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Facultatea de Inginerie și Agronomie din Brăila  
Departamentul: Mediu, Inginerie Aplicată și Agricultură  
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## LISTA LUCRĂRILOR ȘTIINȚIFICE

### A. Teza de doctorat

Cercetări privind utilizarea generatoarelor sonice gazodinamice în procesele tehnologice de epurare a apei

### B. Cărți și capitole în cărți publicate în ultimii 10 ani

1) Anca Șerban, *Utilizarea generatoarelor sonice gazodinamice în procesele tehnologice de epurare a apelor uzate*, Editura Zigotto, Galați, 2012, ISBN 978-606-8303-57-4

### C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

#### ISI Proceedings

1) Burlacu O. S., Turek Rahoveanu M. M., **Serban A.**, Institutional health in the context of sustainable development, 31<sup>st</sup> International-Business-Information-Management-Association Conference, Milan, ITALY, APR 25-26, 2018, Int Business Informat Management Assoc INNOVATION MANAGEMENT AND EDUCATION EXCELLENCE THROUGH VISION 2020, VOLS I–XI, Pages 506-512, 2018, ISBN: 978-0-9998551-0-2

#### BDI/B+

- 1) **Ștefan A.**, Leopa A., Study on the influence of sonic generator geometry on acoustic parameters, The Annals of Dunarea de jos University of Galati, Fascicle XIV, Mechanical Engineering, 2010, pag. 77-80, ISSN 1224-561
- 2) Leopa, A., **Ștefan, A.**, Filter signals a first step in interpreting experimental results, The Annals of Dunarea de Jos University of Galati, Fascicle XIV -Mechanical Engineering, 2010, pag. 71-76, ISSN 1224-5615
- 3) **Ștefan, A.**, The research of the physico-chemical parameters of water treated with sonic technology, JOURNAL OF SCIENCE AND ARTS , Universitatea Valahia din Târgoviște, 2010, nr.1(12), pag. 79-82, eISSN 2068-3049
- 4) **Ștefan A.**, Bălan G., The Chemistry Of The Raw Water Treated By Air-Jet Ultrasound Generator, Revue Roumaine des Sciences Techniques - Série de Mécanique Appliquée, Published/Hosted by Romanian Academy, Bucharest, Vol. 56, No.1/2011, pag. 85-92, Ed. Academiei Române, ISSN: 0035-4074
- 5) **Ștefan A.**, Graur I, Bălan G, The physical and chemical indicators at the ultrasound treatment of water with poly aluminum chloride, The 10<sup>th</sup> International conference on colloids and surfaces chemistry, June 9<sup>th</sup> – 11<sup>th</sup> 2011, The Annals of "Dunarea de Jos" University of Galati, Mathematics, Physics, Theoretical Mechanics, fascicle II, year III (XXXIV) 2011, Galati University Press, pag. 164-170, ISBN 978-606-8348-05-6.
- 6) Cîrnu C, **Ștefan A.**, Bălan G, Sonomicrobiology of raw water at the treatment by air-jet generators, The 9<sup>th</sup> International Conference "Constructive and technological design optimization in the machines building field", OPROTEH – 2011, Bacău, May 24 – 26, Journal of Engineering Studies and Research, vol. 18, nr. 2/2012, pag.31-38, ISSN 2068-7559.

