

ASTR Filiala Braşov

RAPORT

de activitate pe anul 2016

1. Manifestări ştiinţifice

1.1. Organizate şi sub egida ASTR prin Filiala Brasov:

- a) "SEMINARUL INTERNAŢIONAL PC-CRASH" ediţia VI-a, 3-5 iunie 2016, organizat la Universitatea "Transilvania din Braşov", sub egida ASTR, cu colaborarea Universităţii Tehnice din Graz şi a DSD Linz, Austria;
- b) "THE 1TH INTERNATIONAL CONFERENCE EMECH 2016" , 6-8 iunie 2016 (co-organizatori: ASTR, SMRTA, Universitatea Transilvania din Braşov);
"CREATIVITATE, INVENTICĂ, ROBOTICĂ" - ediţia a XX -a, Iulie 2016, Universitatea Transilvania din Brasov – (Filiala ASTR Brasov- co-organizator)
- c) "THE 6 TH INTERNATIONAL CONFERENCE ON "ADVANCED COMPOSITE MATERIALS ENGINEERING" COMEC 2016, organizată la Universitatea Transilvania din Braşov sub egida ASTR, 24-25 noiembrie 2016;
- d) "40TH INTERNATIONAL CONFERENCE ON MECHANICS OF SOLIDS, ACOUSTICS AND VIBRATIONS, ICMSAV 2016" Braşov , 24-25 noiembrie 2016, (Filiala ASTR Brasov- co-organizator);
- f) " THE 12TH INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING CONAT 2016 " , 20-22 Octombrie 2016, Braşov. (Filiala ASTR Brasov co-organizator);

1.2. Actiuni realizate in colaborare cu parteneri economici si Filiala ASTR Brasov

- Eficienta energetica – ALEA, Alba Iulia, 2016
- Noaptea cercetătorilor, Braşov, septembrie 2016

2. Participări la manifestări ştiinţifice :

"ZILELE ACADEMICE ALE ASTR", Ediţia a XI-a a Conferinţei anuale a ASTR oct. 2016, Tg. Mureş. Din partea Filialei Braşov a ASTR s-au susţinut lucrările:

- *"The role of renewable energy systems in smart cities »* (autor prof. dr. ing. Ion VIŞA, coautor prof. dr. ing. Anca DUŢĂ, B.G Burduhos);
- *"Structuri din lemn integrate în arhitectura oraşelor inteligente"*, (autori Curtu I., Stanciu M.D., Urcu I.S);
- *"Analiza comparativă a teoriilor de rupere studiate pentru diferite specii lemnoase (fag, molid, pin)"*, (autori Curtu I. Baba M.N., Stanciu M.D.)

“THE 12TH INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING CONAT 2016 ”, Braşov.

În calitate și de membru ASTR, prof.dr.ing. Gh.-Al. RADU a participat cu lucrările:

- *“ Establishing the 3D Profile of Vehicle Car Body Elements in the Virtual Environment”* (coautori: dr.ing. Camil TUDOR, dr. ing. Laurențiu MANEA); publicată în Proceedings of CONAT 2016 , University Press, Braşov, ISSN 2069-0401, p. 97—102;
- *“ Analysis of the Mid Day Temperature of the Sun Expose of the Car Body Work Protective Coating in Relation with the Contact Destructions on the Black Sea Coast”* (coautori Adriana MANEA, ing. Dragoş DIMA), publicată în Proceedings of CONAT 2016 , University Press, Braşov, ISSN 2069-0401, p. 235—242;
- *“ Balancing of a Single Stage Reciprocating Compressor with Elastic Elements”* (coautori ing. Dumitru GROZA, dr. ing. Călin ROȘCA), publicată în Proceedings of CONAT 2016, vol. I., p.305-310, ISBN 978-3-319-45446-7, Springer Verlag.
- *“The Evaluation of Rheological Properties of Composites Reinforced with Hemp, Subjected to Photo and Thermal Degradation”*, (Stanciu Mariana Domnica, Curtu Ioan, Groza Mihai, Savin Adriana), DOI 10.1007/978-3-319-45447-4_62

