

**Author: Veneția SANDU**

**Title: CONTRIBUTIONS TO THE OPTIMIZATION OF HEAVY DUTY DIESEL ENGINES**

**Domain: Mechanical Engineering**

## PUBLICATIONS LIST

### RELEVANT PAPERS

1. **V.Sandu**, *Experimental investigations for meeting standards of diesel engine visible emissions*, Bulletin of the "Transilvania" University of Braşov, Series I: Engineering Sciences, Vol. 8 (57) Nr. 1, 2015, p.13-18, indexed EBSCO, [http://webbut.unitbv.ro/bu\\_2015/series\\_i/buletin\\_i\\_pdf/sandu\\_v.pdf](http://webbut.unitbv.ro/bu_2015/series_i/buletin_i_pdf/sandu_v.pdf).
2. **V.Sandu** *Investigations of collateral effects of fuel additives on diesel engine smoke emissions*, Bulletin of the "Transilvania" University of Braşov, Series I: Engineering Sciences, Vol. 6 (55) Nr. 1, 2013, p.13-18, indexed EBSCO, <http://webbut.unitbv.ro/Bulletin/Series I/BULETIN I PDF/Sandu V.pdf>
3. **V.Sandu**, D. Florea, L.Georgescu, M.Comănescu, *Dezvoltarea unor catalizatori pentru purificarea gazelor de evacuare emise de motoarele diesel*, Revista de Chimie Bucharest, vol 8, august 2007, pag.760-764, **ISI Journal** [http://www.revistadechimie.ro/article\\_eng.asp?ID=1532](http://www.revistadechimie.ro/article_eng.asp?ID=1532)
4. **V. Sandu**, M. Marcu, D. Turcu, *Selection of Abatement Techniques Based on Engine Noise Analysis - "CONAT 2004"* - International Automotive Congress - Session 2: Automotive and Environment /Noise reduction, ISBN 973-635-394-X, indexed in FISITA
5. **V.Sandu**, C. Stanca, A. Păsăroiu, D. Dobre, *Experimental investigation of thermoelectric heat recovery from a diesel engine*, Proceedings of the 11<sup>th</sup> International Conference on Applied and Theoretic Electricity, ICATE 2012, ISSN 2069-0150, Craiova, 25-27 October, 2012, indexed COPERNICUS;IEEE, **ISI proceedings**.
6. **V.Sandu**, V.B. Ungureanu, M. Ivănoiu, L. Costiuc, *Experimental analysis on external surface convective-radiative heat transfer in stationary diesel engines*, Revista de Termotehnica no.1, 2014., (indexed in INDEX COPERNICUS), <http://www.revistatermotehnica.agir.ro/articol.php?id=2143>.
7. **V. Sandu**, C. Bejan, *Theoretical and experimental study of torque damping in non linear elasticity couplings*, Proceedings of the 13<sup>th</sup> International Conference Modern Technologies, Quality and Innovation, Modtech Iasi & Chişinău, 21-23 mai 2009, ISSN 2066-3919, p. 567-570, **ISI proceedings**.
8. D. Florea, **V.Sandu**, *Experimental study of urea SCR catalyst for diesel engine NO<sub>x</sub> abatement*, Revista de Chimie, no. 9, 2014, **ISI Journal**, <http://www.revistadechimie.ro/pdf/FLOREA D.pdf 9 14.pdf>
9. M.Marcu, **V.Sandu** - *Evaluation and abatement of environmental noise. A case study for district heating plant placed in a residential area of Brasov – Romania*, Environmental Engineering and Management Journal, Jan. 2015, Vol. 14, No. 1, 195-204, **ISI Journal**, [http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol14/no1/20\\_81\\_Marcu\\_12.pdf](http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol14/no1/20_81_Marcu_12.pdf)
10. S.Aldea, I.Nenciu,**V.Sandu**, C. Bejan *Multipurpose vehicle for agriculture, forestry and communal works*, Automotive and Environment" International Congress 2-4 nov. 2005, CAR Pitesti, ISBN 973-690-450-4.

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**PhD THESIS**

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*Chemical and acoustical treatment of exhaust gases produced by diesel engines,*

PhD Thesis, "Transilvania" University of Brasov, 1998, Scientific coordinator Prof. Gheorghe Bobescu (247 pages)

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**PATENTS**

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**BOOKS / BOOK CHAPTERS**

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**BOOKS**

V.Ungureanu, G.Băcanu, D.Șova, **V. Sandu**, L.Costiuc - *Thermodynamics. Practical works.* "Transilvania" University Publishing House, Brasov, 2010, 404 pag. ISBN 978-973-598-832-6, bilingual – Romanian and English (19%).

