



ASTR

Filiala Iași

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RAPORT DE ACTIVITATE

pentru anul 2013

I. Activități specifice în cadrul filialei

I.A. Participarea cu lucrări din partea membrilor filialei în cadrul manifestărilor organizate de ASTR

1. Alexandrescu Al., **Alexa D.**, Goras T.C.: "Static Frequency Converter that Controls on Induction Motor". ASTR 2013, Zilele Academiei de Științe Tehnice din Romania, Editia a 8-a. Produse si Tehnologii pentru Dezvoltare Durabila, Brasov 2013
2. **Alexandru N.D.**, "Optimization of an Improved Nyquist Filter with Piece-Wise Polynomial Frequency Characteristic", ASTR Conference „Zilele Academiei de Științe Tehnice din Romania”, ediția a 8-a Brașov, 4-5 octombrie 2013, lucrare comunicată
3. Kadhim A. L., **Atanasiu G.M.**, Bliuc, I., Diminuarea efectelor insulei de căldură în aglomerările urbane prin integrarea suprafetelor înverzite în anvelopa clădirii, Conference 2013, to be published in Vol. Zilele academice ale ASTR (ISSN 2066-6586)/Bul. AGIR (ISSN 1224-7928) - revista de categorie B+ (CNCSIS), pp. 10
4. **Lazăr C.**, 2013, Formarea profesională continuă a inginerilor în domeniile automatică avansată, TIC și managementul cunoștințelor, A VIII-a ediție a Zilelor Academiei de Științe Tehnice din România (ASTR), Brasov, 4-5 octombrie, 2013
5. **Păstrăvanu O.**, Matcovschi M., **Voicu M.**, Stabilitatea diagonală – conexiuni între dinamica sistemelor și algebra matriceală. A VIII-a ediție a Conferinței „Zilele Academiei de Științe Tehnice din România”, Brașov, 3-4 octombrie 2013
6. **Precupanu D.**, Precupanu C., Oprea S., O soluție numerică pentru o problema de elasticitate plană. A VIII-a ediție a Conferinței „Zilele Academiei de Științe Tehnice din România”, Brașov, 3-4 octombrie 2013

I.B. Organizarea și co-organizarea unor de manifestări științifice sub egida ASTR

1. A XI-a ediție a Simpozionului Internațional „Signals, Circuits and Systems”, ISSCS 2013, Iași, 11-12 iulie 2013 (**L. Goras, N.D. Alexandru**)
2. A XVII-a ediție a Conferinței Internaționale „System Theory, Control and Computing”, ICSTCC 2013, Sinaia, 11-13 octombrie 2013 (**M. Voicu, C. Lazăr, O. Păstrăvanu**)

II. Cercetare (publicații, proiecte)

II.A. Cărți și capitole în cărți

1. Florin Leon, **Gabriela Maria Atanasiu** (2013/2014). Probabilistic Path Finding Method for Post-Disaster Risk Estimation, Seismic Evaluation and Rehabilitation of Structures, Geotechnical, Geological and Earthquake Engineering, vol. 26, eds. Ilki, A., Fardis, N.M., pp. 61-76, Springer International Publishing Switzerland, ISBN 978-3-319-00457-0, ISSN 1573-6059, doi: 10.1007/978-3-319-00458-7_5
2. Elena Mitocariu, Alex Moruz, **Dan Cristea**, Dan Tufiş (eds.) (2013a) Proceedings of the 9th International Conference "Linguistic Resources And Tools For Processing The Romanian Language", 16-17 May 2013, Miclăușeni, „Alexandru Ioan Cuza” University Publishing House, 211 pages, ISSN 1843-911X
3. Elena Mitocariu, Daniel-Alexandru Anechitei, **Dan Cristea** (2013b). Comparing discourse tree structures, In Alexander Gelbukh (ed.): Computational Linguistics and Intelligent Text Processing, The 14th International Conference CICLing 2013, Samos, Greece, March 24-30 2013, Proceedings, Springer LNCS, vol.I, pages 513-522
4. Daniel Anechitei, **Dan Cristea**, Ioannidis Dimosthenis, Eugen Ignat, Diman Karagiozov, Svetla Koeva, Mateusz Kopeć, Cristina Vertan (2013). Summarizing Short Texts Through a Discourse-Centered Approach in a Multilingual Context, in Amy Neustein and Judith Markowitz (eds.) Where Humans Meet Machines, Springer Science, New York.
5. **Liviu Goraș**, Ion Vornicu, Paul Ungureanu, „Topics on Cellular Neural Networks”, Capitolul 4 in cartea „Handbook on Neural Information Processing”, Editura Springer, Aprilie 26, 2013
6. **Lazăr C.**, Regalarea predictivă, Automatica, vol. II, Editori: I. Dumitrache și T. Dragomir, Editura Academiei Române, pp. 506-550, 2013
7. C. Copot, **C. Lazar** and A. Burlacu (2013). Nonlinear model based predictive control of visual servoing systems using image moments, Advances in Intelligent Systems and Computing, Volume 187 AISC, 2013, pp. 115-128, Springer-Verlag Berlin Heidelberg, ISBN 978-3-642-32547
8. Căruntu C. F. și **C. Lazăr**, Modelare și Control Predictiv, Ed. Politehniun, 2013, ISBN 978-973-621-413-4
9. Căruntu C. F., C. Budaciu și **C. Lazăr**, Ingineria reglării automate, Ed. Politehniun, 2013, ISBN 978-973-621-414-1
10. Stănescu A.M., Mânzu V., Caramihai S., **Păstravanu O.**, 2013, Sisteme cu evenimente discrete (Cap. 28), în Dumitrache I. Dragomir T. (coord.), Automatica, vol. II, pp. 658-747, ISBN 978-973-27-2298-5
11. Severian Dumitriu (founder editor) and **Valentin Popa** (editor), Polymeric Biomaterials (2vols), Structure and function (vol I); Medicinal and Pharmaceutical Applications (vol II), CRC Press/Taylor& Francis, Publication Date: January 16, 2013 | ISBN-10:1420094726 | ISBN-13:978-1420094725 | Edition: 3
12. **Valentin I. Popa**, Lignin in Biological System, in Polymeric Biomaterials (2vols), Structure and function (vol I)
13. Severian Dumitriu (founder editor) and **Valentin Popa** (editor), 2013, p.709-738, Georgeta Cazacu, Mirela Capraru and Valentin I.Popa, Chap. 8 Advances Concerning Lignin Utilization in New Materials, in Advances in Natural Polymers, Advanced Structured Materials 18, Eds. S.Thomas et al , : 10.1007/978-3-642-20940-6_8, Springer-Verlag Berlin Heidelberg, 2013
14. Ioana Ignat, Irina Volf and **Valentin I.Popa**, Chap 56 Analytical Methods of Phenolic Compounds, in Handbook of Natural Products, Eds. K.G.Ramawat, J.M.Merillon, DOI 10, 1007/978-3-642-221444-6_56, Springer-VerlagBerlin Heidelberg, 2013
15. **V.I.Popa** and I.Volf, Strategia cercetarii experimentale (Strategy of experimental research), Ed. Politehniun, Iasi, 2013, 180 p., ISBN978-973-621-403-5

