



LISTA DE LUCRĂRI

BURNETE Nicolae Vlad

Lista lucrărilor considerate a fi cele mai relevante pentru realizările profesionale ale candidatului BURNETE Nicolae Vlad
(List of papers considered to be most relevant for the professional achievements of the candidate BURNETE Nicolae Vlad)

- 1) **Burnete, N., V.**, *Separate direct injection of diesel and ethanol – a numerical analysis*, Thermal Science 21: 451-463, 2017, DOI: 10.2298/TSCI160824274B
https://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=Y1t4CUaUjcxEkC2Yu4g&page=1&doc=1
- 2) Mariașiu, F., **Burnete, N.V.**, Moldovanu, D., Varga, B.O., Iclodean, C., Kocsis, L., *Effects of bioethanol ultrasonic generated aerosols application on diesel engine performances*, Thermal Science 19: 1931–1941, 2015, DOI:10.2298/TSCI140703108M
<http://www.doiserbia.nb.rs/img/doi/0354-9836/2015/0354-98361500108M.pdf>
- 3) Jurchiș, B., Burnete, N., Iclodean, C., **Burnete, N., V.**, *Study of emissions for a compression ignition engine fueled with a mix of DME and diesel*. IOP Conference Series: Materials Science and Engineering 252: 012065, 2017, DOI: 10.1088/1757-899X/252/1/012065
<http://iopscience.iop.org/article/10.1088/1757-899X/252/1/012065/meta>
- 4) **Burnete, N., V.**, Burnete, N., Jurchiș, B., Iclodean, C., *Influences of diesel pilot injection on ethanol autoignition - a numerical analysis*. IOP Conference Series: Materials Science and Engineering 252: 012066, 2017, DOI: 10.1088/1757-899X/252/1/012066
<http://iopscience.iop.org/article/10.1088/1757-899X/252/1/012066>
- 5) Molea, A., Visuian, P., Barabás, I., Suci, R., C., **Burnete, N., V.**, *Key fuel properties and engine performances of diesel-ethanol blends, using tetrahydrofuran as surfactant additive*. IOP Conference Series: Materials Science and Engineering 252: 012077, 2017, DOI: 10.1088/1757-899X/252/1/012077
<http://iopscience.iop.org/article/10.1088/1757-899X/252/1/012077>



- 6) **Burnete, N. V.**, Iclodean, C., Popescu, G., & Filip, N., *The Effects of a Diesel-Ethanol Blend Without Additives on Diesel Engine Operation*. In A. Chiru & N. Ispas (Eds.), CONAT 2016 International Congress of Automotive and Transport Engineering, pp. 387–394, Springer International Publishing. DOI: 10.1007/978-3-319-45447-4_43
http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=3&SID=3E6wHSesqJKomQJJYfY&page=1&doc=4
- 7) **Burnete, N., V.**, Iclodean, C., Moldovanu, D., Filip, N., *Direct Injection of Diesel and Ethanol in a Diesel Engine - A Numerical Analysis*. In A. Chiru & N. Ispas (Eds.), CONAT 2016 International Congress of Automotive and Transport Engineering, pp. 379–386, Springer International Publishing. DOI: 10.1007/978-3-319-45447-4_42
http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=3&SID=3E6wHSesqJKomQJJYfY&page=1&doc=3
- 8) **Burnete, N., V.**, Filip, N., Barabás, I., *Diesel-Ethanol blends and their use in Diesel engines*. Romanian Journal of Automotive Engineering vol. 21, no. 3, 2015, pp. 89-106, ISSN 2457 – 5275
http://www.ingineria-automobilului.ro/reviste/RoJAE_201509_03.pdf
- 9) **Burnete, N., V.**, *Ethanolespritzung mit Selbstzündung im Diesilverfahren*, Ed. Springer Vieweg, ISBN 978-3-658-19381-2 (eBook), ISBN 978-3-658-19380-5, 2017
<http://www.springer.com/gp/book/9783658193805>



**Teza de doctorat
(PhD Thesis)**

Studii și cercetări privind influența injecției de combustibil asupra emisiei de poluanți la motoare cu aprindere prin comprimare

Studies and researches regarding the influence of fuel injection on pollutant emissions in compression ignition engines

Conducători științifici: Prof. Dr. Ing. habil. Prof. E. h. Dr. h. c. Cornel STAN

Prof. Dr. Ing. Nicolae FILIP

Doctor prin ordinul ministrului educației naționale și cercetării științifice: 5895 / 28.11.2016

**Cereri de brevete de invenție
(Patent applications)**

- 1) Băldean, D., L., Mariașiu, F., E., **Burnete, N., V.**, *Metodă de alimentare multicomcombustibil a motoarelor cu ardere internă cu aerosoli produși prin ultrasonare din biocombustibili pe bază de alcooli*