11TH EUROSUN CONFERENCE, 11-14 September, 2016, Palma de Majorca, Spain

- *“Optimised Prototype of a Novel Trapeze Solar-thermal Collector for Facades Integration”*, (Visa I., A., Comsit M., Moldovan M.)
- *“Conceptual Design of a Solar Energy Driven Photocatalytic Reactor for Wastewater”* ,Treatment Plants, (Duta A., Visa I., Enesca A., Moldovan M., Duta Ad.,)
- *“Education and In-service Training on Solar Energy Applications at High School Level. A Romanian Case Study”*, (Visa I., Duta A., Visa M.,)

The 7th GLOBAL CONGRESS OF CATALYSIS GCC-2016, Seul, Korea, 30 iun 02. Iul, 2016

- *“Conceptual Design of a Photocatalytic Reactor for Advanced Wastewater Treatment”*, (Visa I., Duta A., Banciu A., Macedon Moldovan and Mihai Comsit).

ESEIA CONFERENCE, aprilie 2016, Graz.

- *“Design, Development And Management Of Renewable-Based Energy Mixes In Sustainable Metropolitan Regions”*, (Visa I., Duta A.)

THE 10TH INTERNATIONAL CONFERENCE OF APPLIED SCIENCES – CHEMISTRY AND CHEMICAL ENGINEERING, 2-4 iunie 2016, Bacau

- *“Sustainable Materials and Renewable Energy Systems in Sustainable Communities”*, (Visa I., Duta A.)

EENVIRO, 26-28 octombrie 2016, Bucuresti

- *“Facades integrated solar-thermal collectors – challenges and solutions”*, (Visa I., Moldovan M., M.Comsit, Neagoe M., Duta A), (articol acceptat spre publicare in Energy Procedia)

“CREATIVITATE, INVENTICĂ, ROBOTICĂ” - ediția a XX -a , Iulie 2016, Universitatea Transilvania din Brasov

- *“Proiectarea și realizarea unui stand experimental multipost pentru studiul flambajului – STIMUL F”* (Stanciu Mariana Domnica, Scurtu Stefan, Urcu Iulian, Curtu Ioan)
- *“Proiectarea și realizarea standului experimental pentru măsurarea parametrilor funcționali ai turbinelor eoliene de mici dimensiuni”* (Stanciu Mariana Domnica, Scurtu Stefan, Urcu Iulian, Curtu Ioan)
- *“Optimizarea sistemului de ranforsare a palelor de turbine eoliene utilizând metoda elementelor finite”*, (Curtu I., Stanciu M.D., Tesula I., Jeflea M.) în CREATIVITATE, INVENTICĂ, ROBOTICĂ, nr. 1/2016, pp. 35-39, <http://www.agir.ro/buletine/2495.pdf>
- *“Analiza proprietăților acustice ale plăcilor utilizate în structura corpului de chitară”*, (Stanciu M.D., Curtu I., Somesan A.,) în CREATIVITATE, INVENTICĂ, ROBOTICĂ, nr. 1/2016, pp. 105-112, <http://www.agir.ro/buletine/2495.pdf>

40th INTERNATIONAL CONFERENCE ON MECHANICS OF SOLIDS, ACOUSTICS AND VIBRATIONS& The 6th INTERNATIONAL CONFERENCE ON ADVANCED COMPOSITE MATERIALS ENGINEERING ICMSAV2016&COMAT2016 Braşov ,noiembrie 2016,

- *“Modal analysis of lignocelluloses based composite materials”*, (Adriana Savin, Ioan Curtu, Mariana Domnica Stanciu)
- *“Analysis of CFRP composite with delaminations using eNDE method”*, (Adriana Savin, Ioan Curtu, Mariana Domnica Stanciu, Gabriel Dobrescu, Nicoleta Iftimie)
- *“Analysis of wood material responses as measured by three points bending”*, (Mariana D. Stanciu¹, Ioan Curtu¹, Călin Pop², Dorin Man², Iulian Urcu¹, Petrică G. Duță¹, Sergiu Georgescu,)

7th International Conference on Advanced Concepts in Mechanical Engineering, Materials Science and Engineering 147 (2016)

- *“Comparison between viscous elastic plastic behaviour of the composites reinforced with plain glass fabric and chopped strand mat”*, (M D Stanciu, Harapu, H Teodorescu Drăghicescu, I Curtu, A Savin), 012097 doi:10.1088/1757-899X/147/1/012097.

