Europass
Curriculum Vitae

Domeniului științific	Chimie		
Personal information			
First name(s) / Surname(s)	**Codina MOVILEANU**		
Address(es)	2 Verigei Str., Bloc Z 3, app. 61, 050322 sector 5, Bucharest , Romania		
Telephone(s)	+40-21-316 7912, ext. 22 (office);	Mobile:	+40-766-52 72 00
Fax(es)	+40-21-312 11 47		
E-mail	cmovileanu@icf.ro; crinamov@yahoo.com		
Nationality	Romanian		
Date of birth	16.01.1976		
Gender	female		
Occupational field	**Physical chemistry**		
Work experience			
Dates	2016-present		
Occupation or position held	Senior researcher 2nd degree, Chemical Kinetics Laboratory		
Main activities and responsibilities	Advanced laboratory research;		
Name and address of employer	Ilie Murgulescu Institute of Physical Chemistry, 202 Spl.Independentei, sector 6, Bucharest, Romania		
Type of business or sector	Academic research within the Romanian Academy		
Dates	2019 – martie 2024		
Occupation or position held	Researcher assistant		
Main activities and responsibilities	Scientific research – Proof of Concept, “Smart superparamagnetic nanoparticles based on curcumin for cancer diagnosis and treatment” (CURCUMIN_LOADED MAGNETITE), project director Project member – PN-III-P1..2-PCCDI-2017-0629 – “Inovative biomaterials for treatment and diagnosis” (BIONANOINOV)		
Name and address of employer	Polytechnic University of Bucharest, Faculty of Applied Chemistry and Materials Science		
Type of business or sector	Academic research		
Dates	2013 – 2016		
Occupation or position held	Senior researcher 3rd degree		
Main activities and responsibilities	Basic laboratory research		

Name and address of employer	Ilie Murgulescu Institute of Physical Chemistry, 202 Spl.Independentei, sector 6, Bucharest, Romania
Type of business or sector	Academic research within the Romanian Academy
Dates	2008 – 2013
Occupation or position held	Researcher
Main activities and responsibilities	Basic laboratory research
Name and address of employer	Ilie Murgulescu Institute of Physical Chemistry, 202 Spl.Independentei, sector 6, Bucharest, Romania
Type of business or sector	Academic research within the Romanian Academy
Dates	2002-2008
Occupation or position held	Assistant Researcher
Main activities and responsibilities	Basic laboratory research
Name and address of employer	Ilie Murgulescu Institute of Physical Chemistry, 202 Spl.Independentei, sector 6, Bucharest, Romania
Type of business or sector	Academic research within the Romanian Academy
Dates	2002-2008
Occupation or position held	Trainee Assistant Researcher
Main activities and responsibilities	Basic laboratory research
Name and address of employer	Ilie Murgulescu Institute of Physical Chemistry, 202 Spl.Independentei, sector 6, Bucharest, Romania
Type of business or sector	Academic research within the Romanian Academy
Education and training	- 2014 Princeton-Combustion Institute Summer School on Combustion and the Environment - 2013 Princeton-CEFRC Summer School for Combustion - 2013 CISS Summer School , Lund, Suedia - 2020 HPC Summer School, Novo mest, Slovenia - ICISS (International Combustion Institute Summer School) on Near-Wall Reactive Flows, Virtual Summer School, June 7-10, 2021 - Webex Course Web of Science: Cum sa economisesti timp cu EndNote - FLOW Summer School on Advancements in assessment of high temperature flows, 4-7 iulie 2023, Stockholm, Suedia - CoEC Combustion Autumn School 2023, 23-26 octombrie 2023, Sofia, Bulgaria - Online PATC-BSC Training Course: Introduction to high-fidelity combustion simulations using HPC - Climate Change Summit 2023, 19-20 octombrie, Bucuresti, Romania - Online Cyber Hygiene Training to Protect Your Institution Against Cybertheft of Research and Intellectual Property (IP) - 2nd International CASA Training Courses on Technologies for the Analysis of Carbon Data, 13-19 martie 2023. - "Green energy for everyone" SEE 2014-2021,
Dates	2022
Title of qualification awarded	Advanced training/Certificate

