

# Sergiu-Viorel CARAMAN

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## Scientific Activity

### ➤ Published papers

#### Papers/Studies published in international journals, ISI

1. Belea R., **Caraman S.**, Palade V., *Diagnosing the Population State in a Genetic Algorithm Using Hamming Distance*, Volume 3215/2004 - Knowledge-Based Intelligent Information and Engineering Systems, **Lecture Notes in Computer Science (ISI Journal + indexata in baza de date Inspec)**, Publisher: Springer-Verlag GmbH, ISSN: 0302-9743, pp.246-255.
2. **Caraman, S.**, Sbarciog, M., Barbu, M., *Predictive control of a wastewater treatment process*, **International Journal of Computers, Communications and Control** (<http://journal.univagora.ro/>), Vol. 2, No.2, pp. 132-142.
3. M. Barbu, **S. Caraman**, E. Ceanga, Optimal Control Strategy of a Biotechnological Process Using a Fuzzy Zonal Model, International Journal of Romanian Biotechnological Letters, Vol. 13, No. 5, September – October 2008, pp. 29-38.
4. M. Barbu, **S. Caraman**, E. Ceanga, A Modified ASM3 Model for a Trickling Filter, International Journal of Romanian Biotechnological Letters, Vol. 13, No. 5, September – October 2008, pp. 39-48.

#### Papers published in journals contained in international data-basis\*

1. Belea R., **Caraman S.**, Palade V., *Convergence Analysis of Genetic Algorithm Using a Unified Representation of Genes*, International Journal of Knowledge-Based Intelligent Engineering Systems, Vol. 10, No. 1, 2006, pp. 29-40, ISSN 1327-2314, **(ISI Journal + indexata in baza de date Inspec)**.

#### Papers/Studies published in roumanian journals recognized by Roumanian Research Council

1. **Caraman, S.**, Frangu, L., Ceangă, E., *Modeling and Optimal Control Techniques of Biosynthesis Processes in Batch Bioreactors*, **Control Engineering and Applied Informatics**, Revista Societății Romane de Automatică și Informatică Tehnică (SRAIT), București, **3**, nr. 1/2001, pp. 15-28, ISSN 1454-8658.
2. Frangu, L., **Caraman, S.**, Ceangă E., *Model Based Predictive Control using Neural Network for Bioreactor Process Control*, **Control Engineering and Applied Informatics**, Revista Societății Romane de Automatică și Informatică Tehnică (SRAIT), București, **3**, nr. 1/2001, pp. 29-38, ISSN 1454-8658.
3. **Caraman, S.**, Barbu, M., *Mean Age Control Strategies Techniques of the Continuous and Discontinuous Biosynthesis Processes. Comparative Study*, **Control Engineering and Applied Informatics**, Revista Societății Romane de Automatică și Informatică Tehnică (SRAIT), **5**, No. 2, pp. 31-40, June 2003, ISSN 1454-8658.
4. **S. Caraman**, L. Frangu, *Software generator of the biotechnological processes models*, **Control Engineering and Applied Informatics**, Revista Societății Romane de Automatică și Informatică Tehnică

(SRAIT), Bucureşti, **4**, nr. 3/2002, pp. 33-38, ISSN 1454-8658.

5. M. Barbu, **S. Caraman**, E. Ceanga, *Stochastic Estimation Techniques for Biotechnological Processes*, **Control Engineering and Applied Informatics**, Revista Societatii Romane de Automatica si Informatica Tehnica (SRAIT), Bucureşti, **6**, nr. 4/2004, pp. 43-51, ISSN 1454-8658.
6. **Caraman, S.**, Barbu, M., Ceanga E., *Robust Multimodel Control Using QFT Techniques of a Wastewater Treatment Process*, **Control Engineering and Applied Informatics**, Revista Societatii Romane de Automatica si Informatica Tehnica (SRAIT), Bucureşti, **7**, nr. 2/2005, pp. 10-17, ISSN 1454-8658.
7. S. Bumbaru, E. Ceanga, **S. Caraman**, Gh. Mencinicopschi, *Biosynthesis Process Optimizing Modelling of Alfaamilase and Bacterial Proteasis*, **Analele Universitatii din Galati**, Fascicula III, anii 1987-1989, pp. 30-32 (ISSN 1221-454X).
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10. **S. Caraman**, E. Ceanga, S. Bumbaru, *Some Results Regarding Modelling and Control of Alphaamilase and Protease Biosynthesis Process in Discontinuous Bioreactors*, **The Annals of “Dunarea de Jos” University of Galati**, Fascicle III, 1996, pp. 28-32, ISSN 1221-454X.
11. **S. Caraman**, E. Ceanga, S. Bumbaru, *Variable Structure Models Applied to Inference Engine of Enzymatic Biosynthesis Process Control Expert Systems*, **The Annals of “Dunarea de Jos” University of Galati**, Fascicle III, 1997, pp. 49-53, ISSN 1221-454X.
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24. **S. Caraman**, S. Bumbaru, Gh. Mencinicopschi, A Qualitative Model of the Mass Proteic Accumulation from Polyporus Mycelium, **Revista Institutului de Chimie Alimentara Bucuresti, Stiinte si Tehnologii Alimentare**, Vol. 3, Nr. 3, mai - iunie 1995, pp. 64-65, ISSN 1222 0000.

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5. **Caraman, S.**, Barbu, M., Dumitrascu, G., *Wastewater Treatment Process Identification Based on the Calculus of State Variables Sensibilities with respect to the Process Coefficients*, IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics, AQTR 2006, Cluj-Napoca, Proceedings IEEE Tome 2, 2006, pp. 199-204, ISBN 1-4244-0360-X (**indexata BDI-IEEE Explorer + Inspec**).
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1. **Caraman, S.**, Sbarciog, M., Barbu, M., *Predictive control of a wastewater treatment process*, 1<sup>st</sup> IFAC Workshop on Applications of Large Scale Industrial Systems - ALSIS'06, August 30-31, Proceedings on the CD-ROM, 2006, ISBN 952-5183-28-9.
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