

Publications (brief selection)

a). Thomson Reuters ISI or ISI proceedings

- [1]. **Zichil V.**, et al „*Studies on ductile - brittle transition for carbon dioxide pipelines*” în Environmental Engineering and Management Journal, Volum 13, Nr. 7 pag. 1769, 2014, ISSN 1582-9596;
- [2]. **Zichil V.**, et al „*Noise and vibration pollution reduction to a mineral aggregates station through rim optimization in order to align at eu legislation*” în Applied Mechanics and Materials, Volume 657, Cap. 8, page 941, 2014, ISSN 1662-7482;
- [3]. Mirila, D. C., Pirvan, M. S., Platon, N., Georgescu, A. M., **Zichil, V.**, Nistor, I. D., „*Total mineralization of malachite green dye by advanced oxidation processes*” in Acta Chemica Iasi, Vol. 26, page 263-280, ISSN 2067-2438, e-ISSN 2067-2446, DOI 10.2478/achi-2018-0017, Dec. 2018;
- [4]. Georgescu, A. M., Nardou, F., **Zichil, V.**, Nistor, I. D., „*Adsorption of lead(II) ions from aqueous solutions onto Cr-pillared clays*” in Applied Clay Science, Volume 152, DOI 10.1016/j.clay.2017.10.031, Feb. 2018;
- [5]. Cirtita-Buzoianu, C., **Zichil, V.**, Drob, C., „*Communication within managerial culture so performance management or management performance?*” in Review of Management and Economic Engineering International Management Conference, page 150-155, 2018, at the 6th Review of Management and Economic Engineering, Tech. Univ. Cluj Napoca, Cluj Napoca, Romania, WOS:000471723700022;
- [6]. Drob, C., **Zichil, V.**, Cirtita-Buzoianu, C., „*Behind making decisions: an overview regarding romanian managers: performance management or management performance?*” in Review of Management and Economic Engineering International Management Conference, page 335-339, 2018, at the 6th Review of Management and Economic Engineering, Tech. Univ. Cluj Napoca, Cluj Napoca, Romania, WOS:000471723700047;
- [7]. Coseru (Tuluca), A., Adjallah, K., H., Sava, A., **Zichil, V.**, „*Characterisation, Monitoring and Failure Risks Assesment of Buried Ductile Steel Pipeline Subject to Earthquakes by Using Wireless Sensors*” in Proceedings of the 9th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), Volume 1, page 194-199, 2017, Bucharest, Romania;
- [8]. **Zichil V.**, Panainte, M., Nedef, V., Mosnegutu, E., Savin, C., Măcărescu, B. „*Considerations about a new method able to determine the breaking up energy at materials*”

with variable texture”, în Revista „Metalurgia International”, Metalurgica International, vol XIV, nr. 6, 2009, ISSN 1582 – 2214, pg. 15-20;

[9]. **Zichil V.**, Panainte, M., Nedeff, V., Mosnegutu, E., Savin, C., Măcărescu, B. Ambăruș, A. „, *A new method to determinate the viscosity of the non-newtonian mixtures*”, în Revista „Metalurgia International”, nr. 7/2008, pag. 21, ISSN 0461-9579, poz. 400 în Thomson Scientific Master Journal List;

[10]. **Zichil, V.**, Nedeff, V., Schnakovszky, C., Savin, C., Judele, A. „, *The influence of the temperature upon stress distribution at chuck plate with circular stress concentrator using Finite Element Method*”, în Revista „Metalurgia International”, nr. 10/2008, pag. 28, ISSN 0461-9579, poz. 400 în Thomson Scientific Master Journal List;

[11]. Schnakovszky, C., Hergehelegiu, E., Radu, M., C., **Zichil, V.** „, *Effects of reusing abrasive material in abrasive water jet cutting on the quality of processed surfaces and environment*” în Environmental Engineering and Management Journal, Volum 13 Nr. 7 pag. 1707, 2014, ISSN 1582-9596;

[12]. Albut, A., **Zichil V.**, et al „, *Study concerning the maximal depth of a cylindrical part made from tailor welded blanks*” în Applied Mechanics and Materials, Volum 657, Cap. 2, pag. 188, 2014, ISSN 1662-7482;

[13]. Judele, A., **Zichil, V.** „, *Assesing the cracking risk at tubular junctions of the technological routes used in nuclear power plants*” în Environmental Engineering and Management Journal, Volum 11 Nr. 12, 2012 pag. 1627, ISSN 1582-9596;