Principal subjects/occupational skills covered	Internal/managerial control system
Dates	2002-2008
Title of qualification awarded	PhD
Principal subjects/occupational skills covered	Additives effect on the explosivity of gaseous systems
Name and type of organisation providing education and training	Faculty of Chemistry, University of Bucharest, Romania
Dates	2000-2002
Title of qualification awarded	MSc
Principal subjects/occupational skills covered	Amperometric pesticide detection method based on the choline sensor
Name and type of organisation providing education and training	University of Bucharest, Faculty of Chemistry
Dates	1996-2000
Title of qualification awarded	BS In chemistry
Principal subjects/occupational skills covered	Optical and magnetic properties of complex combinations of Cu2 +
Name and type of organisation providing education and training	University of Bucharest, Faculty of Chemistry
Personal skills and competences	
Mother tongue(s)	**Romanian**
Other language(s)	

Self-assessment	**Understanding**				**Speaking**				**Writing**	
European level (*)	Listening		Reading		Spoken interaction		Spoken production			
Language	B2	English	B2	English	B2	English	B2	English	B2	English
	B2	French	B2	French	B2	French	B2	French	B2	French

(*) *Common European Framework of Reference for Languages*

Social skills and competences	Good teamwork
Organisational skills and competences	Project director for 4 research grants with various durations (2 or 3 years) within 2013-2024, financed from national or international funding organisations

Fields of competence	Chemical kinetics in homogeneous and heterogeneous systems; Combustion and flames of gases; Flammability of gaseous mixtures in air; Safety recommendations, for closed and open systems where deflagrations may occur; Nanomaterials for biomedical applications.
Main research directions	Critical conditions for explosion initiation by means of electric sparks or hot bodies (metallic wires, jets of hot, burned gas); flammability limits; flame propagation in hydrocarbon-oxygen and hydrocarbon-air mixtures, in steady and non-steady conditions; catalytic combustion of hydrocarbons; explosive decomposition of exothermic compounds
Available experimental techniques	Methods for measuring the ignition and propagation parameters characteristic for gaseous fuel-oxidant mixtures (flammability limits; minimum ignition energy, for initiation with high-voltage or low-voltage electric sparks or with heated wires; peak pressure, maximum rate of pressure rise, deflagration index of closed vessel explosions; propagation speed and normal burning velocity), methods for synthesis and characterisations of nanomaterials for bimedical applications.
Computer skills and competences	Operating Systems: MS Windows; Developing Media: MS Office, Origin Lab, Table Curve
Computer skills and competences	Good communication skills, adaptability, good teamwork
Driving licence	B class / 1998
Additional information	
Publications (total)	56 articles: 46 in ISI journals (17 as main author); 5 in non- ISI journals; 5 in Proceedings (3 as main author), a book chapter, two patent proposals.
Citations	846 citations (without self-citations)-according Web of Science
h-index	17 according Web of Science, 18 according Scopus
Scientific communications	Over 40 scientific communications at National and International Conferences and Symposia as posters and 5 oral communications presented at International Conferences.
Managerial competence	Project director at 4 National contracts, Research team member of 8 grants
Awards	1. Ilie Murgulescu Prize for Chemistry awarded in 2008 by the Romanian Academy, for publications in the field of fast gas-phase reactions issued in 2006. 2. The National Patent Proposal: C. Movileanu, D. Ficai, A. Ficai, M. Calin, M. F. Anghelache, A. V. Gafencu, G. Fundueanu-Constantin, M. Pinteala, M. Simionescu, E. Andronescu "Intelligent nanoparticle systems for cell internalization", nr. A / 00339 (15.06.2021) was awarded with: a. Gold medal – International exhibition INVENTCOR, II-nd edition, 16-18.12.2021, Deva, Romania b. Gold medal – Expozitia nternational specializata INFOINVENT, editia a XVII-a, 17-20 noiembrie 2021, Chisinau, Republica Moldova c. Excellence diploma and Gold medal, The International Salon of scientific research, innovation and invention, PRO INVENT, editia XiX, 20-22 octombrie 2021, Cluj-Napoca d. Gold medal – The International Exhibition of Inventions and Innovations TRAIAN VUIA, Timisoara, 14 octombrie 2021