- *“The evaluation of the elasto-plastic behavior in case of the honed steel pipes subjected to variable internal pressure”*, (R Steigmann, M D Stanciu, M Szasz, I Curtu, T Sturzu, A Savin,) IOP Science Materials Science and Engineering 145 (2016) 022036 doi:10.1088/1757-899X/145/2/02203, <http://iopscience.iop.org/article/10.1088/1757-899X/145/2/022036/pdf>

3. Participări la contracte de cercetare științifică:

a) Granturi cu finanțare națională

- PNII Parteneriate, EST IN URBA (ctr. No. 28/2012), (director de Grant Prof. Dr.ing. Ion VIȘA);
- PNII Parteneriate: CBPhotoDeg (ctr. No.228/2014). (membru in echipa Prof. Dr.ing. Ion VIȘA);
- PNII Parteneriate: SimPhotoAd (ctr. No. 214/2014). (membru in echipa Prof. Dr.ing. Ion VIȘA);
- PNII Parteneriate: NANOISMAT (ctr. No. 162/2012). (membru in echipa Prof. Dr.ing. Ion VIȘA);
- Grant-CNCSIS- **2013-2016** *“MULTILAYERED INORGANIC /ORGANIC TRIBOLOGICAL COATINGS FOR SPACE APPLICATIONS”* – GRANT la Programul de Cercetare Dezvoltare-Inovare Valoarea totala 917.679 lei, Valoarea la Universitatea Transilvania =108.000 lei –(responsabil de tema *prof. Dr.ing. Cornel Samoilă*)
- PN-III-P2-2.1-BG-2016-0017,*“SOLUȚII INTEGRATIVE DE CREȘTERE A PERFORMANȚEI ECONOMICE PRIN OPTIMIZAREA PROPRIETĂȚILOR RIGIDO-ELASTICE ȘI STABILITĂȚII STRUCTURALE A CHITARELOR DE FABRICAȚIE ROMÂNEASCĂ, SINOPTIC”*, (membru in echipa Prof. Dr.ing. Ion CURTU);
- P2- Contract 59/01.07.2014, *MONITORIZAREA INTEGRITATII STRUCTURALE SI AUTOREPARAREA PALELOR DE TURBINE EOLIENE SI A ALTOR STRUCTURI DIN COMPOZITE INTELIGENTE (STEMOWTB)*, (director de proiect Prof. Dr.ing. Ion CURTU);

b) Granturi cu finanțare europeană ()

- BioEnergyTrain, BET (H202-LCE-2014-2, grant agreement No. 656760). (director de Grant /coordonator responsabil Prof. Dr.ing. Ion VIȘA):
- Reinforcing cooperation with ENP countries on bridging the gap between energy research and energy innovation, Ener2i (FP7 INCO, 609532/2014). (director de Grant /coordonator responsabil Prof. Dr.ing. Ion VIȘA):

In calitate de membru in echipa:

- Politichie Abiative per l’Edilizia Sostenibile (ERASMUS +, ctr. No. 014974/2015), Resp. Prof. dr. ing. Mircea Neagoe (membru în echipă Prof. Dr.ing. Ion VIȘA)
- *Proiect TEMPUS IV-ICo-op530278 TEMPUS-1-2012-DE-TEMPUS-JPHES Industrial Cooperation and Creative Engineering Education based on Remote Engineering and Virtual*

Instrumentation 2013–2016 (RESPONSABIL prof. Dr. Ing. Cornel SAMOILĂ)

- "Proiect: SFERA II" FP7- INFRA-312643 *Research on using solar energy to heat treatment of steels surface*, (membru în echipă Prof. Dr.ing. Ioan Giacomelli)

c) Contracte cu terți

- *"Simularea proceselor de curgere cu transfer de căldură"*. Contract 231 / 2014-2016. Beneficiar:Termolift Inc. New-York, S.U.A. (membru în echipă Prof. Dr.ing. Gh-AL. RADU)

