

LIST OF PUBLICATIONS NICULESCU Rodica

DOCTORAL THESIS:

“Optimizarea canalelor de admisie la un monocilindru Diesel. Injectare pentru pornire rapida. in cadrul Facultatii de Mecanica a Universitatii Politehnica Bucuresti, Catedra de Motoare cu Ardere Internă”

BOOKS or TRAINING MATERIALS

1	Caracteristici fizico-chimice ale combustibililor pentru motoare termice, Rodica NICULESCU , Adrian CLENCI, Mihaela NĂSTASE, EDITURA UNIVERSITĂȚII DIN PITEȘTI, 2022 (130 pagini), ISBN 978-606-560-769-9;
2	Diesel fuels. Physico-chemical properties. Development of a test method for distillation of diesel-biodiesel-alcohol mixtures at reduced pressure. Rodica NICULESCU , Adrian CLENCI, Victor IORGA-SIMAN, Lambert Academic Publishing, 2018 (55 pagini), IBAN/ISSN: 978-613-6-94449-4
3	Mărimi fundamentale în termotehnică: temperatură, presiune, debit, Rodica Niculescu , Adrian Clenci, EDITURA UNIVERSITĂȚII DIN PITEȘTI, 2018 (188 pagini), IBAN/ISSN: ISBN/ISSN: e-ISBN 978-606-560-613-5
4	Termodinamica Tehnica. Teorie. Aplicații. Teste grilă. Florian IVAN, Rodica NICULESCU Editura Universității Pitești. 2005. ISBN 973-690-370-2. (199 pagini)
5	Termodinamica Tehnica. Florian IVAN, Rodica NICULESCU Editura Universității din Pitești. 2002. ISBN 973-690-045-2. (171 pagini)
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8	Automotive fuels and energy conversion, Rodica NICULESCU Suport de curs. în format electronic (109 slide-uri), Universitatea din Pitești;
9	Termotehnică, Rodica NICULESCU , Suport de curs, în format electronic (212 slide-uri), Universitatea din Pitești.

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2	A CFD study on the effects of operating an engine with low intake valve lift at idle corresponding speed. Adrian Constantin Clenci, Victor Iorga-Siman, Michael Deligant, Pierre Podevin, Georges Descombes, Rodica Niculescu , Energy, Volume 71, Pages: 202-217; DOI: 10.1016/j.energy.2014.04.069, ISSN: 0360-5442, Published: JUL 15, 2014 (Impact Factor = 4.81)
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5	Review on the Use of Diesel–Biodiesel–Alcohol Blends in Compression Ignition Engines. Rodica Niculescu , Adrian Clenci, Victor Iorga <i>Energies</i> 2019 , Volume: 12, Issue: 7, Article Number: 1194; IF=2.707 (2019) https://doi.org/10.3390/en12071194 . WOS: 000465561400011
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8	Experimental investigation of the effect of an afterburner on the light-off performance of an exhaust after-treatment system; Adrian Clenci, Julien Berquez, Robert Stoica, Rodica Niculescu, Bogdan Cioc, Cătălin Zaharia, Victor Iorga-Simăn, Available online at www.sciencedirect.com , ScienceDirect, Energy Reports 8 (2022) 406–418. TMRES22-Fr. EURACA, 09 to 11 May 2022, Metz-Grand Est, France