**V.Sandu**, A. Chiru, *Automotive fuels*, Matrixrom publishers, Bucharest, 2007, (136 pag.), ISBN 978-973-755-188-7

**V. Sandu**, *Termotechnics and thermal machines*, "Transilvania" University Publishing House, Brasov, 2007 (166 pag.), ISBN 978-973-635-937-8.

M. Ivănoiu, **V. Sandu**, *Sustainable Development*, "Transilvania" University Publishing House, Brasov, 2005, (222 pag.).

**V.Sandu** s.a., *Air pollution - Ecological guide for schools* - 2005, S&G Print publishers, (73 pag.)

A. Manea, L. Manea, **V. Sandu**, *Thermal engines - Processes and pollution*, Matrixrom publishers, Bucharest, 2004 - ISBN 973-685-731-X (361 pag.).

C.Cofaru, E. Helerea, L. Dumitrescu, D. Perniu, **V. Sandu**, *Materials, Energy, Sustainable Development*, "Transilvania" University Publishing House, Brasov, 2003, ISBN: 973-635-199-8, (121 pag.).

V. D. Negrea, **V. Sandu**, *Abatement of environmental pollution in road transportation*, Monography – Tehnical Publishing House, Bucharest, 2000, ISBN 973-31-1455-3, 380 pages.

**BOOK CHAPTERS**

**V. Sandu**, C. Papadopol, P. Răducanu, D. Turcu, C. Bejan, cap.24 *Test bench evaluation of heavy vehicle supplementary brake systems*, in *The automobile and the environment*, ISBN 1-4438-2972-2, Cambridge Scholars Publishing, Newcastle upon Tyne, Great Britain, 2011, p.339-348, <http://www.cambridgescholars.com/download/sample/60666>

**V. Sandu**, the chapters "The natural gas" and "The liquefied petroleum gas" in the "Alternative Fuels" section of the volume "Transport and Environmental Engineering C. Cofaru and D. Florea - editors, ISBN 978-973-598-066-5, 25pag., "Transilvania" University Publishing House, Brasov, 2007.

**V. Sandu**, the chapter "Intelligent transport system architecture" in the volume *Advanced road transport systems*, D. Florea and C. Cofaru - editors, ISBN978-973-635-776-3, 17 pag., "Transilvania" University Publishing House, Brasov, 2007.

**V. Sandu**, the chapter "Architecture of intelligent transport systems" in the volume *Advanced road transport systems*, D. Florea and C. Cofaru - editors, ISBN 978-973-635-775-6, 17 pag., "Transilvania" University Publishing House, Brasov, 2007.

## JOURNAL PAPERS

### PAPERS PUBLISHED IN JOURNALS INDEXED IN ISI AND IN INTERNATIONAL DATA BASES

M.Marcu, **V.Sandu** - *Evaluation and abatement of environmental noise. A case study for district heating plant placed in a residential area of Brasov – Romania*, Environmental Engineering and Management Journal, January 2015, Vol. 14, No. 1, 195-204, **ISI Journal**, [http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol14/no1/20\\_81\\_Marcu\\_12.pdf](http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol14/no1/20_81_Marcu_12.pdf)

D. Florea, **V.Sandu**, *Experimental study of urea SCR catalyst for diesel engine NO<sub>x</sub> abatement*, Journal of Chemistry, nr. 9, 2014, **ISI Journal**, <http://www.revistadechimie.ro/pdf/FLOREA D.pdf 9 14.pdf>

**V.Sandu** , D. Florea, L.Georgescu, M.Comănescu, *Development of catalysts for purifying exhaust gases produced by diesel engines*, Journal of Chemistry, Bucharest, vol 8, August 2007, pag.760-764, ISSN 0034-7752, **ISI Journal** [http://www.revistadechimie.ro/article\\_eng.asp?ID=1532](http://www.revistadechimie.ro/article_eng.asp?ID=1532)

**V.Sandu**, *Experimental investigations for meeting standards of diesel engine visible emissions* , Bulletin of the "Transilvania" University of Braşov, Series I: Engineering Sciences, Vol. 8 (57) Nr. 1, 2015, p.13-18 (**indexed in EBSCO**), [http://webbut.unitbv.ro/bu\\_2015/series i/buletin i pdf/sandu v.pdf](http://webbut.unitbv.ro/bu_2015/series i/buletin i pdf/sandu v.pdf)

