81-87 (ISSN: 2285-5653)
- PETRE, M.**, PETRE V., 2013. Ecological recycling of fruit wastes through submerged cultivation of edible mushrooms. Proc. of the 1st International Conference UOC-BenA - SPHAMEER 2013, Constanța, p. 148-149 (ISBN: 978-973-614-784-5)
- PETRE, V., **PETRE, M.**, 2013. Biotechnology for controlled cultivation of edible mushrooms through submerged fermentation of fruit wastes. *AgroLife Sci. J.*, Vol. 2, No. 1, p. 117-120 (ISSN: 2285-5718)
- PETRE, M.**, TEODORESCU, A., GIOSANU., D, BEJAN, C., 2012. Enhanced Cultivation of Mushrooms on Organic Wastes from Wine-making Industry. *Journal of Environmental Protection and Ecology*, **13(3)**:1488-1493 (ISSN: 1311-5065)

- PETRE, M.**, TEODORESCU, A., NICOLESCU, A., DOBRE, M., GIOSANU, D., 2012. Biotechnology of Winery and Vineyard Wastes Recycling by Controlled Cultivation of Mushrooms in Robotic System. *Journal of Environmental Protection and Ecology*, **13(3)**:1493-1497 (ISSN: 1311-5065)
- PETRE, M.**, NICOLESCU, A., DOBRE, M., 2012. Fully Controlled Cultivation of Edible Mushrooms in Safety System to Protect the Environment. *Journal of Environmental Protection and Ecology*, **13(2A)**:1032-1038 (ISSN: 1311-5065)
- PETRE, M.**, TEODORESCU, A. ANDRONESCU, A., 2012. Food Biotechnology to Produce High Nutritive Biomass by Submerged Fermentation of Edible Mushrooms. *Journal of Environmental Protection and Ecology*, **13(2)**:579-585 (ISSN: 1311-5065)
- PETRE, M.**, TEODORESCU, A., NICOLESCU, A., DOBRE, M., MENCINICOPSCI, GH., 2012. Biotechnological model to get ecological mushroom products in food safety system. *Journal of Environmental Protection and Ecology*, **13(1)**:77-86 (ISSN: 1311-5065)
- PETRE, M.**, TEODORESCU, A., 2011. Recycling of Vineyard and Winery Wastes as Nutritive Composts for Edible Mushroom Cultivation. Proc. of the International Conference on Advances in Materials and Processing Technologies AMPT 2010, American Institute of Physics, p. 1539-1545 (ISBN: 978-0-7354-0871-5)
- MATEIAS C., NICOLESCU, A., **PETRE, M.**, DORIN, A., 2011. Developing a software platform for online data processing. Annals of DAAAM 2011 & Proceedings, p. 1301-1302 (ISSN: 1726-9679)
- PETRE, M.**, TEODORESCU, A., TULUCA, E., BEJAN, C., ANDRONESCU, A., 2010. Biotechnology of Mushroom Pellets Producing by Controlled Submerged Fermentation. *Rom. Biotechnol. Lett.*, **15(2)**: 50-56 (ISSN: 1224-5984)
- NICOLESCU A., IVAN, A., **PETRE, M.**, DOBRE, M., 2010. Virtual prototyping robotic cell for mushroom cultivation in controlled atmosphere. Annals of DAAAM 2010 & Proceedings, p. 59-60 (ISSN: 1726-9679)
- NICOLESCU, A., MARINESCU, D., DOBRE, M., **PETRE, M.**, 2010. Virtual prototyping robotic cell for mushroom crops automated harvesting. Annals of DAAAM 2010 & Proceedings, p. 61-62 (ISSN: 1726-9679)
- PETRE, M.**, TEODORESCU, A., 2009. Biotechnology for *in vitro* growing of edible and medicinal mushrooms on wood wastes. *Annals of Forest Research*, vol. **52(1)**: 129-137 (ISSN: 1844-8135)
- PETRE, M.**, TEODORESCU, A., DOBRE, M., NICOLESCU, A., GIOSANU, D., 2009. Bioconversion of winery and vine wastes into protein biomass by enhanced solid state cultivation of edible and medicinal mushrooms. Sustainable Energy Beyond 2020: Part 2, Dublin, Ireland, Glasnevin Publishing, p. 114-118 (ISBN:978-0-9555781-2-0)
- NICOLESCU, A., **PETRE, M.**, DOBRE, M., ENCIU, G., IVAN, M., 2009. Conceptual model of a modular robotic system for mushroom's controlled cultivation and integrated processing. Annals of DAAAM 2009 & Proceedings (ISSN: 1726-9679)
- PETRE, M.**, PETRE, V., 2008. Environmental biotechnology to produce edible mushrooms by recycling the winery and vineyard wastes. *Journal of Environmental Protection and Ecology*, **9(1)**:87-97 (ISSN: 1311-5065)
- PETRE, M.**, BEJAN, C., VISOIU, E., TITA, I., OLTEANU, A., 2007. Mycotechnology for optimal recycling of winery and vine wastes. *International Journal of Medicinal Mushrooms*, **9(3)**: 241-243 (ISSN: 1521-9437)
- PETRE, M.**, TEODORESCU, A., DICU, G., 2005. The Growing Effect of Vineyard and Winery Wastes on the Production of Mycelia and Fruit Bodies of Edible and Medicinal Fungi. *International Journal of Medicinal Mushrooms*, **7(3)**:444-446 (ISSN:1521-9437)
- PETRE, M.**, CUTAS, F., LITESCU, S., 2004. Biotechnology to concentrate heavy metals from polluted waters. In: Environmental Biotechnology (W. Verstraete, ed.), Balkema Publishers, Taylor & Francis Group, London, UK, p.433-439 (ISBN: 90-5809-653-X)
- PETRE, M.**, TEODORESCU, M.E., ZARNEA, G., ADRIAN, P., GHEORGHIU, E., GHEORDUNESCU, V., 2001. "In Situ Cellulose Biodegradation Using Immobilized Fungi as Long-Term Viable Biocatalysts. In: Proc. First European Bioremediation Conference, Chania, Greece, p. 327-331 (ISBN: 90-970-143-3)
- PETRE M.**, TEODORESCU M.E., ZARNEA G., ADRIAN P., GHEORGHIU E., GHEORDUNESCU, V. 2001. Microbial Degradation of Cellulose Wastes in Continuous Bioreactors. *Med. Fac. Landbouw., Univ. Gent, Belgium*, **66(3a)**:195-199 (ISSN: 0368-9697)
- PETRE, M.**, TEODORESCU, M.E., BULEANDRA, M., RADU, G.L., GHEORDUNESCU, V., 2001. Use of Immobilized Microbial Sorbents to Remove Bioavailable Heavy Metals (Cu, Zn, Pb) from Polluted Waters. *Romanian Journal of Biochemistry*, **(1)**:71-73 (ISSN: 1421-2345)

