

Publications List

Prof. dr. habil. Catinca SECUIANU

a) Habilitation thesis (H)

H1. Secuianu, C., *Phase equilibria and thermophysical properties at ambient and high-pressures*, University Politehnica of Bucharest, Bucharest, **2016**.

b) PhD Thesis (T)

T1. Secuianu, C., *High-pressures phase equilibria of binary systems of carbon dioxide + monohydroxilic alcohols*, University Politehnica of Bucharest, Bucharest, **2004**.

c) Books (C)

C1. Secuianu, C., *High-pressures phase equilibria*, ISBN: 978-973-718-854-0, Ed. Printech, Bucharest, **2007**.

C2. Secuianu, C. (Editor), 29th European Symposium on Applied Thermodynamics ESAT 2017 Book of Abstracts, Ed. Politehnica Press, 2017 (323 pages).

C3. Secuianu, C. et al., *Practical laboratory experiments for Physical Chemistry*, Bucharest, Ed. Politehnica Press, 2017, ISBN 978-606-515-747-7.

d) ISI WEB OF SCIENCE Articles (IS)

LEGEND: **IS** – Q1 (0-25%); **IS** – Q2 (25-50%); **IS** – Q3 (50-75%); **IS** – Q4 (75-100%) of publication year (impact factor).

IS1. Secuianu, C.*, 19th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 19), *Chem. Eng. Comm.* 203 (12), 1539-1539, **2016**.

IS2. Secuianu, C.*, Feroiu, V., Geană, D., Phase behavior of the carbon dioxide + 1-dodecanol system at high pressures, *Fluid Phase Equilib.* 428, 62-75, **2016**.

IS3. Secuianu, C.*, Ioniță, S., Feroiu, V., Geană, D., High pressures phase equilibria of (carbon dioxide+1-undecanol) system and their potential role in carbon capture and storage, *J. Chem. Thermodyn.* 93, 360-373, **2016**.

IS4. Sima, S., Milanesio, J.M., Ramello, J.I., Cismondi, M., Secuianu, C.*, Feroiu, V., Geană, D., The effect of the naphthenic ring on the VLE of (carbon dioxide plus alkane) mixtures, *J. Chem. Thermodyn.* 93, 374-385, **2016**.

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- IS5.** Crişciu, A., Sima, S., Deaconu, A.-S., Chirilă, A., Deaconu, D., **Secuianu, C.***, Feroiu, V., Modelling of the carbon dioxide + cyclohexane binary system with cubic equations of state, *Rev. Chim.-Bucharest* 67 (10), 1984-1989, **2016**.
- IS6.** Sima, S., **Secuianu, C.***, Feroiu, V.*, Geană, D., New high-pressure vapor-liquid equilibrium data for the carbon dioxide + 2-methyl-1-propanol (isobutanol) binary system, *Cent. Eur. J. Chem.* 12 (9), 953-961, **2014**.
- IS7.** Sima, S., **Secuianu, C.***, Feroiu, V.*, Geană, D., New high-pressure vapor-liquid equilibrium data for the carbon dioxide + 2-methyl-2-propanol binary system, *Cent. Eur. J. Chem.* 12 (9), 893-900, **2014**.
- IS8.** **Secuianu, C.***, Jaubert, J.-N., Iovu, H., Editor's preface for the special issue "Romanian International Conference on Chemistry and Chemical Engineering", *Cent. Eur. J. Chem.* 12 (9), 953-961, **2014**.
- IS9.** Moga, S.A., Goga, N., Baoukina, S., **Secuianu, C.**, Hadăr, A., Simulations on DPD Thermostat and Standard MD for Different Systems, *Mater. Plast.* 51 (3), 340-342, **2014**.
- IS10.** Sima, S., Ioniță, S., **Secuianu, C.***, Feroiu, V., Geană, D., Fluid Phase Equilibria Modelling for Carbon Dioxide + Methanol System with Cubic Equations of State, *Rev. Chim.-Bucharest* 65 (3), 272-279, **2014**.
- IS11.** Sima, S., Crişciu, A., Feroiu, V.*, **Secuianu, C.***, Application of refractive index mixing rules in binary systems containing n-octane, 2-hexanol or 2-octanol at 298.15 K, *Rev. Chim.-Bucharest* 65 (2), 202-205, **2014**.
- IS12.** Crişciu, A., **Secuianu, C.***, Feroiu, V.*, Densities and Refractive Indices of 1-Hexanol + n-Pentadecane Binary System at Temperatures from (293.15 to 323.15) K, *Rev. Chim.-Bucharest* 65 (1), 76-79, **2014**.
- IS13.** Sima, S., Cruz-Doblas, J., Cismondi Duarte, M., **Secuianu, C.***, High-pressure phase equilibrium calculations for carbon dioxide + cyclopentane binary system, *Cent. Eur. J. Chem.*, 12 (9), 918-927, **2014**.
- IS14.** Teodorescu, M.*, **Secuianu, C.**, Refractive Indices Measurement and Correlation for Selected Binary Systems of Various Polarities at 25°C, *J. Solution Chem.* 42 (10), 1912-1934, **2013**.
- IS15.** **Secuianu, C.**, Qian, J., Privat, R., Jaubert, J.-N.*, Fluid Phase Equilibria Correlations for Carbon Dioxide + 1-Heptanol System with Cubic Equations of State, *Ind. Eng. Chem. Res.* 51, 11284-11293, **2012**.
- IS16.** **Secuianu, C.***, Feroiu, V., Geană, D., Measurements and Modeling of High-Pressure Phase Behavior of the Carbon Dioxide + Pentan-1-ol Binary System. *J. Chem. Eng. Data* 56 (12), 5000-5007, **2011**.

