

Prof.univ.dr.ing. Cristian Silviu Simionescu

Lista de lucrări reprezentative

Teza de doctorat

Titlu: Scule cu plăcuțe schimbabile pentru danturarea roților cilindrice de modul mare
Conducător științific: prof.dr.ing. Emil Țâru
Anul susținerii: 1998

Brevete de invenție

- 1/ Brevet RO 90140, Robot cu acționare hidraulică, Inventors: Cristian-Silviu Simionescu, Marina Simionescu
- 2/ Brevet RO 79778, Cheie dinamometrică, Inventors: Mihai Simionescu, Chiorean Ioan, Cristian-Silviu Simionescu

Cărți și capitole din cărți

- 1/ C.S. Simionescu - Detachable Small Plates Tools for Toothing High Pitch Gear – LAMBERT ACADEMIC PUBLISHING – Saarbruken 2015, ISBN 978-3-659-43866-0, 83 pag.
- 2/ C.S. Simionescu - Mentenanța și fiabilitatea mașinilor – Editura AGIR – București 2014, ISBN 978-973-720-547-6, 165 pag.
- 3/ C.S. Simionescu - Organe de masini și elemente de cuplare și amortizare. Îndrumar pentru lucrări practice de laborator – Editura AGIR – București 2014, ISBN 978-973-720-548-3, 75 pag.
- 4/ Simionescu C.S., Simionescu M.A., Prejban C. – Album de dispozitive pentru prelucrari mecanice, Editura SAPIENS, Brăila, 1994, ISBN 973-96732-0-1, 224 pag.
- 5/ Simionescu C.S. - Organe de mașini - note de curs, Universitatea “Dunărea de Jos” din Galați, 1997, 240 pag.
- 6/ Simionescu C.S. – Managementul cercetării – note de curs, Facultatea de Inginerie din Brăila, 2011, 60 pag.
- 7/ Simionescu C.S. - Controlul Calității Ambientale a Microclimatului Construit și Protecția Mediului – 42 pag, Facultatea de Inginerie din Brăila, 2008, 60 pag.

Lucrări științifice publicate indexate ISI

- 1/ **Simionescu Cristian Silviu**, Leopa Adrian – *The Seismic Response Evaluation fo a Bridge Deck, Isolated by Rubber Bearing* - ACTA TECHNICA NAPOCENSIS SERIES – APPLIED MATHEMATICS MECHANICS AND ENGINEERING, Vol 63, issue 1, pg 51 – 60 – mar 2020
- 2/ Chircan Eliza, Scutaru Maria Luminita, **Simionescu Cristian**, Vlase Sorin - *Influence of the Number of Finite Elements on Determination the Modal Response in the Analysis of Multibody Systems with Elastic Elements* – ACTA TECHNICA NAPOCENSIS SERIES – APPLIED MATHEMATICS MECHANICS AND ENGINEERING, Vol 62, issue 3, pg 489 – 496 – sept 2019
- 3/ **Simionescu Cristian Silviu**, Turek Rahoveanu Adrian, Turek Rahoveanu Magdalena - *Approches in Assesing Farms Activity in Rural Romania - Conference 33rd International Busines Information Management Association* – Granada, Spain Apr 10-11 2019
- 4/ Dobrota Liviu Marian, Turek Rahoveanu Maria Magdalena, **Simionescu Cristian Silviu** - *Research on the Identification of Mechanisms and Instruments for the Revialization of Region Rural Space* – Conference 33rd International Busines Information Management Association – Granada, Spain Apr 10-11 2019
- 5/ **Simionescu Cristian Silviu**, Barda Alexandru Mihai, Diaconescu Oana Ramona - *Operating Optimization of the Equipment and Machines using Imposed Lifespan Between Maintenance*, Fourth International Conference on Mathematics and Computers in Sciences and in Industry, Corfu, 2017, pp 98 – 101, DOI: 10.1109/MCSI.2017.24
- 6/ Stefan Balta, Daniela Laura Buruiana, **Cristian Silviu Simionescu**, Laurentia Geanina Tiron, Marian Bordei, Bart van der Bruggen - *Influence of relative air humidity and casting time on the permeation properties of PSf nanofiltration membranes* - Desalination and Water Treatment, 2015 ISSN 1944 – 3994, IF 0,988.
- 7/ Daniela L. Buruiana, Catalina Iticescu, Geanina L. Tiron, Ștefan Pintilie, **Cristian Silviu Simionescu**, Stefan Balta - *INFLUENCE OF NANOPARTICLES IN MEMBRANE PROPERTIES*, Materiale plastice, 2015, ISSN 0025-5289, IF 0,463.
- 8/ **Daniela L. Buruiana, Geanina L. Tiron, Ștefan Pintilie, Cristian Silviu Simionescu**, Stefan Balta - *INFLUENCE OF THE TIO₂ AND ZNO NANOPARTICLES ON THE PERMEATION PROPERTIES OF PSF MEMBRANES*, Revista romana de materiale, 2015, ISSN 1583 – 3186, IF 0,538.