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3	On the Effect of Di-Ethyl-Ether (DEE) Injection upon the Cold Starting of a Biodiesel Fuelled Compression Ignition Engine. Adrian Clenci, Rodica Niculescu , Victor Iorga-Simăn, Alina Trică, Amelie Danlos, 2016 TMREES Fall Meeting (Technologies and Materials for Renewable Energy, Environment and Sustainability), Paris, November 16 – 18, 2016, Published with AIP Conference Proceedings, 1814, 020064 (2017), http://doi.org/10.1063/1.4976283
4	Study on the engine oil's wear based on the flash point. Rodica Niculescu , Victor Iorga-Simăn, Alina Trică, Adrian Clenci, 7th International Conference on Advanced Concepts in Mechanical Engineering (ACME) 2016, Iasi, June 9 – 10, 2016, Published with IOP Conference Series-Materials Science and Engineering, Volume: 147 Article Number: UNSP 012124, DOI: 10.1088/1757-899X/147/1/012124
5	A CFD approach for the study of the in-cylinder air motion characteristics in a motored gasoline engine. TRICĂ G., IORGA SIMĂN V., CLENCI A., NICULESCU, R. , TRICĂ, A., INGINERIA AUTOMOBILULI, Issue: 38, 2016, Pages: 12-16 ISSN: 1842-4074. WOS: 000409237600006
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9	A Study on the Influence of the Miller Cycle upon the Engine's Internal Aerodynamics. Mihai Niculae, Adrian Clenci, Victor Iorga-Simăn, Rodica Niculescu, SMAT 2019: The 30th SIAR International Congress of Automotive and Transport Engineering pp 58-67. Published with

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10	Engine oil analysis in order to evaluate the degree of its wear during the period of operation of the vehicle. Catalin Victor Zaharia, Rodica Niculescu, Mihaela Nastase, Adrian Clenci, Victor Iorga-Siman, The Proceedings of the 31st International SIAR Congress of Automobile and Transport Engineering – ... <i>Automotive and Integrated Transport Systems – AITS 2021</i> ". IOP Conference Series, Materials Science and Engineering, Volume 1220, The XXXI-st SIAR International Congress of Automotive and Transport Engineering "Automotive and Integrated Transport Systems" (AITS 2021), 28th-30th October 2021, Chisinau, Republic of Moldova, 2022 <i>IOP Conf. Ser.: Mater. Sci. Eng.</i> 1220 012037. doi:10.1088/1757-899X/1220/1/012037
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12	Diagnosing the truck engine operation by evaluating engine oil wear and issuing maintenance recommendations, C. Zaharia, R. Niculescu, M. Nastase, A. Clenci, EAEC-MVT 2022 (siarcongress.eu)