4. Articole publicate în reviste:

- Visa I., Burduhos B., Neagoe M., Moldovan M., Duta A., *„Comparative analysis of the infield response of five types of photovoltaic modules”*, *Renewable Energy*, Volume 95, September 2016, Pages 178-190, ISSN 0960-1481, <http://dx.doi.org/10.1016/j.renene.2016.04.003>.
- Visa I., Duta A., *„Innovative Solutions for Solar Thermal Systems Implemented in Buildings”*, *Energy Procedia*, Volume 85, 2016, Pages 594-602, ISSN 1876-6102, <http://dx.doi.org/10.1016/j.egypro.2015.12.249>.
- Visa I., Cotorcea A., Neagoe M., Moldovan M., *„Adaptability of solar energy conversion systems on ships”*, 2016 IOP Conf. Ser.: Mater. Sci. Eng. 147 012070 (<http://iopscience.iop.org/1757-899X/147/1/012070>)
- Ilie C.A., Visa I., Duta A., *„Simulated thermal energy demand and actual energy consumption in refurbished and non-refurbished buildings”*, 2016 IOP Conf. Ser.: Mater. Sci. Eng. 147 012136
- Visa I., Cotorcea A., Moldovan M., Neagoe M., *„Two degrees of freedom parallel linkage to track solar thermal platforms installed on ships”*, 2016 IOP Conf. Ser.: Mater. Sci. Eng. 147 012071 (<http://iopscience.iop.org/1757-899X/147/1/012071>)
- Ilie A.C., Visa I., Duta A., *“Solar-Thermal Systems Implemented In Communities Of Collective Households for Domestic Hot Water Preparation”*, *Annals of „Dunarea de Jos” University of Galati, Mathematics, Physics, Theoretical Mechanics, Fascicle II, Year VIII, 2016*
- Giacomelli I., *“The Heat Treatment Influence of 1.3343 High Speed Steel on Content of Residual Austenite”*, in [Procedia Technology](#) Tg. Mures, [Volume 22](#), 2016, Pages 161-166
- Stanciu M.D., Curtu I., Tesula I., *“Structural Optimization of Composite from Wind Turbine Blades with Horizontal Axis Using Finite Element Analysis”*, Elsevier - *Procedia Technology* 22(2016) 726-733; http://www.sciencedirect.com/science?_ob=PublicationURL&_method=list&_hubEid=1-s2.0
- A Savin, P D Barsanescu, P Vizureanu, M D Stanciu, I Curtu, N Iftimie, R Steigmann, *“Damage detection of carbon reinforced composites using nondestructive evaluation with ultrasound and electromagnetic methods”*, *Materials Science and Engineering* 133 (2016) 012013 doi:10.1088/1757-899X/133/1/012013, <http://iopscience.iop.org/issue/1757->

[899X/133/1;jsessionid=B1B9FC1B958A6292BE3D024AAEEB8498.c6.iopscience.cld.iop.org](http://iopscience.iop.org/899X/133/1;jsessionid=B1B9FC1B958A6292BE3D024AAEEB8498.c6.iopscience.cld.iop.org),
ISSN 1757-899X

- R Steigmann, N Iftimie, G S Dobrescu, P D Barsanescu, I Curtu, M D Stanciu, A "Savin Nondestructive evaluation and characterization of GFRP using non-contact ultrasound and complementary method", ModTech International Conference - Modern Technologies in Industrial Engineering IV, IOP Conf. Series: Materials Science and Engineering 145 (2016) 032010 doi: 10.1088/1757-899X/145/3/032010, <http://iopscience.iop.org/article/10.1088/1757-899X/145/3/032010/pdf>

5. Articole publicate în ISI Proceedings

- Samoila, C., Ursutiu, D.; Jinga, V. "THE REMOTE EXPERIMENT COMPATIBILITY WITH INTERNET OF THINGS" PROCEEDINGS OF 2016 13TH INTERNATIONAL CONFERENCE ON REMOTE ENGINEERING AND VIRTUAL INSTRUMENTATION (REV) Book Series: International Conference on Remote Engineering and Virtual Instrumentation , Pages: 204-207 , Published: 2016 Conference: 13th International Conference on Remote Engineering and Virtual Instrumentation (REV) Location: Madrid, SPAIN, Date: FEB 24-26, 2016 , Accession Number: WOS:000382146400037 , ISBN:978-1-4673-8246-5, ISSN: 2330-9997
- Jinga,V., Cristea,D., Samoila,C., Ursutiu,D., Mateescu,A.A., Mateescu,G., Munteanu,D - "TRIBOLOGICAL PROPERTIES OF TERNARY NANOLAYERS OBTAINED FROM SIMPLE / COMPOUND MATERIALS" sustinuta la ICIR (International Conference on Innovative Research) EUROINVENT 2016-16-19 May 2016, Iasi Romania, si publicata In Institute of Physics Conference Series: "Material Sciences and Engineering"(MSE) vol.133 (conference 1) ID 01202 -2016

