

LISTA LUCRĂRI

DR. DUMITRIU CRISTIAN ȘTEFAN

LISTA LUCRARILOR RELEVANTE PENTRU REALIZĂRILE PROFESIONALE

1. A. Bărbulescu, L. Barbeș, **C. Ș. Dumitriu***, Study of the additives for polymeric materials by Cheminformatics methods, *IOP Conference Series: Materials Science and Engineering (MSE)*, **1242**, 2022, 12003, doi:10.1088/1757-899X/1242/1/012003
2. A. Bărbulescu, **C. Ș. Dumitriu***, Modeling the Voltage Produced by Ultrasound in Seawater by Stochastic and Artificial Intelligence Methods, *Sensors*, **22(3)**, 2022, 1089, <https://doi.org/10.3390/s22031089>.
3. A. Bărbulescu, V. Mârza, **C. Ș. Dumitriu**, Patent no RO 123086-B1 (30.09.2010), Installation and method for measuring and determining the effects produced by cavitation in ultrasound field in stationary and circulating media.
4. L. Barbeș, **C. Ș. Dumitriu**, *Polymeric Composite Materials*, Lambert Academic Publishing, 2021, 140 pag. (ISBN 978-620-4-19941-2)
5. **C. Ș. Dumitriu**, A. Bărbulescu, *Studii privind alajele cu bază de cupru folosite în construcțiile de nave – Modelarea pierderilor de masă în diferite medii*, Sitech, Craiova, 2007, 137 pag (ISBN 978-873-746-660-0)
6. C. Șerban, **C. Ș. Dumitriu***, A. Bărbulescu, Solving Single Nesting Problem Using a Genetic Algorithm, *Analele Științifice ale Universității Ovidius din Constanța, Matematică*, **30(2)**, 2022, 259-272, DOI: 10.2478/auom-2022-0029.

TEZA DE DOCTORAT

Studii și cercetări privind coroziunea materialelor metalice destinate construcțiilor navale, 20.07.2006, Universitatea "Dunărea de Jos" din Galați.

BREVETE DE INVENȚIE

1. A. Bărbulescu, V. Mârza, **C. Ș. Dumitriu**, Patent no RO 123086-B1 (30.09.2010), Installation and method for measuring and determining the effects produced by cavitation in ultrasound field in stationary and circulating media.
2. **C. Ș. Dumitriu**, Patent no RO 118409-B (30.05.2003) Dispozitiv de masurat pescajul.

CĂRȚI ȘI CAPITOLE DE CĂRȚI

1. **C. Ș. Dumitriu**, A. Bărbulescu, *Studii privind alajele cu bază de cupru folosite în construcțiile de nave – Modelarea pierderilor de masă în diferite medii*, Sitech, Craiova, 2007, 137 pag (ISBN 978-873-746-660-0).
2. A. Bărbulescu, **C. Ș. Dumitriu**, *Mathematical aspects of the study of the cavitation in liquids*, in Series on Mathematical Modelling of Environmental and Life Sciences Problems, Proceedings of the 4th Workshop, Sept. 2005, Constanța, Romania, S. Ion, G. Marinosh, C. Popa (eds.), Editura Academiei Române, București, 2006, pp. 7-15 (ISBN (10) 973-27-1358-5).
3. A. Bărbulescu, **C. Ș. Dumitriu**, *Bazele statistice ale Teoriei Fiabilității*, Editura Sitech, Craiova, 2022, 146 pag. (ISBN 978-606-11-8120-9).

4. L. Barbeș, **C. Ș. Dumitriu**, *Polymeric Composite Materials*, Lambert Academic Publishing, 2021, 140 pag. (ISBN 978-620-4-19941-2).
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6. **C. Ș. Dumitriu**, *On the copper-based materials corrosion*, in Physics Studies, M. Emek (ed.), IKSAD Publishing House, 2021, pp. 67-100 (ISBN 978-625-7562-96-6).
7. **C. Ș. Dumitriu**, *Assessing the fractal characteristics of precipitation series*, in Scientific Researches, Sevi Öz (ed.), IKSAD Publishing House, 2021, pp. 95-114 (ISBN: 978-625-8061-25-3).
8. **C. Ș. Dumitriu**, A. Bărbulescu, *Știința materialelor. Suport de curs pentru invatamantul superior*, Editura Sitech, Craiova, 2022, 106 p. (ISBN 978-606-11-8122-3)