**V.Sandu** , *Optimisation of 798-05 diesel engine performance using waste-gated turbocharger*, Review of the Air Force Academy, no.3 (27), 2014, p.79-82, (**indexed in COPERNICUS**), [http://www.afahc.ro/ro/revista/2014\\_3/79.pdf](http://www.afahc.ro/ro/revista/2014_3/79.pdf)

**V.Sandu**, *Improving diesel engine performance by air-to-air intercooling*, Bulletin of the "Transilvania" University of Braşov, Series I: Engineering Sciences Vol.7 (57), Nr. 2, 2014, p.19-24, (**indexed in EBSCO**), <http://webbut.unitbv.ro/Bulletin/2014/BULETIN I/Sandu V.pdf>

L. Gergely , **V.Sandu** , *Investigation of friction coefficients of additivated engine lubricants in Falex tester*, Bulletin of the "Transilvania" University of Braşov, Series I: Engineering Sciences Vol.7 (57), Nr. 2, 2014, p.13-18, (**indexed in EBSCO**), <http://webbut.unitbv.ro/Bulletin/2014/BULETIN I/Gergely L.pdf>

**V. Sandu**, M.Ivănoiu , *Integrating academic education and community needs in environmental field - case studies analysis*, Ecoterra , 2014 (2), 18-26, (**indexed in COPERNICUS**), <http://www.ecoterra-online.ro/files/1412677022.pdf>.

**V.Sandu**, V.B. Ungureanu, M. Ivănoiu, L. Costiuc, *Experimental analysis on external surface*

- convective-radiative heat transfer in stationary diesel engines*, Journal of Thermotechnics nr.1, 2014, **(indexed in COPERNICUS)**, <http://www.revistatermotehnica.agir.ro/articol.php?id=2143>
- V. Sandu**, V. Gheorghe, *Adapting vehicle diesel engine to power generation – conversion aspects*, Bulletin of the "Transilvania" University of Braşov, Series I: Engineering Sciences Vol.7 (57), Nr. 1, 2014, p.13-18, **(indexed in EBSCO)**, <http://webbut.unitbv.ro/Bulletin/2014/BULETIN I PDF/Sandu V.pdf>
- V.Sandru** *Investigations of collateral effects of fuel additives on diesel engine smoke emissions*, Bulletin of the "Transilvania" University of Braşov, Series I: Engineering Sciences, Vol.6 (55), Nr. 1, 2013, p.13-18, **(indexed in EBSCO)**, <http://webbut.unitbv.ro/Bulletin/Series I/BULETIN I PDF/Sandu V.pdf>
- C.Bejan , **V.Sandru**, *Models for time-variation of mechanical strength for materials and parts of machines*, Bulletin of the "Transilvania" University of Braşov, Series I: Engineering Sciences, • Vol. 4 (53) Nr.2 , 2011,p. 7-12, **(indexed in EBSCO)**, <http://webbut.unitbv.ro/BU2011/Series I/BULETIN I/Bejan C.pdf>
- P. Răducanu, C. Papadopol, **V. Sandu**, R. Fernique, *Aspects concernant l'utilisation des équipements mobiles de compactage des déchets type sciure*, Journal of Thermotechnics, nr 1/ 2011, **(indexed in COPERNICUS)**, [http://www.revistatermotehnica.agir.ro/files/1\\_2011\\_Termodinamica.pdf](http://www.revistatermotehnica.agir.ro/files/1_2011_Termodinamica.pdf)
- V. Sandu** *Thermal adjustment of cooling systems in commercial diesel engines*, International Congress on Automotive and Transport, Brasov, Romania, XI-th Edition, October 27 – 29, ISSN 2069-0428, CONAT 2010, **(indexed by FISITA)**.
- V. Sandu**, C. Papadopol, P. Răducanu, D.Turcu,C. Bejan, *Test bench evaluation of heavy vehicle supplementary brake systems*, International Congress on Automotive and Transport, Brasov, Romania,XI-th Edition, October 27 – 29, ISSN 2069-0428, CONAT 2010, **(indexed by FISITA)**.
- N.Sarbu, P.Puscas,C.Bejan, **V. Sandu** – *Testing procedure for automotive hydraulic cylinders* , International Congress on Automotive and Transport, Brasov, Romania, XI-th Edition, October 27 – 29, ISSN 2069-0428, CONAT 2010, **(indexed by FISITA)**.
- C.Bejan, **V. Sandu**, *Passenger car dimensional statistics related to optimal parking space*, International Congress on Automotive and Transport, Brasov, Romania,XI-th Edition, October 27 – 29, ISSN 2069-0428, CONAT 2010, **(indexed by FISITA)**.
- A.Gal, D. Turcu, **V. Sandu**, - *The Mechanical Power Loss of the Diesel Engines*, Bulletin of the "Transilvania" University of Braşov, Series I: Engineering Sciences, Vol. 1 (50), 2008, p. 27-30 (indexed in EBSCO), [http://webbut.unitbv.ro/BU2008/BULETIN I PDF/Mechanical Engineering/Gal A\\_08.pdf](http://webbut.unitbv.ro/BU2008/BULETIN I PDF/Mechanical Engineering/Gal A_08.pdf)
- V.Negrea, I Negrea, I.Rafan, **V. Sandu**, *Road transports, their sustainable development and environment*, Science and management of automobile and tractors , SIAR International Congress SMAT 2008, Craiova, ISBN 978-606-510-245-3, pg.512-515, **(indexed by FISITA)**.
- V. Sandu**, D. Şova, *Air Pollution Abatement through Blow-by Gas Oil Separation Applied to Diesel Engines* , „Automotive and Environment” International Congress 2-4 nov. 2005, CAR Pitesti, ISBN 973-690-450-4, **(indexed by FISITA)**.
- E. Ivan, **V. Sandu**, L. Manea, A. Manea, *Control of Urban Traffic Air Pollution by Means of Adapting and Displaying Traffic Light Timings*, „Automotive and Environment” International Congress 2-4 nov. 2005, CAR Pitesti ISBN 973-690-450-4, **(indexed by FISITA)**.
- V. Sandu**, M. Marcu, D. Turcu, *Selection of Abatement Techniques Based on Engine Noise Analysis* - “CONAT 2004” - International Automotive Congress - Session 2: Automotive and