Referee	at ISI-ranked Journals: Journal of Hazardous Materials; Journal of Loss Prevention in the Process Industries; Fuel; Intern. Journal of Mechanical & Materials Engineering; Process Safety Progress (Elsevier); Energy & Fuels (Americal Chem. Soc.); Revue Roumaine de Chimie (Editura Academiei Romane); Revista de Chimie (Bucharest)
Evaluator expert	- Evaluator for projects of the Research Executive Agency (REA), within the European Commission (-Horizon Europe CL5 – 2022 – Call D5: Clean and competitive solutions for all transport modes, 11 May – 17 June 2022). - Project monitoring expert for Demonstration Experimental Projects and Transfer Projects at the Economic Operator. -Evaluator for UEFISCDI for competition: PN-III-P2-2.1-PTE-2019, PN-III-P2-2.1-PED-2019, PN-III-P1-1.2-PCCDI-2017 - **Member of the Body of Experts from the National Register of Experts for the certification of research and development activity**
Editorial Boards	- *Guest Editor Processes* Special Issue "Chemical Looping Combustion", 2021-Present - *Topical Advisory Panel Member* Processes, 2021-Present
Professional Associations	Romanian Chemical Society; European Chemical Society Romanian Physical Chemistry Society; The Combustion Institute, USA; American Chemical Society
Organizing committee	- International Forum on Renewable Energy and Sustainable Development,October 09-11, 2023, Online - International Forum on Automotive and Mechanical Engineering, June 08-10, 2023 - 11th annual International Conference on Material Science and Environmental Engineering [MSEE2023], November 24th-26th, 2023,Nanjing, Jiangsu, China
Major collaborations	- PTB (Physikalische-Technische Bundesanstalt), Braunschweig, Germany - *Flammability Properties of Gaseous Mixtures and Safety against Explosions***;** - BAM (Bundesantalt fűr Materialforschung und Prűfung), Berlin, Germany - *Flammability of Fuel/Inert Gas/Oxidizer Mixtures;* - University of Bucharest, Faculty of Chemistry: *Study of fast gas phase oxidation processes.*
ISI-Thomson Researcher ID	B-1665-2008
ORCID ID	0000-0002-7641-3149

List of Scientific Contributions

Book chapters:

1. C. Movileanu, Domnina Razus, V. Giurcan and V. Gosa, Flame propagation of ethylene-air mixtures in closed tubes, Transient Combustion and Detonation Phenomena: Fundamentals and Aplications, Torus Press, 2014.

Papers in Scientific Journals:

ISI ranked papers list:

- papers as main/ corresponding author or without the presence as co-author of the PhD supervisor

1. V. Giurcan, C. Movileanu*, M. Mitu, D. Razus, The impact of H2-enrichment on flame structure and combustion characteristic properties of premixed hydrocarbon-air flames, Fuel, 376, 132674, 2024, IF (2024) = 6.7.
2. C. Movileanu, V. Giurcan, D. Razus, A. M. Musuc, C. Hornoiu, P. Chesler, M. Mitu, Hydrogen influence on confined explosion characteristics of hydrocarbon-air mixtures at sub-atmospheric pressures, Intern. J. Hydrogen Energy, 67, 2024, 150–158, IF (2024) = 8.1.
3. C. Movileanu, M. Mitu, V. Giurcan , A state of the art on laminar burning velocities of H2-enriched n-C4H10-air mixtures, Energies, 2023, IF (2022) = 3.2.
4. V. Giurcan, D. Razus, M. Mitu, C. Movileanu*, Dynamics of Pressure Variation in Closed Vessel Explosions of Diluted Fuel/Oxidant Mixtures, Processes, 2022, 10, 2726, I.F. (2022) = 3.352
5. C. Movileanu, M. Anghelache, M. Turtoi, G. Voicu, I.A. Neacsu, D. Ficai, R. Trusca, O. Oprea, A. Ficai, E. Andronescu*, M.Calin, Folic acid-decorated PEGylated magnetite nanoparticles as efficient drug carriers to tumor cells overexpressing folic acid receptor, International Journal of Pharmaceutics, 625, 2022, 122064, IF (2021) = 6.510.
6. C. Movileanu*, V. Giurcan, M. Mitu, D. Razus, D. Oancea, Ignition by Low-Voltage Electric Discharges of Diluted and Undiluted C3H8−Air Mixtures, Ind. Eng. Chem. Res. 2021, 60, 12123−12132, IF (2021) = 4.326.
7. C. Movileanu*, M. Mitu, V. Giurcan, D. Razus, D. Oancea, Quenching distances, minimum ignition energies and related properties of propane-air-diluent mixtures, Fuel, 274, 2020, 117836, SRI 2018 = 2,535, IF (2020) = 6.609
8. Razus, D., Movileanu, C., Oancea, D., Additive influence on ignition of stoichiometric ethylene-air mixture by break sparks, Fuel 232, pp. 134-140, 2018; I. F. (2018) = 5.128; SRI 2018 = 2,535
9. C. Movileanu, D. Razus, A. Musuc, D. Oancea, Additive influence on quenching distances and minimum ignition energies of ethylene-air mixtures, Fuel, 193, 2017, 401–410; SRI 2017 = 2,551; I. F. (2017) = 4.908;
10. C. Movileanu, M. Mitu, D. Razus, V. Giurcan, D. Oancea, Propagation indexes of C2H4-N2O-N2 deflagrations in elongated closed vesels, Rev. Roum. Chim., 62, 4-5, 357-363 (2017). IF =0.370
11. C. Movileanu*, V. Gosa, D. Razus, Propagation of ethylene–air flames in closed cylindrical vessels with asymmetrical ignition, Process Safety and Environmental Protection, 2015, 96, 167–176. SRI 2015 = 1,661, I. F. (2015) = 2.078.
12. C. Movileanu, D. Razus, D. Oancea, Additive effects on the rate of pressure rise for ethylene-air deflagrations in closed vessels, Fuel, 111, 2013, 194-200. SRI 2013 = 2.729; IF (2013) = 3.357;
13. C. Movileanu , V. Gosa , D. Razus , Explosion of gaseous ethylene-air mixtures in closed cylindrical vessels with central ignition, Journal of Hazardous Materials, 2012, 235-236 , pp. 108-115. SRI 2013 = 3.046, I.F. (2012) = 3.925.