- SULARIA, M., **PETRE, M.**, 2001. Kinetic models of fungal biomass growth and cellulose biodegradation. Eurosim 2001 - Shaping Future with Simulation - The 4th International EUROSIM Congress, in which is incorporated the 2<sup>nd</sup> Conference on Modeling and Simulation in Biology, Medicine and Biomedical Engineering. (ISBN: 90-806441-1-0)
- PETRE, M.**, ZARNEA, G., ADRIAN, P., GHEORGHIU, E., 2000. Long-term effectiveness of cellulose biodegradation by using bacteria and fungi immobilized in hydrophilic polymers. In: Proc. "ConSoil 2000" Leipzig (Germany), pp. 1090-1093 (ISBN: 0-7277-2954-3)
- PETRE, M.**, ZARNEA, G., TEODORESCU, A., ADRIAN, P., GHEORGHIU, E., GHEORDUNESCU, V. 2000. Bioconversion of cellulose wastes from wine-producing industry by using immobilized filamentous fungi. *Med. Fac. Landbouww.*, Univ. Gent, (Belgium), **65(3a)**:277-282 (ISSN: 0368-9697)
- PETRE, M.**, ZARNEA, G., ADRIAN, P., GHEORGHIU, E., GHEORDUNESCU, V., 2000. Cellulose biodegradation in Continuous Bioreactors by Using Immobilized Bacteria and Fungi. In: Proc. 9<sup>th</sup> World Congress of Biotechnology, Germany, p. 503-506
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#### 4. PATENTS

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- PETRE, M, TEODORESCU, A., 2013.** Patent RO 00126277 for the invention: "Proceeding for cultivation of macromycetes belonging to *Grifola frondosa* species and nutritive fungal biomass"
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- PETRE, M, TEODORESCU, A., 2013.** Patent RO 00126279 for the invention: "Proceeding for cultivation of macromycetes belonging to *Lentinus edodes* species and fungal biomass with anti-oxidative role"

## 5. MEDALS AND DIPLOMAS AWARDED BY THE INTERNATIONAL AND NATIONAL JURIES OF EXHIBITIONS AND FAIRS OF INVENTIONS

- 2006 - Silver medal and diploma at the 55th World Exhibition of Innovation, Research and New Technologies in Brussels - EUREKA 2006 for invention: „Growing process of macromycete species *Pleurotus ostreatus* to get immunostimulator, antitumoral and antiinfection bioproducts”, author: Marian Petre
- 2008 - Gold medal and diploma at the 6th International Exhibition of Inventions in Suzhou, China, granted on 25.10.2008 by IFIA and China Association of Inventions for invention: „Biotechnology to produce *Lentinula edodes* biomass with immunomodulatory, antitumoral and antiinfection properties”, autor: Marian Petre
- 2009 – Silver medal and diploma at the International Exhibition of Inventions in Geneva in 2009, for the invention: "Biotechnological proceeding to get the fungal biomass of *Lentinula edodes*" author: Marian Petre
- 2009 - Silver medal and diploma at the International Exhibition of Inventions, Scientific Research and New Technologies INVENTIKA for invention "Biotechnology to produce the biomass of *Lentinula edodes* with immunomodulatory, antitumor and antiinfection properties", author: Marian Petre
- 2009 – Bronze medal and diploma at the International Exhibition of Inventions, Scientific Research and New Technologies INVENTIKA the invention: "Method and apparatus for growing the edible and medicinal mushrooms", authors: Marian Petre, Adrian Nicolescu and Marcel Dobre
- 2009 – Genius medal and diploma at the International Fair of Inventions GENIUS - Europe invention: "Biotechnological proceeding for controlled cultivation of *Ganoderma lucidum*" author: Marian Petre
- 2010 – Silver medal and diploma at the International Exhibition of Inventions in Warsaw - iWIS 2010 for the invention: "Biotechnological proceeding for controlled cultivation of *Ganoderma lucidum*" author: Marian Petre
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- 2011 – Silver medal and diploma at the International Exhibition of Inventions in Brussels - EUREKA - for the invention: "Proceeding and installation for cultivating eatable and medicinal mushrooms", authors: Marian Petre, Adrian Nicolescu and Marcel Dobre
- 2013 – Gold medal and diploma at The European Exhibition of Creativity and Innovation EUROINVENT - Iasi 2013 for the invention: "Proceeding and installation for cultivating eatable and medicinal mushrooms", authors: Marian Petre, Adrian Nicolescu and Marcel Dobre
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