[14]. Savin, C., **Zichil, V.**, Judele, A „, *The experimental study of structural viscosity which characterized the non-Newtonian food mixtures and process optimatization using finite element method*” în 17th International Symposium of the Danube-Adria-Association-for-Automation-and-Manufacturing, Date: NOV 08-11, 2006 Vienna AUSTRIA, 17th International DAAAM Symposium Pages: 363-364 Published: 2006; ISSN 1726-9687

[15]. **Zichil, V.** et al „, *Considerations regarding the limitations of the biodiesel use in Diesel engines, in comfort and environmental terms*” în The 2nd International Conference „Natural and anthropic risks”, 4 - 7 iunie 2014 Bacău, România, ISSN 2360-4018;

[16]. **Zichil, V.** et al „, *The competencies dilemma between east and west for economics engineering graduates*” The 3rd International Conference „A new dilemma: between East and West” 13-15.09.2012 Cluj Napoca, Romania, ISSN 2247-8639, ISSN-L 2247-8639 pag. 199;

[17]. **Zichil, V.** „, *Comparative study upon stress and strain in femoral and tibia bones using extensometers and F.E.M.*”, INTERNATIONAL CONFERENCE OF APPLIED SCIENCES, CISA 2010, Bacau-Slanic Moldova, 8 – 11 April 2010, ISSN 2066-7817, pag. 312;

[18]. **Zichil, V.**, Gavrilă, L., et al: "*Diminuarea calitatii uleiurilor pentru motoarele cu ardere interna datorita vibratiilor mecanice*", in "Zilele Academice Iesene - Materiale, Energie, Mediu", 5 -8 Octombrie 1995, Academia Romana, Filiala Iasi, pag. 46.

[19]. Gavrilă, L., **Zichil, V.**, Ivășcan, Șt.: "*Valorificarea catalizatorilor uzați cu conținut de nichel din industria amoniacului. 3 - Rezistența mecanică a catalizatorilor uzați de la reformarea metanului cu vapori de apă*" în: Revista de Chimie (București) (ISSN 0034 7752), vol. 50, nr. 11, 1999, p. 801;

[20]. Năstăsescu, V., **Zichil, V.**, Pintilie, Gh. „*Analiza prin MEF a stării de tensiune și de deformare în peretele unei conducte cilindrice fisurate sub presiune consolidată prin aplicarea unui manșon*”, în *Lucrările celui de-al IX-lea Simpozion Național de Mecanica Ruperii, Sibiu – Mediaș, 31 Oct. – 01 Nov. 2003*, pag. A7, ISSN 1453 – 6536;

b). Patents

[1]. **Zichil V.**, Stan Gh., Schnakovszky C., Nedeff V. "*Poly-articulated robotic arm used in robots construction, has fixed pulley that is mounted on outlet shaft and surrounded by cable whose ends are linked to two bolts fixed diametrically opposite in shaft*", PN RO133407-A2, "Vasile Alecsandri" University of Bacau, DIIDW:2019591634;

[2]. Stan Gh., **Zichil V.** "*Pedestrian scooter for children, has bearing portion which supports shaft fixed to underframe by screws and big chain wheel and small chain wheel are provided for driving back wheel by one-way coupling for ensuring forward motion*" PN RO133410-A2 "Vasile Alecsandri" University of Bacau, DIIDW:2019591631;

[3]. Stan Gh., **Zichil V.** "*Manipulator with articulated levers comprises a body which contains some bearings of a first tubular shaft which has fixed at its top part a first articulated lever and which supports some bearings*" PN RO132479-A2 "Vasile Alecsandri" University of Bacau, DIIDW:201833298K;

[4]. **Zichil V.**, Stan Gh., "*Mechanical compensation system*" PN RO132478-A2 "Vasile Alecsandri" University of Bacau, DIIDW:201833298L;

c). Books and monographies

[1]. Radu, Gh., N., Sofonea, G., Fratila, M., **Zichil, V.** "*Capitole speciale de rezistența materialelor*", Editor: Tehnica – Info, Chișinău, 2005;

[2]. **Zichil, V.** "*Vibrații mecanice*", ISBN 9975-63-159-1, Ed. „Tehnica-Info”, Chișinău, Republica Moldova;

[3]. Jiga G., **Zichil V.** et al “*Teste grilă de rezistența materialelor*”, ISBN 9975-63-158-7, Ed. „Tehnica-Info”, Chișinău, Republica Moldova;

d). Other scientific papers published or communicated in conferences

[1]. **Zichil, V.**, Năstăsescu, V. „*Theoretical and experimental analysis of stress and strain state at the external link plate of the camshaft chain of a D.I. diesel engine*”, in “the 9th International research/expert conference – Trends in the Development of Machinery and Associated Technology”, TMT 2005, Antalya, Turkey, the 26 – 30th September 2005, page 1017.