Environment /Noise reduction, ISBN 973-635-394-X, **(indexed by FISITA)**.

M. Marcu, **V. Sandu**, V. David, *Experimental Determination of Noise Level at the Driving Axle in Order to Reduce the Exterior Noise of the Roman Vehicles*, “CONAT 2004” - International Automotive Congress - Session 2: Automotive and Environment /Noise reduction, ISBN 973-635-394-X (CD), **(indexed by FISITA)**.

A.Manea, L. Manea, Gh. Bobescu, **V. Sandu**, *Contributions to the causes that led to destructions in vehicle engines with reference to a cylinder block construction and its interaction with cooling liquid*, “CONAT 2004” - International Automotive Congress - Session 2: Automotive and Environment, ISBN 973-635-394-X, **(indexed by FISITA)**.

A.Manea, L. Manea, Gh. Radu, **V. Sandu**, *Contributions to the causes of destructions recorded in vehicle’ engines regarding the complex analysis of interaction between cooling liquid -cylinder jacket* “CONAT 2004” - International Automotive Congress - Session 2: Automotive and Environment, ISBN 973-635-394-X, **(indexed by FISITA)**.

V.D. Negrea, G. Pădure, S. Ponoran, **V. Sandu**, *Research regarding the numerical evaluation of toxicity indices for the noxes produced by burning sources*, Environmental Engineering and Management Journal dec.2002,vol1, No 4, Proceedings of the first International Conference on Environmental Engineering and Management ICEEM-01, 2002, sept. 26-28, Iasi, pag.511-516, ISSN1582-9596, **(indexed in EBSCO)**,  
<http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol1/no4/4Negrea abstract.pdf>

**V. Sandu** *Acoustical assessment of diesel engine noise*, IX International Conference Automotive for the next century, 11-12 November CONAT’ 99, Brasov, volume 1, pag.267-272, ISBN 973-9474-19, **(indexed by FISITA)**.