**Cărți
(Books)**

- 2) **Burnete, N., V.**, *Ethanolinspritzung mit Selbstzündung im Dieselfahren*, Ed. Springer Vieweg, ISBN 978-3-658-19381-2 (eBook), ISBN 978-3-658-19380-5, 2017
<http://www.springer.com/gp/book/9783658193805>



Capitole de carte (Book chapters)

- 1) Merie, V., Crăciun, Ș., **Burnete, N., V.**, *Engineering materials in Machine Elements for Industrial Robots specialization*, capitol în „Organe de Mașini – Metodologie de predare a disciplinei la diferite specializări” editată de Bîrleanu, C., Haragâș, S., Pustan, M., Editura Risoprint, ISBN 978-973-53-1793-5, Cluj-Napoca, 2016, pp. 109-126

Articole în publicații indexate ISI / ISI proceedings (Articles)

- 1) **Burnete, N., V.**, *Separate direct injection of diesel and ethanol – a numerical analysis*, Thermal Science 21: 451-463, 2017, DOI: 10.2298/TSCI160824274B
https://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=Y1t4CUaUjcxEkC2Yu4g&page=1&doc=1
- 2) Mariașiu, F., **Burnete, N.V.**, Moldovanu, D., Varga, B.O., Iclodean, C., Kocsis, L., *Effects of bioethanol ultrasonic generated aerosols application on diesel engine performances*, Thermal Science 19: 1931–1941, 2015, DOI:10.2298/TSCI140703108M
<http://www.doiserbia.nb.rs/img/doi/0354-9836/2015/0354-98361500108M.pdf>
- 3) Jurchiș, B., Burnete, N., Iclodean, C., **Burnete, N., V.**, *Study of emissions for a compression ignition engine fueled with a mix of DME and diesel*. IOP Conference Series: Materials Science and Engineering 252: 012065, 2017, DOI: 10.1088/1757-899X/252/1/012065
<http://iopscience.iop.org/article/10.1088/1757-899X/252/1/012065/meta>
- 4) **Burnete, N., V.**, Burnete, N., Jurchiș, B., Iclodean, C., *Influences of diesel pilot injection on ethanol autoignition - a numerical analysis*. IOP Conference Series: Materials Science and Engineering 252: 012066, 2017, DOI: 10.1088/1757-899X/252/1/012066
<http://iopscience.iop.org/article/10.1088/1757-899X/252/1/012066>



- 5) Molea, A., Visuian, P., Barabás, I., Suciu, R., C., **Burnete, N., V.**, *Key fuel properties and engine performances of diesel-ethanol blends, using tetrahydrofuran as surfactant additive*. IOP Conference Series: Materials Science and Engineering 252: 012077, 2017, DOI: 10.1088/1757-899X/252/1/012077
<http://iopscience.iop.org/article/10.1088/1757-899X/252/1/012077>
- 6) **Burnete, N. V.**, Iclodean, C., Popescu, G., & Filip, N., *The Effects of a Diesel-Ethanol Blend Without Additives on Diesel Engine Operation*. In A. Chiru & N. Ispas (Eds.), CONAT 2016 International Congress of Automotive and Transport Engineering, pp. 387–394, Springer International Publishing. DOI: 10.1007/978-3-319-45447-4_43
http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=3&SID=3E6wHSesqJKomQJJYfY&page=1&doc=4
- 7) **Burnete, N., V.**, Iclodean, C., Moldovanu, D., Filip, N., *Direct Injection of Diesel and Ethanol in a Diesel Engine - A Numerical Analysis*. In A. Chiru & N. Ispas (Eds.), CONAT 2016 International Congress of Automotive and Transport Engineering, pp. 379–386, Springer International Publishing. DOI: 10.1007/978-3-319-45447-4_42
http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=3&SID=3E6wHSesqJKomQJJYfY&page=1&doc=3
- 8) Baldean, D., L., **Burnete, N., V.**, Moldovanu, D., Gaspar, F., Borzan, Adela, Ioana, Crisan, M., A., *Experimental Research Regarding the Possibility of Biofuel Fumigation Supply Method on a Single Cylinder Compression Ignited Engine*. In A. Chiru & N. Ispas (Eds.), CONAT 2016 International Congress of Automotive and Transport Engineering, pp. 264–273, Springer International Publishing. DOI: 10.1007/978-3-319-45447-4_30
http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=3&SID=3E6wHSesqJKomQJJYfY&page=1&doc=2



Citări în publicații indexate ISI / ISI proceedings (Citations)