- 7) **Șerban A.**, Bordei M., Ciurea A., Burtea M.C., “Physic-Chemical Water Treated with Sonic Generator and  $Al_2(SO_4)_3$  Coagulant”, The Annals of Dunarea de jos University of Galati, Fascicle IX, Metallurgy and Material Science, nr. 2/2012, ISSN 1453-083 X, p. 57 -63.
- 8) **Șerban A.**, “Study on the influence of ultrasound frequency emitted by a sonic generator on water parameters”, The Annals of Dunarea de jos University of Galati, Fascicle XIV, Mechanical Engineering, nr. 1/2013, ISSN 1224-5615, p 73-76.
- 9) Burtea M.C., **Șerban A.**, Cantemir Gh., “Study on the Chemical Parameters of Polluted Groundwater in Some Areas of Brăila County”, International Conference TEME 2013- New trends in environmental and materials engineering, october 28<sup>th</sup> - 30<sup>th</sup>, 2013, Galati, The Annals of Dunarea de jos University of Galati, Fascicle IX, Metallurgy and Material Science, Special Issue-2013, p. 225-230, Ed. Galati University Press, ISSN 1453-083X
- 10) **Șerban A.**, Leopa A., “The Experimental Analysis of Ultrasonic Treatment Efficiency of Wastewaters from Fish Farms”, International Conference TEME 2013- New trends in environmental and materials engineering, october 28<sup>th</sup> - 30<sup>th</sup>, 2013, Galati, The Annals of Dunarea de jos University of Galati, Fascicle IX, Metallurgy and Material Science, Special Issue-2013, p. 257-262, Ed. Galati University Press, ISSN 1453-083X
- 11) **Șerban A.**, Burtea M.C., Rîșnoveanu L., “Rolul educației ecologice în cadrul implementării politicii de mediu”, Simpozion Educația-Componentă esențială a politicii de mediu, Buletinul AGIR, nr. 3/2013, p. 11-16, Ed. AGIR, ISSN 2247-3548
- 12) Cîrnu C.L., **Șerban A.**, “The calculation procedure of experimental sonic generator with two resonators designed for water treatment processes”, The Annals of Dunarea de jos University of Galati, Fascicle XIV, Mechanical Engineering, volume 2/2013, Issue XXII, p. 53-56, Ed. Galati University Press, ISSN 1224-5615
- 13) **Șerban A.**, Burtea M.C., Rîșnoveanu L., “Ecological treatment method of the Danube water for drinking water quality improvement”, Proceedings of the International Conference Danube Black Sea 3E – Energy, Environment & Efficiency, September 18-21, 2013, Galati, The Annals of Dunarea de jos University of Galati, Fascicle II, Mathematics, Physics, Theoretical mechanics, nr. 2/2013, p. 223-227, Ed. Galati University Press, ISSN 2067-2071
- 14) **Ștefan A.**, Burtea M.C., „Effect of ultrasonic treatment and aluminium sulphate on chemical water indicators”, Journal of Engineering Studies and Research, „Vasile Alecsandri” University of Bacău, Vol.19, nr.1/2013, p. 68-72, Ed. Alma Mater Publishing House, ISSN 2068-7559
- 15) **Șerban A.**, Burtea M.C., Rîșnoveanu L., “Educația populației privind calitatea resurselor de apă destinate consumului uman”, Simpozion Educația-Componentă esențială a politicii de mediu, Buletinul AGIR, nr. 3/2014, p. 124-128, Ed. AGIR, ISSN 2247-3548
- 16) Graur I., **Șerban A.**, Matei N., “Experimental study of the air-jet stem generator”, The Annals of “Dunarea de Jos” University of Galati, Fascicle XIV- Mechanical Engineering, volume 1/2015, p.13-18, ISSN 1224 – 5615
- 17) **Șerban A.**, Burtea M.C., “Aspects on potential degradation of some soils in Braila County”, The Third International Conference of Young Researchers “New trends in environmental and materials engineering” (TEME), 21 – 23 october 2015, Galați, Romania, The Annals of “Dunarea de Jos” University of Galati, Fascicle IX- Metallurgy and Materials Science, Special Issue – 2015, p. 87-91, ISSN 1453 – 083X
- 18) Leopa A., **Șerban A.**, “Aspects Regarding the Impact of Energy Recovery from Domestic Waste on Atmosphere”, The Third International Conference of Young Researchers “New trends in environmental and materials engineering” (TEME), 21 – 23 october 2015, Galați, Romania, The Annals of “Dunarea de Jos” University of Galati, Fascicle IX- Metallurgy and Materials Science, volume 1/ 2016, p. 21-26, ISSN 1453 – 083X
- 19) **Șerban A.**, Burtea M.C., “Aspects on the water sources quality in countryside”, The Annals of “Dunarea de Jos” University of Galati, Fascicle XIV- Mechanical Engineering,

volume 1/2017, issue XXIX, p.25-28, ISSN 1224 – 5615

- 20) Leopa A., **Șerban A.**, Burtea M.C., Gojan P., “Study on the Sludge Capitalization as a Fertilizer for Ornamental Garden Plants”, The V<sup>th</sup> edition of the International Conference “New trends in environmental and materials engineering” (TEME), 23 – 25 october 2019, Galați, Romania, The Annals of “Dunarea de Jos” University of Galați, Fascicle IX- Metallurgy and Materials Science, volume 3/ 2019, p. 16-20, e-ISSN 2668 – 4756