- IS17.** Secuianu, C.*, Maitland, G. C., Trusler, J. P. M., Wakeham, W. A., Diffusion coefficients of aqueous KCl at high pressures measured by the Taylor dispersion method, *J. Chem. Eng. Data* 56 (12), 4840–4848, Festschrift K. Marsh, **2011**.
- IS18.** Secuianu, C.*, Feroiu, V., Geană, D., Phase behavior for carbon dioxide + n-pentadecane binary system, *J. Chem. Eng. Data* 55 (10), 4255–4259, **2010**.
- IS19.** Secuianu, C.*, Feroiu, V., Geană, D., High-pressure phase equilibria in the (carbon dioxide + 1-hexanol) system, *J. Chem. Thermodyn.* 42 (10), 1286–1291, **2010**.
- IS20.** Secuianu, C.*, Feroiu, V., Geană, D., Phase equilibria of carbon dioxide +1-nonanol system at high pressures, *J. Supercrit. Fluid* 55 (2), 653-661, “100th year Anniversary of van der Waals' Nobel Lecture”, **2010**, *invited paper*.
- IS21.** Secuianu, C.*, Feroiu, V., Geană, D., Phase behavior for carbon dioxide + 2-butanol system: experimental measurements and modeling with cubic equations of state, *J. Chem. Eng. Data* 54 (5), 1493–1499, **2009**.
- IS22.** Secuianu, C.*, Feroiu, V., Geană, D., Phase equilibria experiments and calculations for carbon dioxide + methanol binary system, *Cent. Eur. J. Chem.*, 7 (1), 1-7, **2009**.
- IS23.** Secuianu, C.*, Feroiu, V., Geană, D., Phase equilibria calculations for carbon dioxide + methanol binary mixture with the Huron-Vidal infinite dilution (HVID) mixing rules, *Rev. Chim. (Bucharest)* 60 (5), 472-475, **2009**.
- IS24.** Secuianu, C.*, Feroiu, V., Geană, D., Phase behavior for carbon dioxide + ethanol system: experimental measurements and modeling with a cubic equation of state, *J. Supercritical Fluids*, 47 (2), 109-116, **2008**.
- IS25.** Secuianu, C.*, Feroiu, V., Geană, D., High-Pressure Phase Equilibria for the Carbon Dioxide+1-Propanol System, *J. Chem. Eng. Data* 53 (10), 2444-2448, **2008**.
- IS26.** Secuianu, C., Feroiu, V., Geană, D.*, High-Pressure Vapor-Liquid and Vapor-Liquid-Liquid Equilibria in the Carbon Dioxide + 1-Heptanol System, *Fluid Phase Equilib.* 270 (1-2), 109-115, **2008**.
- IS27.** Feroiu, V., Geană, D., Secuianu, C.*, Properties of refrigerants from cubic equations of state, *Rev. Chim. (Bucharest)* 59 (5), 554-557, **2008**.
- IS28.** Secuianu, C.*, Feroiu, V., Geană, D., Investigation of phase equilibria in the ternary system carbon dioxide + 1-heptanol + pentadecane, *Fluid Phase Equilib.* 261 (1-2), 337-342, **2007**.
- IS29** Secuianu, C.*, Feroiu, V., Geană, D., High-Pressure Vapor-Liquid Equilibria of Carbon Dioxide + 1-Pentanol System: Experimental Measurements and Modeling, *Rev. Chim. (Bucharest)* 58 (12), 1176-1181, **2007**.