## PAPERS IN JOURNALS CERTIFIED BY CNCSIS

**V.Sandu**, *Educational aspects of environmental protection projects* , Third Edition of the French Romanian Colloquium Energy - Environment - Economy and Thermodynamics, June 15-17, 2006, Timisoara, Scientific Bulletin of the Timisoara University, Mechanics series, tome 51(65), section 2, 2006, ISSN 1224-6077, pag.231-234  
<http://www.eng.upt.ro/buletin/numere/2006/fasc-02/2006-02-contents-en.pdf>

M.Mesaros, **V. Sandu**, M. Ivanoiu, *Simulation du fonctionnement d’un bus à propulsion hybride sur un trajet dénivelé – I-ère partie. Modélisation*, Third Edition of the French - Romanian Colloquium Energy - Environment - Economy and Thermodynamics, June 15-17, 2006, Timisoara, Scientific Bulletin of the Timisoara University, Mechanics series, tome 51(65), section 2, 2006, ISSN 1224-6077, pag. 81-86,  
<http://www.eng.upt.ro/buletin/numere/2006/fasc-02/2006-02-contents-en.pdf>

M.Mesaros, , M. Ivanoiu, **V. Sandu**, *Simulation du fonctionnement d’un bus à propulsion hybride sur un trajet dénivelé – II-ème partie. Simulations et résultats*, Third Edition of the French - Romanian Colloquium Energy – Environment - Economy and Thermodynamics, June 15-17, 2006, Timisoara, Scientific Bulletin of the Timisoara University, Mechanics series, tome 51(65), section 2, 2006, ISSN 1224-6077, pag. 87-94,  
<http://www.eng.upt.ro/buletin/numere/2006/fasc-02/2006-02-contents-en.pdf>

**V.Sandu**, L.Manea, A.Manea, *Exhaust Back-Pressure Influence on Diesel 798-05 Engine Performance*, Acta Universitatis Pontica Euxinus–International Scientific Journal published by

aegis of Technical University of Varna – Bulgaria and Technical University Ovidius Constanta (ISSN 1312-1669) – vol.5, nr.2, 2005 – pag.32-36

**V. Sandu**, *Anti-pollutant technologies applied to industrial engines*, Journal of Industrial Ecology, nr. 3-4-2004, pag.13-20, ISSN 1224-3183, published by ICTCM-OID.ICM

M. Marcu, **V. Sandu**, A. Manea, *Acoustical Optimization of Roman Vehicle Exhaust System – Annals of Mechanical Engineering – Volume 6, Tome I – ”Tehnonav” – Ovidius University, Constanța – 2004, pag. 430-437, ISSN-1223-7221*

**V. Sandu**, D. Turcu, A. Manea, *NO<sub>x</sub> Selective Catalytic Reduction Applied to Diesel Stationary Engines*, Annals of Mechanical Engineering – Volume 6, Tome I – ”Tehnonav” – Ovidius University, Constanța – 2004, pag. 458-463, ISSN-1223-7221.

**V. Sandu**, *Analysis of fossil fuels replacement by vegetal fuels for diesel engines*, Journal of Industrial Engineering RECENT Vol. 4 (2003), nr. 3 (9) noiembrie 2003, ISSN 1582-0246, pag. 68-71, <http://recentonline.3x.ro/nr009.htm>

C. Bejan, **V. Sandu**, M. Gal, *Testing with conventional and operational stress to establish the temporal evolution of mechanical strength characteristics of engine components*, Ovidius University Annals of Mechanical Engineering, vol.IV , tome I, 2002, Proceedings of ”Tehnonav 2002” Conference, Constanța May 30 mai – June the 1st, 2002, pag.452-455, ISSN 1223-7721

## **PAPERS IN INTERNATIONAL CONFERENCES**

---

### **PAPERS IN THE ISI PROCEEDINGS OF INTERNATIONAL CONFERENCES**

**V.Sandu**, C. Stanca, A. Păsăroiu, D. Dobre, *Experimental investigation of thermoelectric heat recovery from a diesel engine*, Proceedings of the 11<sup>th</sup> International Conference on Applied and Theoretic Electricity, ICATE 2012, ISSN 2069-0150, Craiova, 25-27 October, 2012 - Annals of. Craiova University, Electrical Engineering series, no. 36. ISSN: 1842-4805, **indexed ISI, COPERNICUS, IEEE**

C.Stanca,**V. Sandu** , R.Văduva, O.Nemeth, *Distributed system for indoor temperature control*, Proceedings of the 11<sup>th</sup> International Conference on Applied and Theoretic Electricity, ICATE 2012, ISSN 2069-0150, Craiova, 25-27 October, 2012 - Annals of. Craiova University, Electrical Engineering series, no. 36. ISSN: 1842-4805, **indexed ISI, COPERNICUS, IEEE**