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1. A. Al-Taani, Y. Nazzal, F. Howari, J. Iqbal, N. Bou-Orm, C. M. Xavier, A. Bărbulescu, M. Sharma, **C. Ș. Dumitriu***, Contamination Assessment of Heavy Metals in Agricultural Soil, in the Liwa Area (UAE), *Toxics*, **9(3)**, 2021, 53, <https://doi.org/10.3390/toxics9030053> FI 4.146 Q2
2. F. Aonofriesei, A. Bărbulescu, **C. Ș. Dumitriu***, Statistical analysis of morphological parameters of microbial aggregates in the activated sludge from a wastewater treatment plant for improving its performances, *Romanian Journal of Physics*, **66(7-8)**, 2021, 809, FI 1.888 Q3
3. A. Bărbulescu, L. Barbeș, **C. Ș. Dumitriu**, Computer-aided classification of new psychoactive substances, *Journal of Chemistry*, vol. 2021, Article ID 4816970, 11 pag; <https://doi.org/10.1155/2021/4816970>. FI 2.506 Q3
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10. A. Bărbulescu, **C. S. Dumitriu**, ARIMA and Wavelet-ARIMA Models for the Signal Produced by Ultrasound in Diesel, *2021 25th International Conference on System Theory, Control and Computing (ICSTCC)*, 2021, pp. 671-676, doi: 10.1109/ICSTCC52150.2021.9607321.
11. A. Bărbulescu, **C. Ș. Dumitriu**, Assessing the fractal characteristics of signals in ultrasound cavitation, *2021 25th International Conference on System Theory, Control and Computing (ICSTCC)*, 2021, pp. 677-681, doi:10.1109/ICSTCC52150.2021.9607168.

12. A. Bărbulescu, **C. Ș. Dumitriu***, Modeling the Voltage Produced by Ultrasound in Seawater by Stochastic and Artificial Intelligence Methods, *Sensors*, **22(3)**, 2022, 1089, <https://doi.org/10.3390/s22031089> **FI 3.576 Q1**
13. A. Bărbulescu, **C. Ș. Dumitriu**, F. Dragomir, Detecting Aberrant Values and Their Influence on the Time Series Forecast, *2021 International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME)*, pp. 1-5, doi: 10.1109/ICECCME52200.2021.9591085.
14. A. Bărbulescu, **C. Ș. Dumitriu***, I. Ilie, S.-B. Barbeș. Influence of Anomalies on the Models for Nitrogen Oxides and Ozone Series, *Atmosphere*, **13**, 2022, 558, <https://doi.org/10.3390/atmos13040558> **FI 2.686 Q3**
15. A. Bărbulescu, **C. Ș. Dumitriu***, C. Maftai, On the Probable Maximum Precipitation method, *Romanian Journal of Physics*, **67**, 2022, 801, **FI 1.888 Q3**
16. A. Bărbulescu, **C. Ș. Dumitriu***, N. Popescu – Bodorin, Assessing Atmospheric Pollution and Its Impact on the Human Health, *Atmosphere*, **13**, 2022 **FI 2,686 Q3**
17. A. Bărbulescu, F. Postolache, **C. Ș. Dumitriu**, Estimating the precipitation amount at regional scale using a new tool, *Climate Analyzer, Hydrology*, **8(3)**, 2021, 125, <https://doi.org/10.3390/hydrology8030125>. **ESCI**
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19. F. Dragomir, **C. S. Dumitriu**, A. Bărbulescu, Recommendation systems - modeling abusive clauses in e-commerce, *2021 International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME)*, 2021, Mauritius, DOI: 10.1109/ICECCME52200.2021.9590828
20. F. Postolache, **C. Ș. Dumitriu**, Reshaping the LMS IT Architecture and Educators Methodology through Blended Learning Approach, *2021 13th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)*, 2021, pp. 1-6, doi: 10.1109/ECAI52376.2021.9515134
21. M. Mihăilescu, A. Negrea, M. Ciopec, P. Negrea, N. Duțeanu, I. Grozav, P. Svera, C. Vancea, A. Bărbulescu, **C. Ș. Dumitriu***, Full factorial design for gold recovery from industrial solutions, *Toxics*, **9(5)**, 2021, 111, <https://doi.org/10.3390/toxics9050111> **FI 4.146 Q2**
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24. C. Șerban, **C. Ș. Dumitriu***, A. Bărbulescu, Solving Single Nesting Problem Using a Genetic Algorithm, *Analele Științifice ale Universității Ovidius din Constanța, Matematică*, **30(2)**, 2022, 259-272, DOI: 10.2478/auom-2022-0029 **FI 1.045 Q2**
25. C. Șerban, A. Bărbulescu, **C. Ș. Dumitriu***, A new GA-IDW approach for interpolating the precipitation, *WRE2021*, 1-4 Nov.2021, *IOP Conference Series: Earth and Environmental Science*, **958**, 2022, 012006, doi:10.1088/1755-1315/958/1/012006.
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(* marchează autorul de corespondență)