16. **Valentin I.Popa**, Editor, Pulp production and processing: from papermaking to high-tech products, Smithers Rapra, 2013, 520 p. ISBN-978-1-84735-633- 8 (hardback); ISBN-978-1-84735 - 634-5 (softback); ISBN-978-1-84735- 637-6 (ebook)
17. **V.I.Popa**, Chapter 1 Biorefining and pulp and paper industry, in Pulp production and processing: from papermaking to high-tech products, Smithers Rapra, V.I.Popa (editor), p.1-28 (2013)

II.B. Articole în reviste

1. **Alexa D.**, Pletea I.V., Sirbu A., Lazar A.: Wind energy conversion into electricity by means of the rectifier with near sinusoidal input current-1 converter". IET Renew. Power Gener. 2013, rpg.2012.0158, pp.9. **(ISI)**
2. **N.D. Alexandru**, and A. L. Bălan, „Investigation of the Mechanism of Improvement in Improved Nyquist Filters”, IET Signal Processing, 2013, online E-first **(ISI)**
3. Alexandra Ligia Balan, and **N.D. Alexandru**, „Construction of New ISI-Free Pulses Using a Linear Combination of Two Polynomial Pulses”, accepted for Telecommunication Systems, 2013 **(ISI)**
4. Baetu Sergiu, **Ciongradi Ioan Petru**, Barbat Alex Horia, Seismic Damage Evaluation of an RC Dissipative Wall . Bulletin of the Polytechnic Institute of Jassy, Construction and Architecture Section, Tomul LIX (LXIII), Fasc. 2, 2013, 79-86
5. Daniela Gîfu and **Dan Cristea** (2013). Towards an Automated Semiotic Analysis of the Romanian Political Discourse, in International Journal of Computer Science of Moldova, Academy of Science of Moldova, Institute of Mathematics and Computer Science, v.21, n.1 (61), pp.36-64
6. Ghiocel Ioanid, Aurelia Ioanid, Bogdan Tudor Goras, **Liviu Goras**, „Assessment of the cleaning effect of HF cold plasma by statistical processing of photographic image”, Measurement, Vol. 46, Issue 8, Pages 2569-2576. **(ISI)**
7. C. Copot, A. Burlacu, C. M. Ionescu , **C. Lazar**, R. De Keyser, A fractional order control strategy for visual servoing systems, Mechatronics, 23, 2013, pp. 848–855. **(ISI)**
8. Burlacu A., Copot C., **Lazar C.** (2013), Predictive control architecture for real-time image moments based servoing of robot manipulators, J. Intelligent Manufacturing, DOI:10.1007/s10845-013-0743-0, ISSN: 1572-8145. **(ISI)**
9. **O. Pastravanu**, and M.H. Matcovschi, Stability of matrix polytopes with a dominant vertex and implications for system dynamics, Abstract and Applied Analysis, Special Issue on "Uncertain Dynamical Systems: Analysis and Applications", Volume 2013, Article ID 396759 **(ISI)**
10. I.A.Gilca and **V.I.Popa**, Study on biocidal properties of some nanoparticles based on epoxy lignin, Cellulose Chem. Technol. 47 (3-4), 239-245 (2013) **(ISI)**
11. Volf, I.Ignat, M.Neamtu and **V.I.Popa**, Thermal stability, antioxidant activity and photo-oxidation of natural polyphenols, Chemical Papers, 2013, DOI 10.2478/s11696-013-0417-6 / 68 (1) 121–129 (2014) **(ISI)**
12. Ignat, D.G.Radu, I. Volf, A.I. Pag and **V.I.Popa**, Antioxidant and antibacterial activities of some natural polyphenols, Cellulose Chem. Technol. 47 (5-6), 387-399 (2013) **(ISI)**
13. C.Tanase, I.Volf, S.Vintu, R.Gradinaru and **V.I.Popa**, Potential applications of wastes from energy and forestry industry in plant tissue culture, Cellulose Chem. Technol., 47 (7-8), 553-563 (2013) **(ISI)**
14. C.Tanase, I.Volf and **V.I.Popa**, Assesment of snergetic regulatory actions of spruce bark extract and deuterium depleted water on maize (*Zea mays* L.) crops, Environmental Engineering and Management Journal, 12 (6),1287-1294 (2013) **(ISI)**
15. Alina I. Chiriac, Francisco I. Javier Pastor , **Valentin I. Popa**, Magdalena Aflori, Diana Ciolacu, Changes of supramolecular cellulose structure and accessibility induced by the processive endoglucanase Cel9B from *Paenibacillus barcinonensis*, Cellulose, DOI 10.1007/s10570-013-0118-x **(ISI)**