14. C. Movileanu, M. Mitu, V. Giurcan, A. Musuc, D. Razus, D. Oancea, Numerical study of diluent influence on burning velocity of acetylene-air mixtures, Revue Roumaine de Chimie, 57, 3, 2012, 215-222; SRI 2012 = 0.213; I.F.(2012) = 0.331.
15. C. Movileanu* , D. Razus, D. Oancea , Additive effects on the burning velocity of ethylene-air mixtures, Energy and Fuels, 2011, 25 (6) , pp. 2444-2451; I.F. (2011) = 2.721.
16. C. Movileanu* , M. Mitu, V. Brinzea , A. Musuc , M. Mocanu , D. Razus , D. Oancea , Adiabatic flame temperature of fuel-air mixtures in isobaric and isochoric combustion processes, Revista de Chimie, 2011, 62 (4) , pp. 376-379; I.F.(2011) = 0.599.
17. C. Movileanu *, D. Razus, D. Oancea, Additive effects on explosion pressure and flame temperature of stoichiometric ethylene-air mixture in closed vessels, Revue Roumaine de Chimie, 2011, 56(1), 11-17; I.F.(2011) = 0.418.

-paper in ISI journals as co-author

1. Razus, D.; Mitu;M. Movileanu, C.; Giurcan, V, Calculated Adiabatic Flame Temperature - a Tool for Ascertaining the Minimum Inert Concentration of Fuel-Nitrous Oxide-Inert Gaseous Mixtures, Revue Roumaine de Chimie, 68(7-8), 321-326 (2023). DOI: 10.33224/rrch.2023.68.7-8.01, IF (2022) = 0.5
2. Razus, D.; Movileanu, C.; Mitu; Giurcan, V., Expansion coefficients and propagation speeds of premixed n-butane-air flames, Energies, 2023, IF (2022) = 3.2
3. Giurcan, V; Mitu, M; Movileanu, C; Razus, Propagation Characteristics of Stoichiometric Inert-Diluted Methane-N2O Flames, Ind. Eng. Chem. Res. 2022, 61, 17065−17076, IF (2021) = 4.326
4. Mitu, M.; Movileanu, C.; Giurcan, V. Dynamics of Pressure Evolution during Gaseous Ethane—Air Mixture Explosions in Enclosures: A Review. Energies 2022, 15, 6879. https://doi.org/10.3390/ en15196879. I.F. (2021) = 3.004
5. M. Mitu, C. Movileanu and V. Giurcan *, The Laminar Burning Velocities of Stoichiometric Methane–Air Mixture from Closed Vessels Measurements, Energies 2022, 15, 5058. https://doi.org/10.3390/en15145058. I.F. (2021) = 3.004.
6. Razus, D.; Giurcan, V.; Movileanu, C.; Mitu, M. Nitric Oxide Generation in N2-Diluted H2–N2O Flames: A Computational Study. Processes 2022, 10, 1032. https:// doi.org/10.3390/pr10051032, FI (2022) = 3.352.
7. Giurcan, Venera; Mitu, Maria; Movileanu, Codina; Razus, Domnina; Oancea, Dumitru. Numerical study of laminar flame propagation in CH4-N2O-N2 at moderate pressures and temperatures. Combustion, Explosion, and Shock Waves (Springer), 58(1), 22-33. https://doi.org/10.1134/S0010508222010038. FI = 1.085.
8. Mitu, Maria; Movileanu, Codina; Giurcan, Venera; Deflagration Characteristics of N2-Diluted CH4-N2O Mixtures in the Course of the Incipient Stage of Flame Propagation, Energies 14(18), 5918; https://doi.org/10.3390/en14185918, I.F. (2021) = 3.252.