F.Sandu, **V. Sandu**, S. Nan , A. Dumitru - *Data acquisition and virtual instrumentation system for the study of Peltier and Seebeck effects*, 12th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, May 20-22, 2010, Brasov, ISBN978-973-131-7018-1, **indexed ISI, IEEE**

**V. Sandu**, A.V. Nedelcu, S.A. Cocoradă, S. Dinu - *Instructional design in the vocational training on computer networking*, 12th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, May 20-22, 2010, Brasov, ISBN978-973-131-7018-1, **indexed ISI, IEEE**

**V. Sandu**, C. Bejan, *Theoretical and experimental study of torque damping in non linear elasticity couplings*, Proceedings of the 13 th International Conference Modern Technologies, Quality and Innovation, Modtech Iasi & Chișinău, May 21-23, 2009, ISSN 2066-3919, p.567-570,**indexed ISI**

**V. Sandu**, C. Ambrus, *Problem based learning - case study for automotive engineering*, Proceedings of the 13 th International Conference Modern Technologies, Quality and Innovation, Modtech Iasi & Chișinău, May 21-23, 2009, ISSN 2066-3919, p. 571-574, **indexed ISI**.

A.Manea, L. Manea, A. Nocivin, **V. Sandu**, *Studies of the destruction causes due to the structure of a four stroke naval Diesel engine cylinder's material affected by cavitation*, The 46 th International Symposium Electronics in Marine „Elmar-2004” 16-18 Iunie 2004, Zadar, Croatia, pg.531-536, ISSN 1334-2630, **indexed ISI, IEEE**,  
[http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?isnumber=29769](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?isnumber=29769)

#### **PAPERS IN THE PROCEEDINGS OF INTERNATIONAL CONFERENCES (non- ISI)**

V.Gheorghe, C.Bejan , **V.Sandu**, I.Lihtețchi, E.Secară - *Determination of coefficient of thermal conductivity on glass-fibers reinforced polymer matrix composites*, Proceedings of 5<sup>th</sup> International Conference, "Computational Mechanics and Virtual Engineering "COMEC 2013, 24-25 October 2013, "Transilvania" University Brașov, Romania, ISBN -13:978-1-939757-11-1, pag. 380-384

**V.Sandu**, *Measurement of coefficients of friction of automotive lubricants in pin and vee block test machine*, Proceedings of 5<sup>th</sup> International Conference, "Computational Mechanics and Virtual Engineering "COMEC 2013, 24-25 October 2013, "Transilvania" University Brasov, Romania, ISBN -13:978-1-939757-11-1, pag. 289-296

**V.Sandu**, V.Ungureanu *Experimenting air coolers performance on the 798-05R turbocharged diesel engine*, The 2nd International Conference Motor Vehicle & Transportation, Timișoara - MVT 2012, ISBN 978-973-638-524-7.

**V.Sandu**, M. Ivănoiu, *Improving D2156MTN8 diesel engine performance using a visco fluid fan clutch*, The 2nd International Conference Motor Vehicle & Transportation Timișoara- MVT 2012, ISBN 978-973-638-524-7.

**V.Sandu**, C.Bejan, *Experimental measures for meeting standards of diesel engine visible emissions*, The second International Conference Research a& Innovation in Engineering, COMAT 2012, 18-20 October "Transilvania" University Brasov, ISBN 978-973-131-162-3, vol. II, pag.528-534.

**V.Sandu**, C.Bejan , *Contributions to operation modelling specific to flexible couplings*, Proceedings ModTech International Conference "Modern Technologies, Quality and Innovation", Chisinau, 2011, ISSN 2069-6737, pag.949-952.

C.Bejan , **V.Sandu**, *Model of free vibration of non-linear flexible couplings*, Proceedings ModTech International Conference "Modern Technologies, Quality and Innovation", Chisinau, 2011, ISSN 2069-6737, pag.73-76.

V.Gheorghe, **V.Sandu**, C.Bejan *Fatigue and stiffness analysis of parabolic springs used in commercial vehicle suspension*, The 3rd International Conference on Advanced Composite Materials Engineering, COMAT 2010 "Transilvania" University Brasov

C. Stanca, **V.Sandu**, I.Szekely - *Embedded System for Start-of-ICE with Hybrid Battery-Supercapacitor Sources*, International Conference on Development and Application Systems, May 27-29, 2010 DAS 2010 - Suceava, Romania, CD, ISSN 1844-5039,  
[www.dasconference.ro/cd2010/data/papers/C121.pdf](http://www.dasconference.ro/cd2010/data/papers/C121.pdf)

**V.Sandu**, C.Bejan *Evaluation of torque damping in non linear elastic couplings*, The third

International Conference Computational Mechanics and Virtual Engineering, COMEC 2009, ISBN 978-598-572-1, pg.678-683, "Transilvania" University Brasov.

