

**Şef lucrări dr.ing. RUSU-ANGHEL STELA**  
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**Lucrări științifice, cărți și brevete în domeniul disciplinelor din postul didactic  
(2002-2012)**

**A. Teza de doctorat :** *Cercetări privind modelarea și conducerea proceselor din fabricile de ciment*, Domeniul Științe tehnice, Universitatea Politehnica Timișoara, 1998

**B. Cărți și capitole în cărți**

B1. **Rusu-Anghel Stela**, Gherman Lucian ș.a., *Fuzzy Controllers- Recent Advances in Theory and Applications*, Ed. InTech, 2012, 20/578, ISBN 978-953-51-0759-0

B2. **Stela Rusu-Anghel**, Caius Pănoiu, Manuela Pănoiu, *Protecția liniei de contact și a echipamentelor conexe din transportul electric feroviar, utilizând logica fuzzy*, Editura MIRTON Timișoara, 2010, 249 pagini, ISBN 978-973-52-0878-3.

B3. **Stela Rusu-Anghel**, *Aplicații fuzzy în transportul electric feroviar*, Editura MIRTON Timișoara, 2010, 114 pagini, ISBN 978-973-52-0877-6

B4. **Rusu-Anghel Stela**, *Conducerea neconvențională a proceselor*, Editura MIRTON Timișoara, 2008, 249 pagini, ISBN 978-973-52-0479-2.

B5. Tirian Gelu Ovidiu, **Rusu-Anghel Stela**, *Automatizarea proceselor continue - Lucrari de laborator*, Editura MIRTON Timișoara, 2008, 115 pagini, ISBN 978-973-56-0467-9.

B6. Tirian Gelu Ovidiu, **Rusu-Anghel Stela**, *Teoria sistemelor și reglaj automat aplicații în Matlab*, Editura MIRTON Timișoara, 2007, 106 pagini, ISBN 978-973-52-0146-3.

**C. Lucrări indexate ISI/BDI**

**ISI Proceedings**

C1. **Rusu-Anghel Stela**, Tirian G.O., Osaci M., Diniș C., *Algorithms for Raw Material Dosage Control for Cement Plants*, 13th WSEAS International Conference on SYSTEMS, Recent Advances in SYSTEMS (Proceedings), Rodos, Greece, 2009, 23-25 Iulie, ISBN 978-960-474-097-0, ISSN 1790-2769, pag. 236-241.

C2. Corina Maria Diniș, Corina Daniela Cunțan, Angela Iagăr, Gabriel Nicolae Popa, **Rusu-Anghel Stela**, *Aspects Regarding the Fuzzy Logic in the Process Control from the Sintering Plants*, 13th WSEAS International Conference on SYSTEMS, Recent Advances in SYSTEMS (Proceedings), Rodos, Greece, 2009, 23-25 Iulie, ISBN 978-960-474-097-0, ISSN 1790-2769, pag. 277-282.

C3. Tirian G.O., **Rusu-Anghel Stela**, Pănoiu M., Pinca-Bretotean C., *Control of the Continuous Casting Process Using Neural Networks*, 13th WSEAS International Conference on COMPUTERS, Recent Advances in COMPUTERS (Proceedings), Rodos, Greece, 2009, 23-25 Iulie, ISBN 978-960-474-099-4, ISSN 1790-5109, pag. 199-204.

C4. Osaci M., Pănoiu M., Berdie A.D., **Rusu-Anghel Stela**, *Three-dimensional Stochastic Model for Simulation of the Nanoparticles Geometry in Nanoparticles Dispersed Magnetic Media*, 13th WSEAS International Conference on COMPUTERS, Recent Advances in COMPUTERS (Proceedings), Rodos, Greece, 2009, 23-25 Iulie, ISBN 978-960-474-099-4, ISSN 1790-5109, pag. 179-183.