9. V. Giurcan, M. Mitu, C. Movileanu, D. Razus, D. Oancea, Propagation Velocity of Flames in Inert-Diluted Stoichiometric Propane-Air Mixtures: Pressure and Temperature Dependence, *Processes* 2021, *9*(6), 997; https://doi.org/10.3390/pr9060997 , I.F. (2021) = 3.352
10. V. Giurcan, C. Movileanu, A. Musuc, M. Mitu, Laminar Burning Velocity of Biogas-Containing Mixtures. A Literature Review, *Processes* 2021, *9*(6), 996; https://doi.org/10.3390/pr9060996, I. F. (2021) = 3.352
11. M. Mitu, V. Giurcan, C. Movileanu, D. Razus, D. Oancea, Propagation of CH_4-N_2O-N_2 Flames in a Closed Spherical Vessel, *Processes* **2021**, *9*(5), 851; https://doi.org/10.3390/pr9050851 , I. F. (2021) = 3.352.
12. Razus, Domnina; Mitu, Maria; Giurcan, Venera; Movileanu, Codina, Laminar flame propagation in nitrogen-diluted stoichiometric H2-N2O mixtures - a numerical study, Rev. Roum. Chim. 66(3), 255-265, 2021, I. F. (2021) = 0.410
13. V. Giurcan, M. Mitu, C. Movileanu, D. Razus, D. Oancea, Influence of inert additives on small-scale closed vessel explosions of propane-air mixtures, Fire Safety Journal, 111, 2020, 102939, I. F. (2020) = 2.764.
14. D. Razus, M. Maria,V. Giurcan, C. Movileanu, D. Oancea, Numerical study of pressure and composition influence on laminar flame propagation in nitrogen-diluted H2-O2 mixtures, Revue Roumaine de Chimie, 65(6), pp. 529-537, 2020; I. F. (2020) = 0.278
15. Razus, D., Mitu, M., Giurcan, V., Movileanu, C., Oancea, D., Additive influence on maximum experimental safe gap of ethylene-air mixtures, Fuel,237, pp. 888-894, 2019; I. F. (2019) = 5.578
16. Razus, D., Mitu, M., Giurcan, V., Movileanu, C., Oancea, D., Methane-unconventional oxidant flames. Laminar burning velocities of nitrogen-diluted methane–N_2 O mixtures, Process Safety and Environmental Protection, 114, pp. 240-250, 2018; I. F. (2018) = 4.384
17. Giurcan, V., Mitu, M., Movileanu, C., Razus, D., Temperature, pressure and dilution effect on laminar burning velocity of propane-air, Revue Roumaine de Chimie, 61(6-7), pp. 517-524, 2016; I. F. (2016) = 0.246
18. V. Brinzea, M. Mitu, C. Movileanu, A. Musuc, D. Razus, D. Oancea, Propagation velocities of propane-air deflagrations at normal and elevated pressures and temperatures, Revista de Chimie, 63, 3, 2012, 289-292; I.F. (2012) = 0.538
19. D. Razus, V. Brinzea, M. Mitu, C. Movileanu, D. Oancea, Burning velocity of propane-air mixtures from pressure-time records during explosions in a closed spherical vessel, Energy and Fuels, 2012, 26, 2, 901-909; I.F. (2012) = 2.853
20. D. Razus , V. Brinzea , M. Mitu, C. Movileanu , D. Oancea, Temperature and pressure influence on maximum rates of pressure rise during explosions of propane-air mixtures in a spherical vessel, Journal of Hazardous Materials, 2011, 190 (1-3) , pp. 891-896; I.F. (2011) = 4.173