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- 14 General analysis of the procedures supported by liquid particle to the admission pipe's wall of an internal combustion engine. **Rodica NICULESCU**
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ISBN(13): 978-973-638-284-0 REZUMATE
- 15 Transition in the context of international transport with the opening up of Eastern Europe. Elena NEAGU, **Rodica NICULESCU**, Valentin RIZEA
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- 16 Study concerning the using of bioethanol fuelled transportation engine. **Rodica NICULESCU**, Adrian CLENCI. The 2nd International Congress on Automotive, AMMA 2007, organized under FISITA patronage, Cluj 2007
- 17 The diagnostic analyze of the public transport system within Pitești city. Alexandru BOROIU, Viorel NICOLAE, Elena NEAGU, **Rodica NICULESCU**, Helene SUSTER-BADARAU. The 2nd International Congress on Automotive, AMMA 2007, organized under FISITA patronage, Cluj 2007
- 18 A new pattern making of government within European Union and fuels markets. **Rodica NICULESCU**, Dumitru CRISTEA, Liviu CALIN, Buletinul Științific al Universității Pitești, seria Autovehicule Rutiere, anul XV, nr. 17/ 2007, ISSN1453-1100
- 19 Particularities of Human Resources Management in Romanian Automobile Industry. Ionuț PANDELICĂ, Amalia PANDELICĂ, Cristian NEGULESCU, **Rodica NICULESCU**, Buletinul Științific al Universității Pitești, seria Autovehicule Rutiere, anul XV, nr. 17/ 2007, ISSN1453-1100
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- 23 Research concerning experimental determination of the main passenger flows within the metropolitan area of Pitești city in order to validate the opportunity of introducing a new public transport system on individual lane (wheel tramway). **Rodica NICULESCU**, Florian IVAN, Viorel NICOLAE, Catalin ZAHARIA
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- 29 On the methods used in order to improve diesel startability. **Rodica NICULESCU**, Adrian CLENCI, Sergiu STROE. The 8th International Congress ESFA, organized under the FISITA patronage. Bucuresti 2009
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- 38 The production, characterization and testing of a variety of biodiesel obtained from diferent vegetable oils, Ion IOSUB, **Rodica NICULESCU**, Adrian CLENCI, Victor SIMAN-IORGA, The 3rd International Congress on Automotive, ANMA 2013, organized under FISITA patronage, Cluj 2013
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- 41 Inter-cylinder distribution of di-ethyl-ether injected into the intake manifold of a diesel engine using CFD simulation. Victor IORGA-SIMAN, Adrian CLENCI, **Rodica NICULESCU**, Alina TRICĂ (TUTĂ), The 13th EAEC European Automotive Congress, Bucharest 2015 . Published with Springer, ISBN: 978-3-319-27275-7 978-3-319-27276-4 DOI 10.1007/978-3-319-27276-4: Vol.1, p.9-20
- 42 A CFD approach for the study of the in-cylinder air motion characteristics in a motored gasoline engine. George TRICA, Victor IORGA SIMAN, Adrian CLENCI, **Rodica NICULESCU**, Alina TRICA, Revista Inginerilor de Automobile, serie noua, nr. 38 (martie) / 2016, pg. 12, ISSN 1842 – 4074
- 43 A case study regarding the in-cylinder air motion characteristics in a motored gasoline engine: CFD vs. PIV, George Trică, Iorğa-Siman Victor, Adrian Clenci, Stéphane Guilain, Amélie Danlos, **Rodica Niculescu**, Colloque Francophone sur l'Energie, Environnement, Economie et Thermodynamique, COFRET'16, Bucarest, Roumanie, SFT&SRT, SIA&SIAR
- 44 Review on the use of bioethanol / biomethanol – gasoline blends in spark ignition engine. **Rodica NICULESCU**, Adrian CLENCI, Victor IORGA-SIMAN, Cătălin ZAHARIA, University of Pitești, Scientific Bulletin, Faculty of Mechanics and Technology, AUTOMOTIVE series, year XXII, no. 26
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- 52 Sustainable road mobility with methane gas. Preliminary results of a monovalent spark ignition engine fueled with methane. Popa, R., Berquez, J., Clenci, A., Iorga-Simăn, V. **Niculescu, R.** FISITA World Congress 2021, Prague. <https://www.fisita.com/post/fisita-congress-2021-programme-introduction>

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Contracts won by national competition as director:

1. Cercetari privind dezvoltarea unei metode de îmbunătățire a calitatilor de pomire la rece a motoarelor alimentate cu biodiesel pentru autovehicule cu destinații speciale. CNCSIS 696/ 2009 – 2011, Universitatea din Pitești, Valoare: 61203.00

Member in International contracts of scientific research :

1. Moteur avec autorégulation de la levee des soupapes d'admission. Mise au point du système de controle de levee de soupapes, Partners: University of Pitești – Conservatoire National des Arts et Métiers de Paris (Podévin P - responsable Cnam); Beneficiary: Agence National de Valorization de la Recherche (www.osso.fr) / Contract no. AO704013Z 2008 (27800 euro)
2. Amélioration de l'efficacité énergétique des véhicules routiers par optimisation du couplage moteur-turbocompresseur. NICULESCU RODICA, NICULESCU RODICA, VICTOR IORGA, Cod: AUF – FRS Bulgarie 2018, beneficiar: AUF, anul: 2021, domeniul științific: Ingineria Autovehiculelor, valoare: 46000.00 euro