**PUBLICAȚII ÎN JURNALE ȘI PROCEEDINGS-URI ALE UNOR CONFERINȚE INDEXATE ÎN
ALTE BAZE DE DATE INTERNAȚIONALE (ÎN AFARĂ DE WOS ȘI SCOPUS)**

1. A. Bărbulescu, **C. Ș. Dumitriu**, Models of the mass loss of some copper alloys, *Chem. Bull. Politehnica University (Timișoara)*, vol. 52 (66), 1-2, 2007, pp. 120-123.
2. A. Bărbulescu, **C. Ș. Dumitriu**, Markov Switching Model for Financial Time Series, *Ovidius University Annals, Economic Sciences Series*, vol. XXI, Issue 1, 2021, pp. 193-198. (EBSCO)
3. A. Bărbulescu, **C. Ș. Dumitriu**, Artificial intelligence models for financial time series, *Ovidius University Annals, Economic Sciences Series*, vol. XXI, Issue 1, 2021, pp.685-690. (EBSCO)
4. A. Bărbulescu, **C. Ș. Dumitriu**, RBF model for the mass loss of a brass in cavitation field, *The Annals of Dunarea de Jos University of Galati, Fascicle IX, Metallurgy and Materials Science*, nr. 4, 2021, pp.17-21. (EBSCO)
5. A. Bărbulescu, **C. Ș. Dumitriu**, On the fractal characteristics of some meteorological extreme series recorded at Constanta, Romania, *Ovidius University Annals of Constanta - Series Civil Engineering*, year 23, pp.77-82, 2021. DOI: 10.2478/ouacsce-2021-009. (EBSCO)
6. A. Bărbulescu, C. Maftai, **C. Ș. Dumitriu**, The modeling of the climatic process that participates at the sizing of an irrigation system, *Bull. for Applied & Computer Mathematics (CII-2048)*, Technical University of Budapest, 2002, pp. 11 – 20 (ISSN 0133 – 3526)
7. J. Deguenon, J. Deguenon, **C. Ș. Dumitriu**, Statistical Analysis and Classification of Pollutants in the Nokoué Lake (Benin), *Ovidius University Annals of Constanta - Series Civil Engineering*, year 23, 2021, pp. 55-62. DOI: 10.2478/ouacsce-2021-006. (EBSCO)
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11. **C. S. Dumitriu**, A. Bărbulescu, On the freeboard calculus, *Automation, Computers Applied Mathematics*, vol.13, no.3, 2004, pp. 13 – 20 (ISSN 1221 – 437x) (ZentrallBlatt)
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13. C. Popescu, **C. Ș. Dumitriu**, Study of susceptibility to flash floods in the Vărbilău River catchment, *Ovidius University Annals of Constanta - Series Civil Engineering*, year 23, 2021, pp. 69-76. DOI: 10.2478/ouacsce-2021-008. (EBSCO, Index Copernicus)
14. A. Bărbulescu, **C. Ș. Dumitriu**, Statistical Analysis of the Impact of Application of the European Union Rules on the Number of Death from Traffic Accidents and the CO Pollution, "Ovidius" University Annals, Economic Sciences Series Volume XXI, Issue 2 /2021. (EBSCO)