6. Articole clasificate ISI

- Jinga,V., Mateescu,A.O., Cristea,D., Mateescu,G., Burducea,I., Ionescu,C., Craciun,L.S., Ghiuta,I., Samoila,C., Ursutiu,D., Munteanu,D. – "COMPOSITIONAL, MORPHOLOGICAL AND MECHANICAL INVESTIGATIONS OF MONOLAYER TYPE COATING OBTAINED BY STANDARDS AND REACTIVE MAGNETRON SPUTTERING FROM Ti,TiB2 and WC" in Applied Surface Science , Volume 358, Part B, 15 December 2015, Pages 579–585; ISSN: 0169-4332 ;e-ISSN: 1873-5584, nr. DOI: 10.1016/j.apsusc.2015.08.120 Access number APSUSC 310671.7 ; WOS:000366220500011 IF = 2.711, Red (nu a fost raportat in 2015 deoarece s-a publicat dupa raportare)
- Samoila, C., [Ursutiu, D.](#), [Schleer, WH.](#), [Jinga, V.](#), [Nascov, V.](#) - „USING NOISE AND FLUCTUATIONS FOR IN SITU MEASUREMENTS OF NITROGEN DIFFUSION DEPTH” in MATERIALS
 - Volume: 9 Issue: 10, Article Number: 819, DOI: 10.3390/ma9100819, ISSN: 1996-1944 Accession Number: WOS:000384670800026- 2016 - IDS Number: DX8WG IF= 2,728, Red

- Kuchirka, Y ; Vytvytska, L ; Ursutiu, D ; Samoila, C - "**AN ONLINE COURSE AND LABORATORY FOR STUDYING AUTOMATIC CONTROL SYSTEMS**" INTERNATIONAL JOURNAL OF ONLINE ENGINEERING , Volume: 12 , Issue: 1 , Pages: 24-27 , DOI: 10.3991/ijoe.v12i01.5106 , Published: **2016** ISSN: 1868-1646 , e-ISSN: 1861-2121 WOS:000375386100004, IF=0,1
- Kuchirka, Y ; Petriv, M; Baran, S; Ursutiu; Samoila, C- "**ONLINE TEACHING AND LABORATORY COURSE ON MEASUREMENT METHODS**" INTERNATIONAL JOURNAL OF ONLINE ENGINEERING
 - Volume: 12, Issue: 3 , Pages: 4-7 , DOI: 10.3991/ijoe.v12i03.5233 , Published: **2016** ISSN: 1868-1646 , eISSN: 1861-2121 WOS:000375388500001, IF=0,1

7. Articole publicate în Baze de Date Indexabile

- Ursutiu,D., Samoila,C., Jinga,V., Altoe, F - "**THE FUTURE OF HARDWARE-SOFTWARE RECONFIGURABLE**" in ICL-2016 Conference 21-23 Sept.2016 - Belfast North Ireland published in "**Advances in Intelligent Systems and Computing**" –Springer- ISSN: 2194-5357, Editors: Michael E. Auer, David Guralnick, James Uhomoibhi Book Title: “Interactive Collaborative Learning” eBook ISBN 978-3-319-50337-0, Softcover ISBN 978-3-319-50336-3, Series Volume 544
- Samoila,C.,Ursutiu,D., Jinga,V.,- "**AN INSTRUMENT FOR CREATIVITY POTENTIATION-REMOTE EXPERIMENT**" in ICL-2016 Conference 21-23 Sept.2016 -Belfast North Ireland published in "**Advances in Intelligent Systems and Computing**" –Springer- ISSN: 2194-5357, Editors: Michael E. Auer, David Guralnick, James Uhomoibhi Book Title: “Interactive Collaborative Learning” eBook ISBN 978-3-319-50337-0, Softcover ISBN 978-3-319-50336-3, Series Volume 54
- Samoila,C.,Ursutiu,D., Jinga,V.,- "**THE REMOTE EXPERIMENT COMPATIBLTY WITH INTERNET OF THINGS**" in Remote Experiment and Virtual Instrumentation Conference REV-2016, 24-26 Feb. 2016 UNED, Madrid , Spain, DOI: 10.1109/REV.2016.7444466 INSPEC Accession Number: 15903214 Publisher: IEEE , pp: 204 - 207,
- Samoila,C., Ursutiu,D., Jinga, V. - "**REMOTE EXPERIMENT AND VIRTUAL SENSORS**" 2016 IEEE Global Engineering Education Conference (EDUCON) Year: 2016 pp: 980 - 983, DOI: 10.1109/EDUCON.2016.7474670 IEEE Conference Publications INSPEC Accession Number: 16022433 DOI: 10.1109/EDUCON.2016.7474670