9/ Carmen Debeleac, **Cristian Simionescu**, Silviu Năstac - *Functional Assessments of Dynamics of the Vibratory-Driven Equipments with Belt Transmissions*, 2014, *Applied Mechanics and Materials*, 657, 460-464, DOI:10.4028/www.scientific.net/AMM.657.460

10/ Silviu Năstac, Carmen Debeleac, **Cristian Simionescu** - *Dynamic Diagnosis of Elastic Coupling Transmissions of Technological Equipments Based on Joint Time-Frequency Evaluations*, 2014, *Applied Mechanics and Materials*, 657, 465-469, DOI:10.4028/www.scientific.net/AMM.657.465

11/ L. Daschievici, D. Ghelase, **C.S. Simionescu** – *Research About Cutting Tool Blade Tribology Under Thermal Conditions Influence*, -9th WSEAS International Conference on SYSTEM SCIENCE and SIMULATION on ENGINEERING (ICOSSE '10) – Iwate Prefectural University, Japan, October 4-6 2010.

Lucrări științifice publicate indexate BDI

1/ C. Simionescu - Tool's Edges Fragmentation at Gear Hobs – a Method to Reduce Cutting Vibrations, 2016, *Applied Mechanics and Materials*, ISSN 1662-7482, 835, 149-154, DOI:10.4028/www.scientific.net/AMM.835.149

2/ S. Nastac, C. Debeleac, C. Simionescu - *Transitory Dynamics Evaluation inside Driving System of Demolition-Cutting Technological Equipments due to Variable Tool-Material Interactions*, *Applied Mechanics and Materials*, 2015, DOI:10.4028/www.scientific.net

3/ A. Potirniche, G. Capatana, C. Simionescu - *Assessments in experimental dynamics of a pendulum system with application in vibration isolation*, *Applied Mechanics and Materials*, 2015, DOI:10.4028/www.scientific.net

4/ C.S. Simionescu, Stefan Baltă - *Optimizing Maintenance Activities of the Equipment and Machinery by Imposing Lifetime of Components – The Annals of “Dunărea de Jos “ University of Galați – Fascicle IX – Metallurgy and Materials Science – Galați University Press 2015, ISSN 1453 – 083X, pp130*

5/ C.S. Simionescu, Stefan Baltă - *Optimizing Maintenance Activities of the Equipment and Machinery by Imposing Lifetime of Components – The Annals of “Dunărea de Jos “ University of Galați – Fascicle IX – Metallurgy and Materials Science – Galați University Press 2015, ISSN 1453 – 083X, pp130*

6/ F.Nedelcut, C.S. Simionescu (Corresponding author), F.D. Scheaua, *Study on a Seismic wenergy Dissipation Hydraulic Device*, ICMCFS – Lille, France, 17-22 may 2015

7/ S. Nastac, C.S. Simionescu - *Theoretical Assessments on Dynamics of Helical Flexible Coupling within Vibratory Equipments*, Multi-Conference on Systems & Structures (SysStruc '13), 26-28 September 2013, “Eftimie Murgu” University of Resita, Romania, Anul XX, (2013), Nr. 3, ISSN 1453 - 7397, pp.9-14

8/ C.S. Simionescu, N. Hauk - *A Method For Determining The Pressure Loss Coefficients*, *Analele Universitatii “Dunarea De Jos “ din Galati*, 2012, fascicula XIV, pp43, ISSN 1224-5615.