16. **Taranu N.**, Banu D., Oprisan G., Budescu M., Bejan L. Strengthening of thin reinforced concrete slabs with composite strips, *Romanian Journal of Materials*, Vol. 43 (1), 3-13, (2013) **(ISI)**
17. Muscalu M., Andrei R., Lungu I., **Taranu N.**, Budescu M., Cazacliu B. Technical solutions to improve performance of the recycled cement concrete aggregates for durable road pavements. *Environmental Engineering and Management Journal*, Vol. 12, No 3, 595-602 (2013) **(ISI)**
18. Simion, I. M, Ghinea C., Maxineasa, S.G., **Taranu N.**, Bonoli A., Gavrilescu M., Ecological footprint applied in the assessment of construction and demolition waste integrated management, *Environmental Engineering and Management Journal*, Vol. 12, No 4, 779-788 (2013) **(ISI)**
19. Țăranu, G., Lungu I., **Taranu N.**, Budescu M., Mechanical characteristics of glass fibre reinforced composites with cement and recycled anhydrite matrix, *Revista Română de Materiale / Romanian Journal of Materials* (2013), 43 (2), 139-149 **(ISI)**
20. Covatariu D., Lungu I., **Taranu N.**, Budescu M., Toma I.O., The Influence Joints Rehabilitation on Structural Response of Masonry With Low-Strength Mortars, *Revista Română de Materiale / Romanian Journal of Materials* (2013), 43 (3), 251 – 262, **(ISI)**
21. Cojocar R., Andrei R., Muscalu M., **Taranu N.**, Budescu M., Lungu I., The behaviour of cement concrete made with recycled materials for airport rigid pavements, *Revista Română de Materiale / Romanian Journal of Materials* (2013), 43 (4), 68 – 73. **(ISI)**
22. Muscalu M.T., Andrei R., **Taranu N.**, Budescu M., Lungu I., Innovative Technologies and Logistical Solutions for the Reuse of Demolished Concrete in the Construction of Cement Concrete Pavements, *Advanced Engineering Forum Vols. 8-9* (2013) pp 259-268
23. Taranu G., Lungu I., **Taranu N.**, Budescu M., Load Carrying Elements and Structural Modular Systems Made of Synthetic Fibres Reinforced Mineral Matrix Composite, *Advanced Engineering Forum Vols. 8-9* (2013) pp 327-334
24. Covatariu D., Budescu M., **Taranu N.**, Lungu I., Toma I.O., Procedures and Techniques Used to Increase the Durability of Weak Masonries with Clay Mortars, *Advanced Engineering Forum Vols. 8-9* (2013) pp 243-250
25. Muscalu, M.T., Andrei R., Budescu, M., **Taranu, N.**, Florescu E., Use of recycled materials in the construction of roller compacted concrete (RCC) pavements. *Advanced Materials Research Vol. 649, Trans. Tech. Pub, Switzerland, DOI:10.4028/www.scientific net/AMR.649.262., 2013, 262-265*
26. Hohan R., Bejan L., **Taranu, N.**, Cimpoesu N., Ecological mineral matrix for construction. *Bulletin of the Polytechnic Institute of Jassy, Construction and Architecture Section, Tomul LVIII (LXI), Fasc. 1, 2013, 113-124*
27. Gavrioloaia C., Budescu M., **Taranu, N.**, Hohan R., Calibration of a computation model for a reinforced concrete structure against the experimentally determined dynamic characteristics, *Bulletin of the Polytechnic Institute of Jassy, Construction and Architecture Section, Tomul LVIII (LXI), Fasc. 1, 2013, 23-35*
28. Amarie A.O., Radu A., **Taranu N.**, Boboc V., Evaluation of a General Performance Index for Flexible Road Pavements, *Bulletin of the Polytechnic Institute of Jassy, Construction and Architecture Section, Tomul LVIII (LXI), Fasc. 2, 2013, 167-176*
29. Maxineasa S.G., **Taranu N.**, Traditional Building Materials and Fibre Reinforced Polymer Composites. A Sustainability Approach in Construction Sector, *Bulletin of the Polytechnic Institute of Jassy, Construction and Architecture Section, Tomul LVIII (LXI), Fasc. 2, 2013, 55-68*