21. V. Brinzea, M. Mitu, C. Movileanu, D. Razus, D. Oancea, Deflagration parameters of stoichiometric propane-air mixture during the initial stage of gaseous explosions in closed vessels, Revista de Chimie, 2011, 62, 201-205; I.F. (2011) = 0.599
22. D. Razus, D. Oancea, V. Brinzea, M. Mitu, C. Movileanu, Experimental and computed burning velocities of propane-air mixtures, Energy Conversion and Management, 2010,51 (12), 2979-2984; I.F. (2010) = 2.072
23. D. Razus, V. Brinzea, M. Mitu, C. Movileanu, D. Oancea, Inerting effect of the combustion products on the confined deflagration of liquefied petroleum gas-air mixtures, Journal of Loss Prevention in the Process Industries, 2009, 22 (4), 463-468; I.F. (2009) = 0.810
24. D. Razus, C. Movileanu, V. Brinzea, D. Oancea, Closed vessel combustion of propylene-air mixtures in the presence of exhaust gas, Fuel, 2007,86 (12-13) , 1865-1872; I.F. (2007) = 1.829
25. D. Razus, C. Movileanu, D. Oancea, The rate of pressure rise of gaseous propylene-air explosions in spherical and cylindrical enclosures, Journal of Hazardous Materials, 2007, 139 (1), 1-8; I.F. (2007) = 2.337.
26. D. Razus, C. Movileanu, V. Brinzea, D. Oancea, Explosion pressures of hydrocarbon-air mixtures in closed vessels, Journal of Hazardous Materials, 2006, 135 (1-3), 58-65; I.F. (2006) = 1.855
27. D. Razus, M. Molnarne, C. Movileanu, A. Irimia, Estimation of LOC (limiting oxygen concentration) of fuel-air-inert mixtures at elevated temperatures by means of adiabatic flame temperatures, Chemical Engineering and Processing: Process Intensification, 2006, 45 (3), 193-197; I.F. (2006) = 1.129
28. D. Razus, D. Oancea, C. Movileanu, Burning velocity evaluation from pressure evolution during the early stage of closed-vessel explosions, Journal of Loss Prevention in the Process Industries, 2006, 19 (4), 334-342; I.F. (2006) = 0.419
29. D. Razus, C. Movileanu, D. Oancea, Inhibition of premixed C_3H_6-air flames by CH_2BrCl, Revue Roumaine de Chimie, 2006, 51 (6), 533-539; I.F. (2006) = 0.208

Patents:

1. National Patent: C. Movileanu, D. Ficai, A. Ficai, M. Calin, M. F. Anghelache, A. V. Gafencu, G. Fundueanu-Constantin, M. Pinteala, M. Simionescu, E. Andronescu “Intelligent nanoparticle systems for cell internalization”, nr. A / 00339 (15.06.2021).

2. National Patent: C. Movileanu, D. Ficai, A. Ficai, M. Calin, M. F. Anghelache, A. V. Gafencu, G. Fundueanu-Constantin, M. Pinteala, M. Simionescu, E. Andronescu, Intelligent magnetic nanosystems for cellular vectorization of bioactive compounds, nr. A / 00388 (20.07.2023).

Proceedings:

1. C. Movileanu, Domnina Razus, V. Giurcan and V. Gosa, Pressure evolution of ethylene-air explosions in enclosures, Proc. FMC Symp. Cracovia, Poland, 2014, J. Physics, Conf. Series, 08/2014, 530(1): 012014, doi:10.1088/1742-6596/530/1/012014.

2. C. Movileanu, Domnina Razus, M. Mitu, V. Giurcan and D. Oancea, Explosion of C_2H_4-N_2O-N_2 in Elongated Closed Vessels, Proc. Eur. Combust. Meeting, April 2015, Budapest, Hungary. ISBN 978-963-12-1257-0.

3. Domnina Razus, C. Movileanu and D. Oancea, *Effect of exhaust gas dilution on burning velocity of propylene-air mixtures*, Proc. 19-th Intern. Symp. Comb. Proc., Beskidy, Poland, 2005, pp.221-229. ISBN: 83-922381-1-7.