Member in national contracts of scientific research

1. Autoturism cu propulsie hibridă și transmise cu variație continuă a raportului de transmitere (CVT), cod CNCSIS A 286 / 2002-2003, director de proiect: prof. dr. ing. Dumitru CRISTEA – Universitatea din Pitești
2. Reducerea efectelor poluante produse de autovehicule, prin utilizarea echipamentului laser pentru inițierea aprinderii amestecului carburant în motoarele termice, CNMP 1433/ 2009 – 2011, director de proiect: dr. fiz. Traian DASCĂLU, Institutul Național de cercetare-dezvoltare pentru fizica laserilor plasmiei și radiației, București, Magurele
3. Cercetarea și dezvoltarea de sisteme electrice, electronice, termice și tehnologii inovative pentru alternative de mobilitate durabilă, pentru creșterea eficienței energetice a vehiculelor, în scopul reducerii emisiilor poluante și îmbunătățirii confortului termic pentru pasageri Director de proiect: conf. dr. Mariana IVĂNESCU, Beneficiari: A.M. POS CCE și Renault Technologie Roumanie, 2014-2015

4. Studiu privind transportul și mobilitatea &ircirc:n cadrul Regiunii Sud-Vest Oltenia. Contract 35 / 5195 din 18.03.2015. Beneficiar: Agenția pentru Dezvoltare Regională Sud-Vest Oltenia. Valoare contract: 120766 RON. director S.I. dr. ing. ILIE Sorin

Contracts with industrial partners as director:

1. Studiu de oportunitate (trafic de calatori) pentru realizarea unei linii de transport usor si rapid pe ruta Pitesti – Stefănești – Maracineni – Mioveni. Nr. 04/13.10.2008; beneficiar Consiliul Județean Argeș. Valoare: 32002.00
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1	<p>VICTOR. VICTOR IORGA</p> <p>Cod: Proiect de cercetare cu medii socio-economice. beneficiar: Renault Technologie Roumanie. anul: 2020. documentul stiintific: Ingineria Autovehiculelor, valoare: 40630.00</p>
2	<p>Calculati on of unsteady in-cylinder flow of gasoline engines with Fire software. NICULESCU RODICA. VICTOR IORGA. NICULESCU RODICA</p> <p>Cod: Contract de cercetare cu medii socio-economice. beneficiar: Renault France – Centre Technique Lardy. anul: 2020. documentul stiintific: Ingineria Autovehiculelor.</p>
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5	<p>Studiul funcționării instalațiilor auxiliare de încălzire în regim staționar dedicate autovehiculelor. CIENCI ADRIAN CONSTANTIN. NICULESCU RODICA. ZAHARIA CATALIN VICTOR. VICTOR IORGA. Cod: Proiect cu medii socio-economice. beneficiar: CERLOT TRADING SRL. anul: 2021.</p>
6	<p>Diagnosticarea motoarelor de autocamion prin evaluarea gradului de uzură a uleiului de motor și emiterea de recomandări de mentenanță specifice în funcție de condițiile de exploatare. NICULESCU RODICA. ZAHARIA CATALIN VICTOR. NICULESCU RODICA. CIENCI ADRIAN CONSTANTIN. VICTOR IORGA. Mihaela Nastase. Cod: Proiect in colaborare cu medii socio-economice. beneficiar: SC COM DIVERS AUTO RO SA. Bascov. Argeș.. anul: 2021.</p>
7	<p>Modernizarea serviciului de transport local de calatori in municipiul Pitesti. 2006. Beneficiar Primăria municipiului Pitesti</p>
8	<p>Studiul de soluții privind optimizarea transportului de persoane in zona metropolitană și pe ruta Pitesti – Mioveni. Beneficiar Consiliul Județean Argeș 2009</p>
9	<p>Studiul privind transportul urban de persoane &ircirc:n zona metropolitană Pitesti și pe ruta Pitesti - Mioveni. Contract de prestări servicii de cercetare-dezvoltare Nr. 16312/15.12.2010 la Consiliul Județean Argeș și 11962/14.12.2010 la Universitatea din Pitesti. Beneficiar: Consiliul Județean Argeș. perioada proiectului: 2011.</p>