30. Oltean R., **Taranu N.**, Cozmanciuc I.C., Bond Analysis between Fiber Reinforced Polymeric Composites and Clay Masonry Blocks, Bulletin of the Polytechnic Institute of Jassy, Construction and Architecture Section, Tomul LVIII (LXI), Fasc. 2, 2013, 35-43
31. Bobu A., Andrei R., **Taranu, N.**, Boboc, V., Transport assessment and risk analysis: the case of radauti by-pass project. Bulletin of the Polytechnic Institute of Jassy, Construction and Architecture Section, Tomul LVIII (LXI), Fasc. 3, 2013, 19-27
32. Cozar A., Andrei R., **Taranu, N.**, Assurance of road network robustness in case of unexpected events. Project. Bulletin of the Polytechnic Institute of Jassy, Construction and Architecture Section, Tomul LVIII (LXI), Fasc. 3, 2013, 28-36
33. Popoaei S., **Taranu N.**, Ciobanu P., Evaluation of the structural response of different joint configurations for pultruded glass fibre reinforced polyesterbeams. Experimental set up. Bulletin of the Polytechnic Institute of Jassy, Construction and Architecture Section, Tomul LVIII (LXI), Fasc. 3, 2013, 103-111

II.C. Articole în volume de conferințe

1. Alexandrescu Al., Goras T.C., **Alexa D.**, Pletea I.V., Matasaru P.D.: "RNSIC-1 based Wind Energy Conversion" ISSCS - International Symposium on Signals, Circuits and Systems. Proceedings, 2013
2. **Nicolae Dumitru Alexandru**, Alexandra Ligia Balan, Felix Diaconu and Mihai Dimian, "Development of Improved Nyquist Filters with Piecewise Linear Frequency Characteristics", 36th Internat. Conference on Telecommunications and Signal Processing - TSP, Rome, Italy, 2013
3. **Nicolae Dumitru Alexandru**, Alexandra Ligia Balan, Felix Diaconu, "Square-Root Improved Nyquist Filter with a Piece-wise Rectangular Frequency Characteristic", Proc. ISSCS 2013, Iași, on CD
4. **Nicolae Dumitru Alexandru**, Nicolae Cleju, "Implementation Considerations of Improved Nyquist Filters", Proc. ECAI, Pitești, Vol.3, /2013, pp.13-16, ISSN-1843-2115, indexat IEEEXplore DOI: 10.1109/ECAI.2013.6636187
5. **Nicolae Dumitru Alexandru**, Alexandra Ligia Balan, "Optimization of a Square-Root Nyquist Filter with Staircase Frequency Characteristic", ISEEE Galați, 2013, indexat in IEEEXplore DOI: 10.1109/ISEEE.2013.6674319
6. **Atanasiu G.M.**, Lanivsi, C.E., Performance assessment of wood/jute fibers reinforced polyester (JFRP) interface based on nonlinear numerical simulations, The 2nd Conference on Smart Monitoring Assessment and Rehabilitation of Civil Structures, Istanbul, September 2013, pp.8
7. **Atanasiu G.M.**, Lanivsi C.E., Using Bio-composites for Structural Retrofitting, A 37-a Conferință Națională de Mecanica Solidelor, Acustică și Vibrații, CNMSAV XXXVII, Chisinau, 6-8 Iunie 2013, Vol Conf. ISBN 978-9975-4241-3-4, p.116-122
8. Murarasu V., Olariu C., **Atanasiu G.M.**, Analiza interactiunii terenului de fundare cu structura pentru reabilitarea seismica a unui monument istoric, A 37-a Conferință Națională de Mecanica Solidelor Acustică și Vibrații, CNMSAV XXXVII, Chisinau-8 Iunie 2013, Vol Conf. ISBN 978-9975-4241-3-4, p. 56-66
9. Crijanovschi S., **Atanasiu G.M.**, Comparative linear and non-linear time- history analysis of an experimental prototype structure using advanced techniques, The 4th International Conference on Integrity, Reliability & Failure, Funchal, 23-27 June 2013, p. 593, ISBN 978-972-8826-27-7
10. Lanivsi C.E, **Atanasiu, G.M.**, Secu, A. Numerical Analysis of a Rigid Node of a Spatial Timber Frame Made of Elements with Composed Cross-sections, The 2nd