- 1) Xiao, H., Zeng, P., Zhao, L., Li, Z., Fu, X., *An experimental study of the combustion and emission performances of 2,5-dimethylfuran diesel blends on a diesel engine*, Thermal Science 00: online first, 2016, DOI: 10.2298/TSCI160526226X
<https://www.scopus.com/record/display.uri?eid=2-s2.0-85009174445&origin=resultslist&sort=plf-f&cite=2-s2.0-84957808511&src=s&imp=t&sid=28FFA4945D81EBC0976FAB542072FD84.wsnAw8kcdt7IPLYL00V48gA%3a60&sot=cite&sdt=a&sl=0&relpos=0&citeCnt=0&searchTerm>

Articole în publicații / la conferințe indexate BDI (Articles/ Papers indexed in BDI)

- 1) Băldean, D., L, Gaspar, F., **Burnete, N., V.**, *Contributions to the experimental evaluation of the common rail fuel supply system and consumption from the Peugeot 4007 sport utility vehicle. A XVI-a Conferință internațională – multidisciplinară, "Profesorul Dorin Pavel - fondatorul hidroenergeticii românești" 2016 Sebeș - Alba, Știință și inginerie 30–46*
<http://stiintasiinginerie.ro/30-46-contributii-la-evaluarea-experimental-a-consumului-de-combustibil-si-a-sistemului-de-alimentare-prin-injectie-cu-rampa-comuna-de-la-autovehiculul-peugeot-4007-din-gama-suv/>
- 2) **Burnete, N., V.**, Filip, N., Barabás, I., *Diesel-Ethanol blends and their use in Diesel engines. Romanian Journal of Automotive Engineering vol. 21, no. 3, 2015, pp. 89-106, ISSN 2457 – 5275*
http://www.ingineria-automobilului.ro/reviste/RoJAE_201509_03.pdf
- 3) **Burnete, N.V.**, Iclodean, C., *Advanced Computer Simulation Methods of C.I. Engines Processes. Surrogate Models*, Journal Ingineria Automobilului, SIAR, Vol. 8, nr. 1 (30), 2014, pp. 17 – 21, ISSN: 2284-5690
http://www.ingineria-automobilului.ro/reviste/Ingineria_30_en.pdf

**Articole în publicații / la conferințe neindexate**
(Articles/ Papers at conferences that ar not indexed)

- 1) Burnete, N., V., Filip, N., Moldovanu, D. "Improved Combustion in a Diesel Engine by Diesel-Ethanol Injection – A Numerical Analysis". EAEC-ESFA, București 2015
- 2) Iclodean, C., Varga, B., O., Burnete, N., V. " Numerical Evaluation Of Real-Time Energy Consumption Of Three Different Powertrain Systems For Urban Electric Vehicle". EAEC-ESFA, București 2015
- 3) Moldovanu, D., Băldean, L., D., Gaspar, F., Kocsis, L., B., Borzan, A., I., Burnete, N., V., Crișan, M., A., "Research Review of the Possibility and Conditions for Increasing the Energy Efficiency in Automotive Engines by Inovating and Influencing the Operational Processes". EAEC-ESFA, București 2015
- 4) Burnete, N., V., Iclodean, C., Sârbu, G. "LIN, CAN, FLEXRAY, MOST. Comparative analysis." Sesiunea de comunicări științifice a studenților Facultății de Mecanică, Ediția a X-a, 15 mai 2014





LISTA LUCRĂRILOR DE LABORATOR

BURNETE Nicolae Vlad

- 1) Organologia și funcționarea instalației de alimentare la motoare Diesel cu injecție CR
- 2) Ridicarea diagramei indicate și calculul parametrilor termodinamici – motoare Diesel
- 3) Ridicarea diagramei indicate și calculul parametrilor termodinamici – motoare Otto
- 4) Analiza constructiv funcțională a sistemului EGR
- 5) Analiza constructiv funcțională a sistemelor de supraalimentare
- 6) Analiza constructiv funcțională a sistemului SCR

Aviz
Director DART,
Conf. dr. ing. Adrian Isdorescu,

Conf. on the
Pineapple
D.A. 1941
through
1941



CONTRACTE DE CERCETARE

BURNETE Nicolae Vlad

Contracte de cercetare – Director de proiect (Research contracts - DIRECTOR)

1. *Studiul unui motor cu aprindere prin comprimare cu injecție directă separată de motorină și bioetanol.* Contract intern UTC-N: 2014/12.07.2017

Contracte de cercetare – Membru în echipă (Research contracts - MEMBER)

2. *Creșterea eficienței energetice a bioalcoiilor prin procedeu inovativ de fumigare.* Contract intern UTC-N: C.I.11/1.2/2015, 2015-2016