#### **D. Lucrări publicate în ultimii 10 ani în reviste și volume de conferințe cu referenți (neindexate)**

##### **- Reviste**

- 1) **Ștefan A.**, Acoustical research of the sonic air-jet radial generator, *Analele Universității Maritime*, Anul IX, Volumul 11, Constanța, 2008, ISSN 1582-3601, pag. 293-298.
- 2) **Ștefan A.**, Bălan G., *Efectul tratării sonice asupra parametrilor fizico-chimici ai apei de Dunăre*, Revista Meridian Ingineresc, nr. 3/2009, pag.11-18, Editura UTM, Chișinău, Republica Moldova
- 3) **Ștefan A.**, Bălan G., *Efectul tratării sonice asupra microbiologiei apei de Dunăre*, Revista Meridian Ingineresc, nr. 4/2009, pag. 35-40, Editura UTM, Chișinău, Republica Moldova
- 4) **Ștefan A.**, Bălan G., The Microbiological Effect of the Water Sonic Treatment, *Proceedings of the XXI<sup>st</sup> Annual Symposium of The Institute of Solid Mechanics and Session of The Commission of Acoustics SISOM & Acoustics 2010*, Romanian Academy, Bucharest, 27-28 May, 2010, ISSN 2068-0481
- 5) Cîrnu C., **Ștefan A.**, Bălan G, Acoustic parameters of the flat air-jet generator with two swirl resonators, *Proceedings of The XXII-th Annual Symposium of The Institute of Solid Mechanics and Session of The Commission of Acoustics SISOM & Acoustics 2011*, Romanian Academy, Bucharest, 25-26 May, 2011, pg. 216-222, ISSN 2068-0481

##### **- Selecție cu maximum 20 lucrări în volume de conferințe**

- 1) **Ștefan A.**, Cîrnu C., Bălan G., *The treatment of the Danube water by the ultrasound air-jet generator*, The 3<sup>rd</sup> International Conference on Thermal Engines and Environmental Engineering - METIME 2009, Galati 4-6 June, University “Dunărea de Jos” of Galati, Mechanical Engineering Faculty Thermodynamics and Heat Engines Department, Galați 2009.
- 2) **Ștefan A.**, Burtea M.C, *The chemical indicators of water with aluminium sulphate at the ultrasonic treatment*, The 9th International Conference “Constructive and technological design optimization in the machines building field”, OPROTEH – 2011, Bacău, May 24 – 26, 2011.
- 3) Burtea M.C., **Șerban A.**, Rîșnoveanu L., Dragomir M., *Comparative study on the protection of the environment in ecological systems of agriculture*, The Third International Conference of Young Researchers “New trends in environmental and materials engineering” (TEME), 21 – 23 october 2015, Galați, Romania.
- 4) Burtea M.C, Nechita P., **Șerban A.**, Risnoveanu L, *Aspects regarding the influence of irrigation water and its quality on soils and cultivated plants*, The 9<sup>th</sup> International Symposium on ADVANCED TECHNOLOGIES IN PULP, PAPER, CORRUGATED BOARD AND ENVIRONMENTAL ENGINEERING, September 12-15, Braila, 2017
- 5) Burtea M.C, Nechita P., **Șerban A.**, Risnoveanu L, *The management of agricultural land use when the irrigation water has different properties*, UGAL International Conference Multidisciplinary HUB for the Higher Education Internationalization by Means of Innovative Interaction with the Labour Market and Society , 26<sup>th</sup>-27<sup>th</sup> of October, 2018, ACADEMIC project, CNFIS – FDI – 2018 – 0054

- 6) **Șerban A.**, Leopa A., Turek Rahoveanu M.M., *The mineral wastes from construction inappropriately stored and their management regarding the potential impact on the ground*, UGAL International Conference Multidisciplinary HUB for the Higher Education Internationalization by Means of Innovative Interaction with the Labour Market and Society , 26<sup>th</sup>-27<sup>th</sup> of October, 2018, ACADEMIC project, CNFIS – FDI – 2018 – 0054
- 7) Burtea M.C., Rîșnoveanu L., **Șerban A.**, Cojocaru M.E., Cojocaru A., *Study on the remanence of pesticides in the soil trophic system: water –soil - plants*, The V<sup>th</sup> edition of the International Conference “New trends in environmental and materials engineering” (TEME), 23-25 october 2019, Galați, Romania

**E. Brevete obținute în întreaga activitate**

- nu este cazul