[2]. **Zichil, V.**, Năstăsescu, V. „*Analysis of the fracture conditions at thin wall aluminum pipes*”, in “the 9th International Research/Expert Conference – Trends in the Development of Machinery and Associated Technology”, TMT 2005, Antalya, Turkey, the 26 – 30th September 2005, page 909.

[3]. **Zichil, V.**, Năstăsescu, V. „*Comparison between stress and strain values obtained through analytical method and F.E.M. at binded tubes*”, in “the 10th International Conference of Fracture Mechanics”, Bacau July the 08 - 10th 2004, page 159, ISBN 973 8392 25 - X.

[4]. **Zichil V.**, Judele A., Albuț A., Sava A., Lozovanu P. „*Noise and vibration pollution reduction to a mineral aggregates station through rim optimization in order to align at EU legislation*”, in Applied Mechanics and Materials, Volume 657, Cap. 8, page 941, 2014, ISSN 1662-7482.

[5]. **Zichil V.**, Coseru A., Dobreci L., Cotirlet A., Schnakovszky C. „*Studies on ductile - brittle transition for carbon dioxide pipelines*” in Environmental Engineering and Management Journal, Volume 13, Nr. 7, page 1769, 2014, ISSN 1582-9596.

[6]. Judele A., **Zichil V.** „*Assesing the cracking risk at tubular junctions of the technological routes used in nuclear power plants*” in Environmental Engineering and Management Journal, Volume 11 Nr. 12, page 1627, 2012, ISSN 1582-9596.

[7]. Năstăsescu, V., **Zichil, V.**, and others. „*The study of the shear stress field in a cross section of a channeled jack by hybrid method*” in the 10th International Symposium on Experimental Stress Analysis and Material Testing”, Sibiu October 21 - 23th 2004, vol II, page 5-69, ISBN 973-651-918-X;

[8]. **Zichil, V.**, et al, „*Analysis of the fracture conditions at thin wall aluminum pipes*”, in the 9th „International Research/Expert Conference – Trends In The Development Of

Machinery And Associated Technology”, TMT 2005, Antalya, Turkey, 26 – 30th September 2005, pag. 909, ISBN 9958-617-18-8.

[9]. Judele, A., **Zichil, V.** „*Experimental study, using strain gauge technique, for stress measurement on 45° angular tubular branched structures*”, in Buletinul Asociației Române de Mecanica Ruperii – ARMOR, nr. 30 din 2012, page 8, ISSN 1453-8148.

[10]. **Zichil, V.**, Iatan, R., et al „*Thermo - mechanical loading in beveled area between two cylindrical shells with different thicknesses. Theoretical study - connection loads*”, in Journal of Engineering Studies and Research (JESR), vol. 20, nr. 1, page 87, 2014, ISSN 2068-7559.

[11]. **Zichil, V.**, et al „*Comparative study between strain gauge, extensometer and optical methods for deformation measurement*”, in *Optimum Technologies, Technologic Systems and Materials in the Machines Building Field T.S.T.M.* 10, Academia Română, Iași, 2004, page 209, ISSN 1224-7499.

[12]. **Zichil, V.**, et al „*Correlations between sound pressure and internal energy able to prevent breakage of parts that work with dynamic loads*” in **INMATEH** - Agricultural Engineering, Volume 41, Nr. 3, 2013, page 69, ISSN print: 2068 - 4215, electronic: 2068 – 2239.

e). Research activity under contract (brief selection)

[1]. Grant - CEEEX M1-373/2006, Model biomecanic pentru execuția, încercarea și optimizarea protezei de șold (MATNANTECH-CEEEX).

[2]. Grant - Grant PN II 297/2014, Tehnologii ecologice și economice pentru prelucrarea tablelor metalice folosite la realizarea blindajelor.

[3]. Grant - RO/2004/PL93117/TD, Întreprinderea simulată: o metodă modernă de pregătire pentru instruirea studenților.