C5. **Rusu-Anghel Stela**, Tirian G.O., Gherman L., Rusu N., *Experimental Considerations upon the Optimal Control of Reversing Rolling Mills*, 5th International Symposium on Applied Computational Intelligence and Informatics (SACI 2009), Proceedings of the 5th International Symposium on Applied Computational Intelligence and Informatics, Timișoara, Romania, 2009, 28-29 Mai, ISBN 978-1-4244-4478-6, pag. 295-300.

C6. Tirian G.O., O.Prostean, **Rusu-Anghel Stela**, Pinca B. C, D.Cristea, *Fuzzy System for Implementing the Cracks Control During the Continuous Casting*, Annals of DAAAM & Proceedings of the 20th International DAAAM Symposium, 25-28th November 2009, Volume 20, No.1, Vienna, Austria, 25-28 November, 2009, ISSN 1726-9679, pag. 1661-1662.

C7. **Rusu-Anghel Stela**, Tirian G.O., Rusu-Anghel N., Gherman P.L, *Digital Ear for Determination of Ball Mill Load*, Annals of DAAAM & Proceedings of the 20th International DAAAM Symposium, 25-28th November 2009, Volume 20, No.1, Vienna, Austria, 25-28 November, 2009, ISSN 1726-9679, pag. 1749-1750

### **BDI**

C8. **Rusu-Anghel Stela**, Miklos Cristina, Topor Marcel, *Chaos Theory based Control of Contact Force in Electric Railway Transportation System*, IEEEIC, 11th International Conference on Environment and Electrical Engineering, Venice, Italy, mai .2012, 5 pag., ISSN/ISBN 978-1-4577-1828-1 (IEEE XPLORE)

C9. **Rusu-Anghel Stela**, Cristina Miklos, Marcel Topor, Doru Demian, *Pantograph-Catenary system control using elements of chaos theory*, Pantograph-Catenary Interaction Framework for Intelligent Control, December 8th, 2011, Amiens, France, decembrie 2011, pp.105-109, ISSN/ISBN 0-7277-3252-8

C10. Doru Demian, Ion Girnita, Carmen Alic, **Rusu-Anghel Stela**, Cristina Miklos, *Contributions to the development and improvement of maintenance management of Catenary networks for railway electric traction*, Pantograph-Catenary Interaction Framework for Intelligent Control, December 8th, 2011, Amiens, France, decembrie 2011, pp.110-114, ISSN/ISBN 0-7277-3252-8

C11. **Rusu-Anghel Stela**, Pănoiu C., Pănoiu M., Topor M., Mezinescu S., *Improvement of electric railway transportation protection systems using a relay based on fuzzy logic*, IEEEIC, 10th Environment and electrical engineering (IEEEIC) Conference, Roma, Italia, mai 2011, pp.001-004, ISSN/ISBN978-1-4244-8781-3 (IEEE XPLORE)

C12. Gherman L., **Rusu-Anghel Stela**, Topor M., Mezinescu S., *Chaos Control in DC arc furnaces powered by parallel DC-DC buck converters*, 10th Environment and electrical engineering (IEEEIC) Conference, Roma, Italia, mai 2011, pp.011-015, ISSN/ISBN978-1-4244-8781-3 (IEEE XPLORE)

C13. **Rusu-Anghel Stela**, Miklos C., Averseng J., Tirian G.O., *Control System for Catenary-Pantograph Dynamic Interaction Force*, Proceedings of 2010 International Joint Conference on Computational Cybernetics and Technical Informatics (ICCC-CONTI) Timisoara, Romania, mai 2010, ISBN 978-1-4244-7432-5, pag.181-186 (IEEE XPLORE).

C14. Tirian G.O., Prostean G., **Rusu-Anghel Stela**, Cristea D., *Adaptive Control System of Continuous Casting Process Based on a Fuzzy Logic Mechanism*, Proceedings of 2010 International Joint Conference on Computational Cybernetics and Technical Informatics (Iccc-Conti) Timisoara, Romania, mai 2010, ISBN 978-1-4244-7432-5, pag. 379-382 (IEEE XPLORE).