- IS30.** Secuianu, C., Feroiu, V., Geană, D.*, High-Pressure Vapor-Liquid Equilibria in the System Carbon Dioxide + 1-Butanol at Temperatures from 293.15 to 324.15 K, *J. Chem. Eng. Data* 49 (6), 1635-1638, **2004**.
- IS31.** Secuianu, C., Feroiu, V., Geană, D.*, High-Pressure Phase Equilibria for the Carbon Dioxide + Methanol and Carbon Dioxide + Isopropanol Systems, *Rev. Chim. (Bucuresti)*, 54 (11), 874-879, **2003**.
- IS32.** Secuianu, C., Feroiu, V., Geană, D.*, High-Pressure Vapor-Liquid Equilibria in the System Carbon Dioxide and 2-Propanol at Temperatures from 293.25 K to 323.15 K, *J. Chem. Eng. Data* 48 (6), 1384–1386, **2003**.

e) **ARTICLES INDEXED IN INTERNATIONAL DATABASE (BDI)**

- BDI1. Ioniță, S., Secuianu, C.*, Feroiu, V., Geană, D., Validation of a new apparatus for determining high-pressures phase equilibrium of mixtures, *U.P.B. Sci. Bull., Series B*, 77 (1) 31-40, **2015**.
- BDI2. Secuianu, C.*, The 19th Romanian International Conference on Chemistry and Chemical Engineering – RICCCCE 19, Sibiu, Romania, *Bull. Soc. Chem. Rom.* 22 (3), 47-49, **2015**.
- BDI3. Sima, S., Secuianu, C.*, Feroiu, V.*, Geană, D., Phase equilibrium experiments and modeling for the carbon dioxide + ethanol system at high pressures, *Bull. Rom. Chem. Eng. Soc.* 1 (1), 130-138, **2014**.
- BDI4. Feroiu, V., Geană, D., Secuianu, C., Thermodynamic of some chloro-fluoro-hydrocarbons from cubic equations of state, *U.P.B. Sci. Bull., Series B*, **72 (1)**, 37-46, **2010**.
- BDI5. Secuianu, C.*, Feroiu, V., Geană, D., Phase behavior for carbon dioxide + methanol system: experimental measurements and modeling with a cubic equation of state, *Intern. J. Liq. State Sci. (IJLSS)*, 2 (1) 1-14, **2010**.
- BDI6. Secuianu, C.*, Crișciu A., Physical properties for binary and ternary mixtures of hexadecyltrimethylammonium bromide with water, and different alcohols, *J. Optoelectronics Adv. Mat. Symposia* **1 (6)**, 1118-1123, **2009**.
- BDI7. Secuianu, C., Feroiu, V., Geană, D., High-Pressure Phase Equilibrium for Carbon Dioxide + Ethanol at 333.15 K, *Sci. Technol. Environ. Prot.* **12 (1)**, 77-86, **2005**.
- BDI8. Secuianu, C., Feroiu, V., Geană, D., High-Pressure Vapor-Liquid Equilibria in the System Carbon Dioxide + Ethanol. Experimental Data and Calculations with an Equation of State, *U.P.B. Sci. Bull., Series B*, **66 (1)**, 9-18, **2004**.
- BDI9. Secuianu, C., Feroiu, V., Geană, D., High-Pressure Vapor-Liquid Equilibria in the System Carbon Dioxide + 2-Butanol and Calculations with EOS methods, *Sci. Technol. Env. Prot.* **11 (1)**, 48-60, **2004**.
- BDI10. Secuianu, C., Feroiu, V., Geană, D., High-Pressure Phase Equilibrium in Binary Mixtures of Carbon Dioxide + 1-Butanol, *Sci. Technol. Env. Prot.* **10 (1)**, 62-70, **2003**.