8. Citări în reviste indexate ISI

- Lucrarea: "**MONTHLY AVERAGE DAILY GLOBAL AND DIFFUSE SOLAR RADIATION BASED ON SUNSHINE DURATION AND CLEARNESS INDEX FOR BRASOV, ROMANIA**" publicata in Revista Journal of Renewable and Sustainable Energy 6, 053106 (2014); E-ISSN: 1941-7012, DOI: 10.1063/1.4896596, AIP Publishing-2014, pp. 053106-1 -053106-16, WOS:000344590600006 (co-autor prof. Dr.ing. Cornel SAMOILĂ)

Citata in: " Functionalized antimicrobial compozite thin films printing for stainless steel implant coatings" *Molecules*, vol.21 (2016) issue 6, ISSN 1420-3049, <http://dx.doi.org/10.3390/molecules21060740>

Citata in: "Improved antifouling properties and selective biofunctionalization of stainless steel by employng heterobiofunctional silane-polyethylene glycol overlayers and a vidin-biotin technology" *Scientific Reports* vol. 6 article number 29324 ISSN 2045-2322-2016, <http://dx.doi.org/10.1038/srep29324>

- **Lucrarea: "FAST COMPUTATION ALGORITHM FOR SPECKLE PATTERN SIMULATION"** 12th TIM Physics Conference of the West-University of Timisoara- 27-30 Nov.2012, Books series title AIP Conference Proceedings, Vol.1564, ISSN-0094-243X, ISBN-978-0-7354-1192-0, Access Number: WOS.000327454500034, pp 217-222 (co-autor prof. Dr.ing. Cornel SAMOILĂ)
Citata in: " Simulation of speckle patterns with pre-defined correlation distributions" *Biomedical Optics Experts*, vol.7, issue 3, pp.798-809 (2016) ISSN 2156-7085, <http://dx.doi.org/10.1364/BOE.7.000798>
- **Lucrarea: "ONLINE TEACHING AND LABORATORY COURSE ON MEASUREMENT METHODS"** INTERNATIONAL JOURNAL OF ONLINE ENGINEERING Volume: 12, Issue: 3 , Pages: 4-7 , DOI: 10.3991/ijoe.v12i03.5233 , Published: 2016 ISSN: 1868-1646 , eISSN: 1861-2121 WOS:000375388500001 (co-autor prof. Dr.ing. Cornel SAMOILĂ)
Citata In: "A portable PID control learning tool by means of a mobile robot" *Journal of Online Engineering* -2016, v12 n6 (2016): 54-57 ISSN: 1868-1646 Unique Identifier:660515321

9. Citări în reviste indexate BDI

Lucrarea: "NI ELVIS IN REMOTE ELECTRONIC LABORATORY-REL"- Ursutiu,D., Cotfas,O., Samoila., C- 1st Symposium REV-2004, Remote Engineering and Virtual Instrumentation/ Carinthia Tech Institute, 25 Sept-1Oct 2004- Editura-Kassel Press, Editor M.Auer, ISBN-3-89958-090-7;

Citata in: "Remote laboratory as conceptula model of blended learning" *SIE 2015-Society, Untegration, Education-Proceedings* vol. 2 (2016); <http://dx.doi.org/10.17770/sie2016vol2.1421>

10. Cărți publicate:

a. Capitole în monografiile internaționale

- Moldovan M., Visa I, Duta A., *“FUTURE TRENDS FOR SOLAR ENERGY USE IN NEARLY ZERO ENERGY BUILDINGS, IN ADVANCES IN SOLAR HEATING AND COOLING* <http://dx.doi.org/10.1016/B978-0-08-100301-5.00020-5>, Elsevier, Woodhead Publishing, 2016, pp. 547 – 569
- Visa, M. Neagoe, M. D. Moldovan, *“STRUCTURAL SYNTHESIS OF PLANAR GEARED LINKAGE MECHANISMS AS MULTIBODY SYSTEMS”*, New Advances in Mechanisms, Mechanical Transmissions and Robotics, Volume 46 of the series *Mechanisms and Machine Science* pp 99-106, Date: 01 October 2016