C15. **Stela Rusu-Anghel**, I. Gârniță, I. Gavrilă, C. Pănoiu, M. Pănoiu, S. Mezinescu, *Advanced System for the Control of Work Regime of Railway Electric Drive Equipment*, 6<sup>th</sup> Wseas

International Conference on Energy, Environment, Ecosystems & Sustainable Development (Eeesd 10) Timișoara, România, octombrie 2010, ISSN/ISBN 1792-5924/978-960-474-237-0, pag.115-121 (SCOPUS ELSEVIER).

C16. Lucian Gherman, F. Șurianu, **Stela Rusu-Anghel**, S. Mezinescu, *Power System Harmonic Pollution Limitation Using Fuzzy Logic Controlled Active Filters*, 6<sup>th</sup> Wseas International Conference on Energy, Environment, Ecosystems & Sustainable Development (Eeesd 10) Timișoara, România, octombrie 2010, ISSN/ISBN 1792-5924/978-960-474-237-0, pag.101-109 (SCOPUS ELSEVIER).

C17. Tirian G.O., Pinca-Bretotean C., **Rusu-Anghel Stela**, *Cracks Prediction Using Artificial Neural Networks in Continuous Casting of Steel*, 28th IASTED International Conference on Modelling, Identification and Control, Proceedings of the 28th IASTED International Conference on Modelling, Identification and Control, Innsbruck, Austria, 2009, 16-18 Februarie, ISBN 978-0-88986-781-9, pag. 108-112 (SCOPUS).

C18. N. Rusu, J. Averseng, C. Miklos, C. Alic, **Rusu-Anghel Stela**, *Dynamic Modeling of Pantograph - Catenary System for Energy Loss Control*, AQTR 2006 - THETA 15, 2006 IEEE-TTTC - International Conference on Automation, Quality and Testing, Robotics, Proceedings of the AQTR 2006 - THETA 15, 2006 IEEE-TTTC - International Conference on Automation, Quality and Testing, Robotics, Cluj-Napoca, Romania, (IEEE Explore), 2006, 25-28 Mai, ISBN (10) 973-713-114-2, ISSN (13) 978-973-713-114-0, pag. 11-14.

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

##### **- Reviste**

D1. Rusu N., Hărău C., Ilca I., **Rusu-Anghel Stela**, *Avoiding strain on continuous casting by correlation of the work rate*, Metalurgia International, Categoria B, 2004, vol.5, pag. 35-38.

##### **- Conferințe**

D2. **Stela Rusu-Anghel**, L. Gherman, S. Mezinescu, *Using the Matlab-Simulink Simulation for Operating Active Filters Ordered by Digital Signal Processor (DSP)*, International Symposium on Advanced Engineering & Applied Management 40<sup>th</sup> Anniversary in Higher Education (1970-2010), Hunedoara, România, noiembrie 2010, ISBN 978-973-0-09340-7, pag. II-79-II-86.

D3. **Stela Rusu-Anghel**, L. Gherman, S. Mezinescu, *Management Flow Control Rotor Induction Machine Using Fuzzy Regulators*, International Symposium on Advanced Engineering & Applied Management 40<sup>th</sup> Anniversary in Higher Education (1970-2010), Hunedoara, România, noiembrie 2010, ISBN 978-973-0-09340-7, pag. II-87-II-94.

D4. Lucian Gherman, **Stela Rusu-Anghel**, S. Mezinescu, *Using DSP to Order Active Filters*, International Symposium on Advanced Engineering & Applied Management 40<sup>th</sup> Anniversary in Higher Education (1970-2010), Hunedoara, România, noiembrie 2010, ISBN 978-973-0-09340-7, pag. II-99-II-106.

D5. **Rusu-Anghel Stela**, Tirian G.O., *Experimental Research for Identifying Industrial Processes by Statistical Methods*, 10th International Symposium "Interdisciplinary Regional research" - Romania - Hungary - Serbia, ISIRR 2009, Hunedoara, Romania, 2009, 23-24 Aprilie, ISBN 1584-2673, 6 pag.

D6. **Rusu-Anghel Stela**, *Automatic Determination of the Mineral Composition of the Portland Cement Clinker*, 10th International Symposium "Interdisciplinary Regional research" - Romania - Hungary-Serbia, ISIRR2009, Hunedoara, Romania, 2009, 23-24 Aprilie, ISBN 1584-2673, 6 pag.