9/ L. Grigorescu, Gh Oproescu, I. Diaconescu, C.S. Simionescu – *Fourier Transform And Its Applications*, 13th WSEAS Intl. Conference on Mathematical Method And Computational Techniques In Electrical Engineering – Angers – France, 17 –19 nov. 2011 (ISSN: 978-1-61804-051-0)

10/ L. Grigorescu, I. Diaconescu, C. S. Simionescu – *Signal Processing Techniques*, 6th IASME / WSEAS Intl. Conference on Circuits, Systems and Signals, Vouliagmeni, Greece, 7 – 9 March 2012 (ISSN: 978-1-61804-074-9)

11/ I. Diaconescu, C. S. Simionescu, L. Grigorescu – *Optimal Dew Point In Paper Drying Process*, 3th IASME / WSEAS Intl. on Fluid Mechanics and Heat and Mass Transfer, Vouliagmeni, Greece, 7 – 9 March 2012 (ISSN: 978-1-61804-074-9)

12/ I. Diaconescu, R. Patrascu, L. Grigorescu, C.S. Simionescu – *New Strategy For Energy Management Program*, 7th IASME / WSEAS Intl. Conference on Energy, Environment, Ecosystems and Sustainable Development - Angers – France, 17 –19 nov. 2011 (ISSN: 978-1-61804-052-7)

13/ I. Diaconescu, R. Patrascu, L. Grigorescu, C.S. Simionescu – *New Strategy For Energy Management Program*, 7th IASME / WSEAS Intl. Conference on Energy, Environment, Ecosystems and Sustainable Development - Angers – France, 17 –19 nov. 2011 (ISSN: 978-1-61804-052-7)

14/ Daschievici Luiza, Ghelase Daniela, Simionescu Cristian, Haraga Georgeta - *About the Cognitive Engineering in Manufacturing Process* - Proceeding of the International Science and Engineering Conference „Machine-Building and Technosphere of the XXI Century”, September- 2008, Sevastopol, National Technical University Ukraine, Vol. 4, p108-111, ISSN 966-7907-23-6.

15/ L. Daschievici, D. Ghelase, I. Gorloch, C. Simionescu – *MATHEMATICAL MODELLING OF THERMAL AREA IN CUTTING PROCESS* – Proceeding of International Conference on Competitive of Manufacturing COMA “07, Stellenbosch University, South Africa, 2007, ISBN 0-1164-0, p 249-252.

16/ Daschievici L., Ghelase D, Diaconescu I, Simionescu C. – *Slow hydrostatic engine utilization in the structure of hydrostatic systems for machines and building equipments traction* - Proceedings of the International Science and Engineering Conference Machine - Building and Technosphere of the XXI Century - Sevastopol, Ukraine, 2007, tom 4, ISBN 966-7907-22-8, pg. 316-320.

17/ L. Daschievici, D. Ghelase, C.S. Simionescu – EXPERIMENTAL RESULTS OBTAINED IN RESEARCHING OF NON-COULOMBIAN FRICTION - Academia Romana, Institutul de mecanica solidelor, SISOM, Bucuresti 17-19 mai 2006

18/ L. Tomulescu, C. S. Simionescu – CERCETARI ASUPRA PROCESULUI DE FRECARA DIN ZONA DE ASCHIERE - Conferinta stiintifica internationala TMCR 2003 – Chisinau, ISBN 9975 – 9748 – 1 – 3, vol I, pg 326 – 329.

19/ L. Tomulescu, C. Falticeanu, C. S. Simionescu – INFLUENTA REGIMULUI DE LUCRU ASUPRA PROCESULUI DE UZURA LA ASCHIERE. Conferinta stiintifica internationala TMCR 2003 – Chisinau, ISBN 9975 – 9748 – 1 – 3, vol I, pg 330 – 333.