- International Conference on Structural Health Assessment of Timber Structures, Trento (Italy), September 4-6, 2013, SHATIS'13, published on International Journal Advanced Materials Research, indexed in EI Compendex, Thomson ISTP and Elsevier SCOPUS databases, <http://www.scientific.net/>
11. **Dan Cristea**, Eugen Ignat (2013, invited paper). Linking Book Characters. Toward A Corpus Encoding Relations Between Entities. In Proceedings of the 7th International Conference on Speech Technology and Human-Computer Dialogue, Cluj-Napoca, 16-19 October 2013
 12. Daniela Gîfu, **Dan Cristea** (2013). Monitoring and predicting journalistic profiles, in Proceedings of the 5th International Conference on Computational Collective Intelligence Technologies and Applications 11-13 September 2013, Craiova
 13. Raluca Moiseanu, **Dan Cristea** (2013). Romanian Etymological Chains – A Preliminary Analysis, in E. Mitocariu, A. Moruz, D. Cristea, D. Tufiş (eds.) Proceedings of the 9th International Conference "Linguistic Resources And Tools For Processing The Romanian Language", 16-17 May 2013, Miclăușeni, „Alexandru Ioan Cuza” University Publishing House, ISSN 1843-911X
 14. Daniela Gîfu, Dan Stoica, **Dan Cristea** (2013). Virtual Civic Identity, in E. Mitocariu, A. Moruz, D. Cristea, D. Tufiş (eds.) Proceedings of the 9th International Conference "Linguistic Resources And Tools For Processing The Romanian Language", 16-17 May 2013, Miclăușeni, „Alexandru Ioan Cuza” University Publishing House, ISSN 1843-911X
 15. Anca-Diana Bibiri, **Dan Cristea**, Laura Pistol, Liviu Andrei Scutelnicu, Adrian Turculeț (2013). Romanian Corpus For Speech-To-Text Alignment, in E. Mitocariu, A. Moruz, D. Cristea, D. Tufiş (eds.) Proceedings of the 9th International Conference "Linguistic Resources And Tools For Processing The Romanian Language", 16-17 May 2013, Miclăușeni, „Alexandru Ioan Cuza” University Publishing House, ISSN 1843-911X
 16. M. Fira, **L. Goras**, C. Barabasa, “Reconstruction of Compressed Sensed ECG Signals Using Patient Specific Dictionaries”, International Symposium on Signals, Circuits and Systems (ISSCS 2013), Iasi, Romania
 17. **Liviu Goras**, Nicolae Patache, Paul Ungureanu, “On the Spatio-Temporal Dynamics of a Class of Autonomous Cellular Neural Networks”, International Symposium on Signals Circuits and Systems (ISSCS 2013), Iasi, Romania
 18. **Lazar C.**, Burlacu A., Archip A., Vision-guided Robot Manipulation Predictive Control for Automating Manufacturing, Prep. of 3rd Int. Workshop on Service Orientation in Holonic and Multi Agent Manufacturing and Robotics, Valenciennes, France, June 20-22, pp. 199-208, ISBN 978-973-720-490-5
 19. Copot C., Ionescu C., **Lazar C.**, De Keyser R. (2013). Fractional Order PD Control of a Visual Servoing Manipulator System, Proc. of European Control Conference 2013, July 17-19, 2013, Zurich, pp. 4015 - 4020
 20. Carpiuc, S. C. and **Lazar, C.** (2013). Low-complexity model predictive control of a permanent magnet synchronous machine system. Proc. of the 19th International Conference on Control Systems and Computer Science (CSCS), Bucharest, Romania, May 29-31, 2013, vol. 1, pp. 3-9, ISBN 978-0-7695-4980-4
 21. Carpiuc, S. C. and **Lazar, C.** (2013). Low-computational-complexity algorithm for current predictive control of an externally excited synchronous machine. In 17th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, October 11-13, 2013, CD, pp. 103-108, ISBN 978-1-4728-4
 22. Tiganasu A. and **Lazar C.** (2013). Singular Regions Detection in Fingerprint Images, In 17th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, October 11-13, 2013, CD, pp. 551-556 , ISBN 978-1-4728-4
 23. Maxim A., Ionescu C., Copot C., **Lazar C.**, De Keyser R. (2013) Multivariable Model-Based Control Strategies for Level Control in a Quadruple Tank Process, In 17th

- International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, October 11-13, 2013, CD, pp. 343-348, ISBN 978-1-4728-4
24. Carpiuc, S. C. and **Lazar, C.** (2013). Constrained state–feedback control of permanent magnet synchronous machines for automotive applications. Proc. of the 39th Annual Conference of the IEEE Industrial Electronics Society (IECON), Vienna, Austria, November 10-13, 2013, USB-stick, pp. 3408-3413, ISBN 978-1-4799-0223-1
 25. **O. Pastravanu**, M.H. Matcovschi, **M. Voicu**, Feasible and equilibrium solutions to the closed Leontief models. Proc. IEEE Conf. on Systems Theory, Control and Computing ICSTCC 2013, pp. 398 – 403, 11-13 Oct. 2013
 26. Maxineasa G M, **Taranu N**, Ciobanu P., Popoaei S., (2013) Application of life cycle assessment to Civil Engineering. Proceedings of the 13th International Scientific Conference VSU 2013, Sofia, June 6-7, 2013, II, 188-193
 27. Ciobanu P.,**Taranu N**, Popoaei S., Maxineasa G M (2013), Experimental setup to evaluate the efficacy of CFRP based solutions for strengthening of concrete beams subjected to flexure. Proceedings of the 13th International Scientific Conference VSU 2013, Sofia, June 6-7, 2013, II, 182-187
 28. Popoaei S., **Taranu N**, Maxineasa G M, Ciobanu P., (2013) Improving the performance of composite materials bolted joints, Proceedings of the 13th International Scientific Conference VSU 2013, Sofia, June 6-7, 2013, IV, 23-28
 29. Taran R.G., Budescu M., Covatariu D., **Taranu N**, (2013), Increasing the bearing capacity of masonry with low strength mortars by joints rehabilitation with admixed mortars, Proceedings of the 13th International Scientific Conference VSU 2013, Sofia, June 6-7, 2013, II, 218-233
 30. Corduban C., Isopescu D., **Taranu N**, Dumitrașcu A., (2013) Low-tech versus high-tech sustainability patterns, Proceedings of the 13th International Scientific Conference VSU 2013, Sofia, June 6-7, 2013, II, 194-199
 31. Isopescu D., Corduban C., **Taranu N**, Dumitrașcu A., Nedelcu A., (2013) Folded structure with CLT panels for an exhibition pavilion in Iași. Geometric transformations, Proceedings of the 13th International Scientific Conference VSU 2013, Sofia, June 6-7, 2013, II, 200-205
 32. Gavriiloaia C., Corduban C., Isopescu D., **Taranu N.**, Budescu M.(2013), Calibration of a wooden floor calculation model based on the experimentally determined dynamic characteristics, Proceedings of the 14th Symposium on Experimental Stress Analysis and Materials Testing, Timișoara, 8-10 May, 4pp

II.D. Coordonări / Participări în proiecte de cercetare-dezvoltare

Alexa D.