**V.Sandu**, L.Manea, C.Bejan -*Procedure for vehicle crankshaft certification as spare part*,The third International Conference Computational Mechanics and Virtual Engineering, COMEC 2009, "Transilvania" University Brasov, ISBN 978-598-572-1, pg. 672-677.

**V.Sandu** , C. Bejan - *Application of motoring method in power loss determination for diesel engines*,3rd International Conference on Thermal Engines and Environmental Engineering METIME, June 4-6, 2009, Proceedings, pg. 187-192, published by the Lower Danube Foundation, Galați, Romania - ISBN 978-973-627-442-8.

D. Minișan , **V. Sandu** , *The influence of ethanol-gasoline blends on spark ignition engine operation, performance and emission characteristics*, "Science and management of automobile and tractors", 23-25.10.2008, SMAT 2008, Craiova University, ISBN 978-606-510-245-3, pg.58-61.

C.Bejan, C. Ambrus, **V. Sandu**, C. Hașegan ,*Considerations on vehicle access time from urban to extraurban traffic*, International Conference "Tehnonav 2008" – Ovidius University, Constanța, ISBN 978-973-614-447-9, pag. 317-320.

**V.Sandu**, C.Bejan, *Assessing exhaust gas toxicity abatement using biodiesel blends*, International Conference "Tehnonav 2008" – Ovidius University, Constanța, ISBN 978-973-614-447-9, pg. 302-305.

D. Șova, **V. Sandu** , *The use of wood and paper wastes for heat-insulating construction panels*, Conferința Internațională Wood Science and Engineering in the Third Millenium, "Transilvania" University, Brașov, 20-22 .06. 2007, ISSN 1843 -2689, pg.363-370.

**V. Sandu**, D. Minisan , I. Moldoveanu, A. Pandi, *Considerations on distillation curve of gasoline- ethylic alcohol mixtures*, Proceedings of the International Conference on Thermal Engines and Environmental Engineering, METIME, Lower Danube University, Galați, 2007, ISSN 1843- 2794, pag.221-226

Costel Bejan , **V. Sandu** , *Study of reliability –pollution relation for heavy duty diesel engines*, Proceedings of the International Conference on Thermal Engines and Environmental Engineering, METIME, Lower Danube University, Galați, 2007, ISSN 1843- 2794, pag.227-232

**V. Sandu**, C. Bejan , *New strategies and education tools in engineering*, International Scientific Conference TMCR 2007, Technical University of Moldavia, May 31st – June 3rd, 2007, Chișinău – in the volume "Modern technologies, quality and restructuring" vol.4, 11th edition, ISBN 978-9975-45-037-9, pag.281-284.

C.Bejan, I. Lihtețchi, **V. Sandu**, *Experimental research on the evolution of elasticity for the coil springs* - International Scientific Conference TMCR 2007, Technical University of Moldavia, May 31st – June 3rd, 2007, Chișinău – in the volume "Modern technologies, quality and restructuring" vol.4, 11th edition, ISBN 978-9975-45-037-9, pag.107-110.

C.Bejan, **V. Sandu**, I. Lihtețchi, *Experimental determination of the variation of damping capacity for the coil springs*, International Scientific Conference TMCR 2007, Technical University of Moldavia, May 31st – June 3rd, 2007, Chișinău – in the volume "Modern technologies, quality and restructuring" vol.4, 11th edition, ISBN 978-9975-45-037-9, p.111-116.

I.Nenciu, S.Aldea , A. Barna, **V.Sandu**, *Mechanical transmission for multipurpose vehicles*, International Scientific Conference TMCR 2007, Technical University of Moldavia, May 31st – June 3rd, 2007, Chișinău – in the volume "Modern technologies, quality and restructuring"



vol.4, 11th edition, ISBN 978-9975-45-037-9, ISBN 978-9975-45-037-9, pag.253-258.

**V. Sandu**, C. Bejan, *Recycling vehicles - a strategy in restructuration of automotive industry*, International Scientific Conference TMCR 2007, Technical University of Moldavia, May 31st – June 3rd, 2007, Chișinău – in the volume “Modern technologies, quality and restructuring” vol.4, 11th edition, ISBN 978-9975-45-037-9, pag.275-280.