18/ D. Ghelase, Al. Epureanu, C. S. Simionescu - Influenta Numerului De Dinti Asupra Gradului De Acoperire Al Angrenajului Melcat, Analele Universitatii din Oradea , ISSN 1222 – 5541, 2001

20/ D. Ghelase, L. Tomulescu, C. S. Simionescu - Rigiditatea Transmisiei Melcate, Analele Universitatii “Dunarea De Jos “ din Galati, fascicula XIV, ISSN 1224-5615, 2001

21/D. Ghelase, Al. Epureanu, C. S. Simionescu – Rigiditatea Dintelui Melcului, Analele universitatii “Aurel Vlaicu” – Arad, ISSN 1582 – 3393, 2000

22/ S. Nastac, C. S. Simionescu - The Dynamic Calculus Of One Piece Elastic Coupler, Analele Universitatii Hunedoara – 2000, ISSN 1454-6531, Fascicola 4, p 78-81

23/ D. Ghelase, C. S. Simionescu, Gh. Cautes - Metoda Numerica Pentru Calculul Raportului De Transmitere, Analele Universitatii “Dunarea De Jos “ din Galati, fascicula XIV, ISSN 1224-5615, 2000

Lucrări științifice susținute și nepublicate – conferințe internaționale desfășurate în România

1/ C. S. Simionescu, D. Covalciuc - METALUL – MATERIAL DE CONSTRUCTII. SOLUTII SI TEHNOLOGII MODERNE PENTRU REALIZAREA CONSTRUCTIILOR DE ORICE DESTINATIE DIN STRUCTURI SI INCHIDERI METALICE - Cercetarea stiintifica in conditiile integrarii europene – conferinta internationala AGIR, Braila 28-29 mai 2004

2/ C. S. Simionescu, D. Dragomir - ELEMENTE SPECIFICE IN PROIECTAREA ARHITECTURALA SI STRUCTURALA A CONSTRUCTIILOR USOARE METALICE - Cercetarea stiintifica in conditiile integrarii europene – conferinta internationala AGIR, Braila 28-29 mai 2004

3/ C.S. Simionescu, N. Hauk – ASPECTS CONCERNING THE MODULATION, OPTIMIZATION OF THE ASSEMBLING TECHNOLOGIES AND OF THE NORMING OF THE ACTIVITIES OF MAKING THE RESISTANCE STRUCTURE FOR LIGHT METAL STRUCTURE TYPIFIED CONSTRUCTION - Regional forum CONSTRUCT WEEK – Conferinta dedicate studiului terenurilor, infrastructurilor, tehnicii structurilor si inchiderilor, Constanta, 27 – 30 mai 2010.

4/ C.S. Simionescu, L. Daschievici – DETERMINING THE OPTIMUM LIFE SPAN OF THE AIR- TIGHTENING, HIDING AND FIXING ELEMENTS USED AT THE METALLIC TILE ROOFS - Regional forum CONSTRUCT WEEK – Conferinta dedicate studiului terenurilor, infrastructurilor, tehnicii structurilor si inchiderilor, Constanta, 27 – 30 mai 2010.

Contracte de cercetare semnificative

1/ , Cercetari Privind Micsorarea Neuniformitati Incarcarii Energetice A Taisurilor Frezelor Melc Modul Echipate Cu Placute Schimbabile Din Carburi Metalice Sinterizare – Competitia M.I. de acordare a granturilor de cercetare, Contract 5007 poz. 20c. /1993 cu Ministerul invatamantului, 1993-1996 – **director de proiect**

2/ Studiu in vederea determinarii cauzelor aparitiei defectiunilor la transmisiile Volvo Penta tip DP – G 1,68:1 ce echipaza salupele fluviale de patrulare proiect CLASS 500 din dotarea Politiei de Frontiera Romane si modalitati de inlaturare a acestora, Contract nr. 536/2008, 2008 – **director de proiect**

3/ Analiza Parametrilor Specifici ai Organelor de Tractiune si Ghidare la Ascensoarele de Persoane în Vederea Realizarii Exigentelor de Performanta ca Echipamente Inglobate în Constructii - Contracta de cercetare (115/1996) cu Institutul de cercetari pentru echipamente si tehnologii de mecanizarea constructiilor, Perioada de derulare: 1996 – membru în echipă

4/ Profitable and Resource-efficient Industrial crop applications for Marginal Agricultural Land, Axa RIA, Topic RUR-07-2016, Call Identifier H2020-RUR-2016-2017, perioada 2016 - 2020. Perioada de derulare 2016 – **Director partener international.**

2020, June, 17th

Prof.univ.dr.ing. Cristian Silviu Simionescu