- Director „Electric power quality and energy saving using performant power converters for the knowledge based economy”, Code PN-II-ID-PCE-2011-3-0520, Host Institution: SC COMFRAC R&D PROIECT EXPERT SRL, Bucuresti Sector3

Atanasiu G.M.

- Beneficiary-Leader in Programul Cadru FP7- Era Net Concert Japan 2013-2015, Contract 3003/EU/2013
- Task Leader in Programul Cadru FP7 – SERIES Project, GA 227887/2009-2013
- Director proiect RO-SERIES, Ctr. 108 EU/2012-2013, in PNCDII 2007-2013, Modul Capacitati

Cristea D.

- 2010 – 2013, Responsabil UAIC, ATLAS (Applied Technology for Language-Aided CMS), CIP-ICT-PSP-2009-3, European Commission, Grant agreement no. 250467
- 2011 – 2013, Responsabil UAIC, METANET4U, CIP-ICT-PSP-2009-4, European Commission, Grant agreement no. 270893

Lazăr C.

- responsabil partener pentru Universitatea Tehnică „Gheorghe Asachi” din Iași, în cadrul proiectului strategic Creșterea competitivității întreprinderilor prin perfecționarea și specializarea resurselor umane în domeniul noilor tehnologii, într-o societate bazată pe cunoaștere și pentru o dezvoltare durabilă. Partener principal: Universitatea Politehnică din București, contract nr. POSDRU/81/3.2/S/53, 2010 – 2013
- Membru al proiectului de cercetare CNCS - IDEI Diagonal stability and flow invariance in system engineering. Techniques specialized for classes of dynamics, encompassed by a unified framework, PN-II-ID-PCE-2011-3-1038, Contract de finanțare 208/05.10.2011 (2011 – 2014), director prof. dr. ing. O. Păstrăvanu
- Expert pe termen lung în cadrul proiectului strategic Rețea națională de centre pentru dezvoltarea programelor de studii cu rute flexibile și a unor instrumente didactice la specializarea de licență și masterat, din domeniul Ingineria Sistemelor. Partener principal: Universitatea Tehnică de Construcții din București, contract nr. POSDRU/ 86 / 1.2 / S / 63806, 2010 – 2013, manager proiect prof. dr. ing. M. Marinescu
- Expert pe termen lung (tutore) în cadrul proiectului strategic Performanță prin postdoctorat pentru integrarea în aria europeană de cercetare (PERFORM - ERA), contract nr. POSDRU/89/1.5/S/57649, 2011-2013, manager proiect prof. dr. ing. M. Popa

Păstrăvanu O.

- Director al proiectului de cercetare CNCS - IDEI Diagonal stability and flow invariance in system engineering. Techniques specialized for classes of dynamics, encompassed by a unified framework, PN-II-ID-PCE-2011-3-1038, Contract de finanțare 208/05.10.2011 (2011 – 2014)

Popa V.

- COST Action FP0901, Analytical tools for biorefineries
- IMMOPHENOL-cooperation project between Switzerland-Romania

Țăranu N.

- Dezvoltarea și susținerea de programe postdoctorale multidisciplinare în domeniile tehnice prioritare ale strategiei naționale de cercetare - dezvoltare - inovare” 4D-POSTDOC, contract nr POSDRU/89/1.5/S/52603 – expert.
- Studii Doctorale pentru performanțe europene în cercetare și inovare (CUANTUMDOC)” ID 79407 - expert

Voicu M.

- responsabil partener pentru Universitatea Tehnică „Gheorghe Asachi” din Iași, în cadrul proiectului strategic Rețea națională de centre pentru dezvoltarea programelor de studii cu rute flexibile și a unor instrumente didactice la specializarea de licență și masterat, din domeniul Ingineria Sistemelor. Partener principal: Universitatea Tehnică de Construcții din București, contract nr. POSDRU/ 86 / 1.2 / S / 63806, 2010 – 2013

III. Prezentări invitate / Comunicări

1. Yakut A., Le Maout A., Richard B., Ragueneau F., **Atanasiu G.M.**, Scheer S., Diler S., Experimental and numerical investigation of torsionally irregular RC shear wall buildings with Rutherford breakers, SERIES Concluding Workshop - Joint with US-NEES “Earthquake Engineering Research Infrastructures”, JRC-Ispra, May 28-30, 2013. (to be published in ISI journal in 2014)
2. **Păstrăvanu O.**, Matcovschi M., **Voicu M.**, Conceptul de stabilitate diagonală în teoria sistemelor. Zilele academice ieșene, "Sesiunea de comunicări științifice a Institutului de Matematică Octav Mayer împreună cu Comisia de Automatică Teoretică și Teoria Controlului", 19 octombrie 2013
3. A. Gilca and **V.I.Popa**, Biorefining as a possibility to obtain valuable products from wastes, COST FPS Annual Progress Conference, March, 25-27, 2013. Madrid, Spain