**V. Sandu**, *Environmental raising awareness - A case study on NGO project*, 3rd International Conference on Environmental Education –“ENV EDU 2006”, Universitatea ”Transilvania” Brașov 18-20 November 2006 , Book of abstracts pag.28, ISBN 973-635-737.

**V. Sandu**, *Environmental engineering – dealing with education demand*, 3rd International Conference on Environmental Education – “ENV EDU 2006”, Universitatea ”Transilvania” Brașov 18-20 November 2006 , Book of abstracts pag.27, ISBN 973-635-737-6

**V.Sandu** , D.Turcu, *Ceramic fiber use in filter particulate traps* , The International Conference „Advanced Composite Materials Engineering - COMAT 2006”, 19 – 22 October 2006, ”Transilvania” University Brasov, ISBN 973- 635-821-8.

**V. Sandu**, D. Șova, *Renewable fuels concern - Distillation curve characteristics of diesel fuel – rapeseed dimethyl ester mixtures*, The International Conference „Advanced Composite Materials Engineering -COMAT 2006”, 19 – 22 October 2006, ”Transilvania” University Brasov , ISBN 973- 635-821-8

S.Aldea, I. Nenciu, **V. Sandu**, C.Bejan, *Multipurpose Vehicle for Agriculture, Forestry and Rural Works*, “Automotive and Environment” International Congress 2-4 nov.2005, Pitesti , publicat pe CD ISBN 973-690-450-4 și în Book of Abstracts, pag. 84.

**V. Sandu**, *Active and Creative Education in Environmental Protection Projects*, International Conference “Energy-Environment” CIEM, Bucharest 20-21 oct.2005, pg.4.36-43, ISBN 973-86948-5-X.

D. Șova, **V. Sandu**, *The study of the thermal conductivity of phonoabsorbent automotive materials* , International Conference on Materials Science and Engineering, BRAMAT ”Transilvania” University Brasov, 24-26 February 2005, ISBN 973-635-454-7.

Bejan, A.Luca, C.Hășegan, **V.Sandu**, *Predimensionarea modulului roților dințate cu dinți drepți pe baza unor nomograme*, International Scientific Conference TMCR 2005, Technical University of Moldavia, May 19-21, Chișinău, – in the volume “Modern technologies, quality and restructuring”, vol.3 pag.99-102, ISBN 9975-9875-3-2

D. Șova, **V. Sandu**, C. Boieriu, *The correlation between the parameters of humid air and the wood moisture during the drying process within chambers with forced circulation of air*, Proceedings of IUFRO - China, 26-28 August 2005, pag. 483-488.

D. Turcu, **V. Sandu**, A. Gal, O. Sorea , *NOx abatement in diesel engine using exhaust gas recirculation*, The 7<sup>th</sup> International Conference on Fuel economy, safety and reliability of motor vehicles, ESFA 2003, Bucharest, May 8-9, 2003, vol.1 pg.75-80 ISBN 973-8449-12-X, ISBN 973-8449-10-3

**V. Sandu** , D. Florea, L.Georgescu, M. Comănescu, *Reducing diesel engine emissions by using catalysts*, The 6<sup>th</sup> International Conference on Fuel economy, safety and reliability of motor vehicles, ESFA '98, Bucharest, Nov.5-6, 1998, vol.2 pag.475-482, ISBN 973-9402-46-1

**V. Sandu**, I. Rău, *Contributions to the abatement of diesel engine emissions*, Proceedings of the International Symposium on Environmental Protection, ECO'96, 10-13 Sept.1996, Bucharest,

pag.94-101

I. Rău , **V. Sandu**, *Discrepancies of international regulations on emissions*, Proceedings of the International Symposium on Environmental Protection, ECO'96, 10-13 Sept.1996, Bucharest, pag. 86-93

**V. Sandu**, A. Marinescu, *Modern equipment for the measurement of diesel engine emissions*, The 5<sup>th</sup> International Conference on Fuel economy, safety and reliability of motor vehicles, ESFA'95, Bucharest.

---

#### **OTHER PAPERS / RELEVANT ACHIEVEMENTS**

---

**V. Sandu**, *Fan characteristics determination for 392-L4 diesel engines*, 17th Edition of the National Conference on Thermotechnics – with international participation, May 21-22, 2009, Bulletin of "Transilvania" University of Brasov • Vol. 2 (51) - 2009 • Series I, ISBN 978-973-598-524-0, pag. 421-424.

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