D7. Tirian G.O., **Rusu-Anghel Stela**, Pinca-Bretotean C., *Prediction of the Signals Using the Neuronal Networks*, 10th International Symposium "Interdisciplinary Regional research" -

Romania - Hungary - Serbia, ISIRR 2009, Hunedoara, Romania, 2009, 23-24 Aprilie, ISBN 1584-2673, 4 pag.

D8. **Rusu-Anghel Stela**, Rusu N., *Advanced Control of the Agglomerating Process of the Ferrous Ores*, AQTR 2004 - THETA 14, Proceedings of 2004 IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics, Tome II, Cluj-Napoca, Romania, 2004, 13-15 Mai, ISBN 973-713-047-2, pag. 321-326.

D9. Caius Pănoiu, **Rusu-Anghel Stela**, *Analysis of the quality of the energy to the UHP three-phase arc furnaces*, 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, vol. III, Chişinău, Republica Moldova, 2003, 26-27 Septembrie, ISBN 9975-9704-9-4, pag. 197-201.

D10. Demian D., Rusu N., **Rusu-Anghel Stela**, Fule A., Takacs I., *Computerized System for a More Fluid Cross-Border Railroad Traffic*, The VIIth International Symposium of Interdisciplinary Regional Research, Hungary - Serbia - Montenegro - Romania, ISIRR 2003, Secţiunea V, Hunedoara, Romania, 2003, 25-26 Septembrie, ISBN 1454-6531, pag. 757-760.

D11. N. Rusu, **Rusu-Anghel Stela**, M. Bălan, *Neural System Meant to Reduce the Wastes With Steel Continuous Casting*, 14th International Conference on Control Systems and Computer Science, Proceedings CSCS - 14, vol.1, Bucureşti, Romania, 2003, 2-5 Iulie, ISBN 973-8449-17-0, pag. 211-216.

D12. Rusu N., **Rusu-Anghel Stela**, *Fuzzy Solution for a Protection System for the Contact Line*, 6th International Symposium Interdisciplinary Regional Research Hungary-Romania-Yugoslavia, Proceedings ISIRR 2002, Section 2: Technical Sciences, Novi Sad, FR Yugoslavia, 2002, 3-4 Octombrie, ISBN 86-499-0033X, pag. 185-190

D13. Rusu N., **Rusu-Anghel Stela**, Cunţan C., *A new Approach Of the Level Control in the Mold Using the Fuzzy Logic*, 6th International Symposium Interdisciplinary Regional Research Hungary-Romania-Yugoslavia, Proceedings ISIRR 2002, Section 2: Technical Sciences, Novi Sad, FR Yugoslavia, 2002, 3-4 Octombrie, ISBN 86-499-0033X, pag. 190-194

D14. N. Rusu, **Rusu-Anghel Stela**, *The Use of Neural Networks in Controlling the Surface Quality of Continuous Cast Products*, AQTR - THETA 13, Proceedings of 2002 IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics, Tome I, Cluj-Napoca, Romania, 2002, 23-25 Mai, ISBN 973-9357-10-3, pag. 480-483.

D15. **Rusu-Anghel Stela**, Rusu N., Cunţan C., *The Management of the Process of Secondary Cooling for Steel Continuous Casting*, AQTR - THETA 13, Proceedings of 2002 IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics, Tome II, Cluj-Napoca, Romania, 2002, 23-25 Mai, ISBN 973-9357-10-3, pag. 286-291.

D16. Rusu N., **Rusu-Anghel Stela**, Lako L., *Advanced Control and Protection System in Electric Railway Transport*, AQTR - THETA 13, Proceedings of 2002 IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics, Tome II, Cluj-Napoca, Romania, 2002, 23-25 Mai, ISBN 973-9357-10-3, pag. 292-295.

**E. Brevete -**

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**Semnătura:**

**Şef lucrări dr.ing. RUSU-ANGHEL STELA**