4. A.M.Capraru, L.C.Trinca, E.Ungureanu, **V.I.Popa** and T.Malutan, Aspects concerning the obtaining nanoparticles with biocides properties based on lignin modified by hydroxymethylation, Paper presented at Simpozionul Stiintific Anual cu Participare internationala, USAMV, Iasi, 24-26 mai, 2013
5. C.Tanase and **V.I.Popa**, Effect of natural products on some physiological processes of plants soybean (*Glycine max L.*), Paper presented at Simpozionul Stiintific Anual cu Participare internationala, USAMV, Iasi, 24-26 mai, 2013
6. C.Tanase, I.Gilca, A.Puitel and **V.I.Popa**, Nanodispersion based on lignin as plant growth regulators, Paper presented at Simpozionul Stiintific Anual cu Participare internationala, USAMV, Iasi, 24-26 mai, 2013
7. **V.I.Popa**, Biorefinery as a possibility to recover aromatic compounds with biological properties, Lecture presented at 11th Romanian International Symposium on Cosmetic and Flavor Products, Iasi, June, 4-7, 2013
8. R. E. Ghitescu, C.Mihailescu, I.Volf and **V.I.Popa**, Microwave –assisted extraction of natural compounds with antioxidant activity of *Picea abies* bark, Paper presented at 11th Romanian International Symposium on Cosmetic and Flavor Products, Iasi, June, 4-7, 2013
9. **V.I.Popa**, Biorefining and the pulp and paper industry, Lecture presented at The 7th International Symposium for the pulp, paper and corrugated board industry, Braila, Romania September 3-6, 2013
10. I.A.Gilca, R.P.Bulzan, C.Puitel and **V.I.Popa**, Characterization of some components resulted in hemp woody core biorefining, Paper presented at The 7th International Symposium for the pulp, paper and corrugated board industry, Braila, Romania September 3-6, 2013
11. I.A.Gilca and **V.I.Popa**, Nanoparticles based on lignin separated from waste hemp by biorefining, paper presented at final meeting COST action Biorefinery analytics-Outcomes from COST Action FP0901, September 17-18, 2013, Abo/Turku, Finland Abstract p.43-44
12. C.Tanase, I. Boz, C.I.Bara, I.Volf and **V.I.Popa**, Biorefining as a possibility to recover bioactive products used to influence cytogenetical and histo-anatomical aspects of maize (*Zea mays L.*) plant paper presented at final meeting COST action Biorefinery analytics-Outcomes from COST Action FP0901, September 17-18, 2013, Abo/Turku, Finland, Abstract p.59-60
13. **N. Țăranu**, "FRP composites a challenging topic for teaching and research in civil engineering", The 13-th International Scientific Conference VSU Sofia, Bulgaria, 6-7 June, 2013

IV. Activități editoriale – Membri în colective de redacție, comitete de program, referenți, recenzenti

Alexandru, N. D.

- Membru în International Scientific Board și recenzent la revista "Advances in Electrical and Computer Engineering" – indexată ISI
- Membru în Technical Program Committee (TPC) și recenzent la ECAI'2013 Pitești
- Membru în Technical Program Committee (TPC) și recenzent la ISEEE 2013, Galați
- Recenzent la ISSCS 2013, Iași, România
- Recenzent la IEEE Communication Letters

Atanasiu G.M.

- Evaluator FP7 – Marie Curie Call ITN 2013, March 2013, Brussels, EC
- Evaluator FP7, RCSC, Call 2013, European Commission, Brussels, EC, November 2013;
- External Rapporteur & Project Monitore, Program FP7-NMP 2013, 4 actions
- Membru Steering Committee al IALCCE 2014 - Fourth International Symposium on

Life-Cycle Civil Engineering Membru în Comitetul Științific & Recenzent al The 4th Int. Symposium on Life Cycle Civil Engineering, IALCCE 2014, Tokyo, Japan, <http://www.ialcce2014.org/contents/organization.html>

- Membru în colectivul editorial al revistei Management&Marketing, București, revista indexată în 5 BDI
- Membru Proud ASCE, USA
- Membru al GAMM, Germania și EUROMECH, din 1994

Cristea D.

- Membru în Comitetul Program la ACL-2013 (The 51st Annual Meeting of the Association for Computational Linguistics), Sofia, Bulgaria, 4-9 August 2013, <http://www.acl2013.org/>
- Membru în Comitetul Program la CICLing-2013, March 24–30, 2013. University of the Aegean, Samos, Greece, <http://www.cicling.org/2013/>
- Membru în Comitetul Program la ediția a 9-a a ConsILR, Conferința Resurse lingvistice și instrumente pentru prelucrarea limbii române, Miclăușeni, 16-17 mai 2013, <http://consilr.info.uaic.ro/2013/>
- Membru în Comitetul Program la KEPT-2013, Knowledge Engineering: Principles and Techniques Conference, Babes-Bolyai University, 5-7 July, 2013, <http://www.cs.ubbcluj.ro/kept2013/>
- Membru în Comitetul Program la IJCNLP, the 6th International Joint Conference on Natural Language Processing, 14-18 October 2013, Nagoya, Japan, <http://lang.cs.tut.ac.jp/ijcnlp2013/>
- Membru în Comitetul Program la NLPCS 2013, 10th International Workshop on Natural Language Processing and Cognitive Science, Marseille, 15-16 October 2013, <https://sites.google.com/site/nlpcs2013/>
- Membru în Comitetul Program la RANLP-2013, Recent Advances in Natural Language Processing, 7-13 September, 2013, Hissar, Bulgaria, <http://lml.bas.bg/ranlp2013/>
- Membru în Comitetul Program la JSSP-2013, Joint Symposium on Semantic Processing. Textual Inference and Structures in Corpora, 20-22 November, Trento, Italy, <http://jssp2013.fbk.eu/>
- Membru în Comitetul Program la Journal of Control Engineering and Applied Informatics, <http://www.ceai.srait.ro/index.php/ceai>
- Recenzor pentru Language Resources and Evaluation Journal <http://www.springer.com/education+%26+language/linguistics/journal/10579>

Goraș L.