11. Brevete acordate

- Dudita M., Bacanu Gh., Visa I., Duta A., *„PLITA IZOTERMA”*, Brevet Nr. a2011 00127 (decizie de acordare, 28.10.2016)
- Visa I., Diaconescu D., Neagoe M., Eftimie E., Serban C., Moldovan M., Saulescu R., Porca Vatasescu M., Burduhos, Totu I., *„MECANISM MONOAXIAL DE ORIENTARE CU DOI ACTUATORI”*, RO127979 (B1) 2016-05-30

12. Propuneri de brevete

- Vișa I. , Duță A., Ciobanu D., Totu I. *„STAND ȘI METODĂ PENTRU TESTAREA COLECTOARELOR SOLAR-TERMICE PLATE DIN SISTEMUL SALIN”*. RO130937 (A0)-2016-02-26.

13. Reprezentanți în Comitete științifice ale Congreselor internaționale

- Conferinta ICL-2016 –Belfast Ireland www.icl-conference.org Membru in International Program Committee Chairman Session 4B (prof. C. SAMOILĂ)
- Conferinta Remote Engineering and Virtual Instrumentation, Madrid, Spain 2016 Membru in International Program Committee (prof. C. SAMOILĂ)
- IEEE EDUCON Conference 2016, Abu Dhabi –UAE - Membru in International Advisory Board (prof. C. SAMOILĂ)
- “ The 12th International Congress of Automotive and Transport Engineering CONAT 2016 ”, Membru în Scientific Committee, coordonator al Secției „ Inovative Solutions for Motor Vehicle” (prof. Gh-Al. Radu)
- “ The 12th International Congress of Automotive and Transport Engineering CONAT 2016 ”, Chairman Session ISV (prof. Gh-Al. Radu)

14. Alte activități:

- În cursul anului 2016 au fost înființate și aprobate de către Prezidiul ASTR 3 Cercuri științifice asociate Filialei Brașov a ASTR, după cum urmează:
 1. *Sisteme electrice avansate* (coordonator: prof.univ.dr.ing. Elena HELERA)
 2. *Conservarea științifică a patrimoniului cultural din lemn* (coordonator: prof.dr.chim. Maria Cristina TIMAR).
 3. *Inginer inovativ și întreprinzător în industria lemnului* (coordonator: prof. univ. dr. ing. Curtu Ioan)
- **Întâlniri cu Inspectorii Generali și Directorii Caselor Corpurilor Didactice din Județele Brașov, Prahova, Covasna, Harghita, Buzău.** În urma acestor întâlniri s-au semnat acorduri cadru de colaborare și s-au demarat cca. 20 de vizite în licee din aceste județe. Ele au vizat prezentarea programelor de studii inginerești, cu precădere programe care formează profesioniști în domenii majore ale dezvoltării durabile (energie regenerabilă și mediu)
- **Organizarea celei de-a 8-a Edii a Conferinței Societății Române de Chimie – Secțiunea Învățământ Preuniversitar, Brașov, 1-18 septembrie, 2016**
- **Seleționarea pentru nominalizarea dlui. Prof. dr. ing. Nicolae Ispas de la Universitatea Transilvania din Brașov, ca specialist – reprezentant al ASTR - în vederea participării la Scientific Expert Workshop “Closing the Gap between light-duty Vehicle real-world CO₂ Emissions and Laboratory Testing” , 7-8 iunie Lisabona, unde a prezentat în plen intervenția “CO₂ Emission Determination in Accord with the European Regulation for Old and Today Cars Powered by Diesel Engines “.**

Concluziile rezultate din workshop au fost sistematizate și prezentate în lucrarea “Closing the Gap between light-duty Vehicle real-world CO₂ Emissions and Laboratory Testing” (80 pagini) apărută în noiembrie 2016 sub auspiciile SAM (Scientific Advice Mechanism) al Comisiei Europene cu ISBN 978-92-79-63183-2 Print și ISBN 978-92-79-63184-9 PDF.