4. D.Razus, D.Oancea, V.Brinzea, M.Mitu, C.Movileanu, *Experimental and computed burning velocities of propane-air mixtures*, Proc. 7-th Intern. Symp. on Hazards, Prevention, Protection and Mitigation of Industrial Explosions (7^{th} ISHPMIE), St. Petersburg, Rusia, 7-11 Jul. 2008, (8 pp.).

5. V. Giurcan, Domnina Razus, M. Mitu , C.Movileanu and D. Oancea, Experimental and Numerical Investigation of Laminar Burning Velocity of Fuel/Air/Inert Gaseous Mixtures of Variable Initial Temperature and Pressure, Proc. 6^{th} Eur. Comb. Meeting, Lund, Sweden, 2013, 1-74, 6 pp.

Non-ISI Papers:

1. C. Movileanu, D. Razus, D. Oancea and N.I.Ionescu, Pressure evolution in confined and partially confined gas explosions, Analele Univ.Vest, (Timisoara), 12(3), 231-238 (2003).
2. C. Movileanu, M. Mitu, V.Munteanu, D. Razus and D.Oancea, CO2 effect on the flame velocity in gaseous flammable mixtures. Preliminary tests on stoichiometric ethylene-air mixture, Analele Univ.Bucuresti, Chimie, 13(1-2), 249-254 (2004).
3. D. Razus, C. Movileanu, Venera Branzea and D. Oancea, Overall activation parameters of propylene oxidation in premixed flames, Analele Univ.Bucuresti-Chimie, 14 (I-II), 209-214 (2005). ISSN: 1220-871X.
4. C. Movileanu, V. Brinzea, M. Mitu, D. Razus and D. Oancea, Explosion pressures of confined deflagrations propagating in gaseous mixtures of lower alkanes with air, Analele Univ. Bucuresti, Chimie, **18**(2), 39-46 (2009). ISSN: 1220-871X.
5. V. Brinzea, M. Mitu, C. Movileanu, Adina Musuc and D. Razus, Expansion Coefficients and Normal Burning Velocities of Propane-Air Mixtures by the Closed Vessel Technique, Analele Univ. Bucuresti, Chimie, 19 (2), 31-37 (2010). pISSN: 1220-871X; ISSN: 1844-0401.

Oral communications at international conferences:

1. Brinzea, Venera; Movileanu, Codina; Mitu, Maria; Razus, Domnina; Oancea, D., Flame propagation during the initial stage of gas-phase explosions in closed vessels, 16-th RICCCE (Romanian Intern. Conf. on Chemistry and Chem. Eng.), sept. 2009, Sinaia, Romania.

2. Movileanu, Codina, Brinzea, Venera, Mocanu, M., Razus, Domnina, Oancea, D., Characteristic parameters of confined explosions propagating in gaseous mixtures of lower alkanes with air, 16-th RICCCE (Romanian Intern. Conf. on Chemistry and Chem. Eng.), sept. 2009, Sinaia, Romania
3. Movileanu, Codina; Razus, Domnina; Oancea, D., Experimental and calculated values of quenching distances for ethylene-air-inert mixtures, 13-th Intern. Conf. on Physical Chemistry ROMPHYSCHEM, Bucuresti.
4. Movileanu, Codina; Razus, Domnina; Brinzea, Venera; Mitu, Maria; Oancea, D., Inerting effects of the combustion products on the confined deflagration of Liquefied Petroleum Gas-Air Mixtures, 15-th Intern. Conf. on Chemistry and Chemical Engineering RICCCE 15.
5. Brinzea, Venera; Mitu, Maria; Movileanu, Codina; Razus, Domnina; Oancea, D., Characteristics of confined deflagration of LPG-air in the presence of exhaust gas, 20-th Intern. Symp. on Combustion, sept. 2007, Pultusk, Polonia.
6. Movileanu, Codina; Musuc, Adina; Razus, Domnina; Munteanu, V.; Oancea, D., Ignition Parameters of Ethylene-Air-Inert mixtures using High Voltage and Break Sparks, 20-th Intern. Symp. on Combustion, sept. 2007, Pultusk, Polonia.
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2. ***Study of explosion propagation in elongated closed vessels***, PN-II-RU-PD-2012-3, 2013-2015.
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4. ***Smart superparamagnetic nanoparticles based on curcumin for cancer diagnosis and treatment***, UPB-Proof of Concept, 2021-2023.

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