- Membru în Technical Program co-Chair 39-th European Solid –State Conference (ESSCIRC) București, 16-20 Septembrie 2013
- Membru în comitetul editorial al International Journal of Neural Networks and Applications; ISSN: 0974-6048
- Membru în comitetul editorial al Acta Technica Napocensis (Electronics And Telecommunications; ISSN 1221-6542
- IEEE Trans Circuits and Systems - recenzent
- IEEE Trans Biomedical Engineering - recenzent
- Zentralblatt für Mathematik - recenzent,
- Romanian Journal of Information Science and Technology - recenzent
- Ministerul Cercetării din Italia - recenzent
- Membru al Școlii doctorale a Facultății de Inginerie a Universității din Catania, Italia

Lazăr C.

- Annals of „Dunarea de Jos” University of Galați - colectiv de redacție
- Buletinul Institutului Politehnic Iași – Secția Automatică și Calculatoare – colectiv de redacție

- International Conference on Cloud & Ubiquitous Computing & Emerging Technologies (CUBE 2013), 15-16 November, 2013, Pune, Maharashtra State, India – comitet de program
- The 17th International Conference on System Theory, Control and Computing, October 11 – 13, 2013, Sinaia – comitet de program
- IEEE Transactions on Industrial Electronics – recenzent
- Journal of Control Engineering and Applied Informatics - recenzent
- IEEE – United Symposium: SLED 2013 (4th Symposium on Sensorless Control for Electrical Drives), PRECEDE 2013 (2nd Symposium on Predictive Control of Electrical Drives and Power Electronics), October 17-19, 2013 – Munich - recenzent
- 19th International Conference on Control Systems and Computer Science (CSCS), May 29-31, 2013, Bucharest - recenzent

Păstrăvanu O.

- Buletinul Institutului Politehnic Iași – Secția Automatică și Calculatoare – colectiv de redacție
- The 17th International Conference on System Theory, Control and Computing, October 11 – 13, 2013, Sinaia – comitet de program
- Zentralblatt für Mathematik - recenzent
- Mathematical Reviews – recenzent
- International Journal of Advanced Intelligence Paradigms (InderScience Publishers) - referent
- IFAC Joint conference: 5th Symposium on System Structure and Control, 11th Workshop on Time-Delay Systems, and 6th Workshop on Fractional Differentiation and Its Applications, Grenoble, February 4-6, 2013 - referent
- 3rd IEEE International Conference on Systems and Control, Algiers, October 29-31, 2013 - referent
- 2nd IEEE International Conference on Control and Fault-Tolerant Systems, Nice, October 9-11, 2013 - referent

Popa V. I.

- Cellulose Chemistry and Technology, Editura Academiei – Editor
- eXPRESS Polymer Letters – referent
- FOODCHEM – referent
- Iranian Polymer Journal – referent
- African Journal of Environmental Science and Technology – referent
- Acta Biochimica – referent
- 11th Romanian International Symposium on Cosmetic and Flavor Products, Iasi, - President of Scientific Committee
- 19th International Symposium in the fields of pulp and paper, packaging and graphics, Cigota, Zlatibor, Serbia - Member of Scientific Board
- 7th International Symposium on Advanced Technologies for the Pulp, Paper and Corrugated board industry - Member of International Scientific Committee

Voicu M.

- Zentralblatt für Mathematik - recenzent
- Mathematical Reviews - recenzent
- Proceedings of the Romanian Academy Series A: Mathematics, Physics, Technical Sciences, Information Science (ISI) - colectiv de redacție
- Romanian Journal of Information Science and Technology (ROMJIST) (ISI) - colectiv de redacție
- Revista Română de Informatică și Automatică - colectiv de redacție
- Control Engineering and Applied Informatics (SRAIT) (ISI) - colectiv de redacție

- Buletinul Institutului Politehnic Iași – editor onorific
- Transactions on Automatic Control and Computer Science, Univ. „Politehnica” din Timișoara - colectiv de redacție
- 17th International Conference on Systems Theory, Control and Computing, Sinaia 2013; technically co-sponsored by IEEE Control Systems Society; inclusă în IEEE Xplore - Vice Chair

V. Contribuții deosebite la creșterea vizibilității internaționale a cercetării științifice din domeniul tehnic în România

Elaborarea a 19 articole publicate / în curs de apariție în reviste cotate ISI – Web of Science.

Organizarea celei de a XI-a ediție a Simpozionului Internațional „Signals, Circuits and Systems”, ISSCS 2013, Iași, 11-12 iulie 2013 – indexată ISI.

Co-organizarea celei de a XVII-a ediție a Conferinței Internaționale „System Theory, Control and Computing”, ICSTCC 2013, Sinaia, 11-13 octombrie 2013 - indexată IEEE Xplorer.

Președinte,

prof. univ. dr. ing. Mihail Voicu
m.c. al Academiei Române

Secretar,

prof. univ. dr. ing. Octavian Păstrăvanu