BDI11. **Secuianu, C.**, Feroiu, V., Geană, D., High-Pressure Vapor-Liquid Equilibria in the System Carbon Dioxide and Methanol at Temperatures from 298.15 K to 323.15 K, *Ann. W.U.T-Ser. Chem.* **12 (3)**, 393-400, **2003**.

f) CONFERENCES

- Vis1.** **Secuianu, C.**, Feroiu, V., Geană, D., *Prediction of phase equilibria in the ternary system carbon dioxide + 1-heptanol + pentadecane*, in Eleventh International Conference on Properties and Phase Equilibria for Product and Process Design PPEPPD 2007, May 20-25, 2007, Hersonissos, Creta, Grecia, Book of abstract p.147, Proceedings of conference (CD-ROM), p. 1-10 (ISI Web of Science).
- Vi1. Sergiu Sima, Adrian Crișciu, Oana Ciocîrlan, Cristian Dincă, **Catinca Secuianu***, Viorel Feroiu, *Phase Behaviour for Binary Systems Containing CO₂ at High Pressures of Interest for Carbon Capture and Storage*, 20th Romanian International Conference on Chemistry & Chemical Engineering – RICCCE 20, 6-9 September 2017, Poiana Brasov, Romania (poster).
- Vi2. Sergiu Sima, George Rizea, **Catinca Secuianu***, Viorel Feroiu, *Phase Equilibria of CO₂ + 1,2-Dimethoxyethane at High-Pressures*, in 29th European Symposium on Applied Thermodynamics – ESAT 2017, 18-21 May, 2016, Bucharest, Romania, Book of abstracts p. 32 (oral communication).
- Vi3. **Catinca Secuianu**, *High pressures phase equilibrium in systems containing supercritical carbon dioxide*, International Conference on Supercritical Fluid Technologies And Applications “Supercritical fluids –the current state and outlook”, 20-21 October 2016, Pulawy, Poland, **Invited Speaker** (oral communication).
- Vi4. Sergiu Sima, Adrian Crișciu, **Catinca Secuianu**, Viorel Feroiu, Dan Geană, *Phase Equilibria of Butanol Isomers in Supercritical Carbon Dioxide*, 14th International Conference on Properties and Phase Equilibria for Product and Process Design – PPEPPD 2016, May 22-26, Porto, Portugal (poster).
- Vi5. Sergiu Sima, **Catinca Secuianu**, Viorel Feroiu, Dan Geană, *Critical Behaviour of CO₂ + Cyclopentane Binary Mixture*, 19th Romanian International Conference on Chemistry & Chemical Engineering – RICCCE 19, Sibiu, Romania, September 2-5, 2015 (poster).
- Vi6. Sergiu Sima, Raluca Toma, Adrian Crișciu, **Catinca Secuianu**, *The Relationship Between Some Physicochemical Parameters and Quality of Fish*, 19th Romanian International Conference on Chemistry & Chemical Engineering – RICCCE 19, Sibiu, Romania, September 2-5, 2015 (poster).
- Vi7. Sergiu Sima, Bogdan Homescu, Monica Adriana Radu, Adrian Crișciu, **Catinca Secuianu**, Viorel Feroiu, *Physico-Chemical Properties of Essential and Food Oils*, 19th Romanian International Conference on Chemistry & Chemical Engineering – RICCCE 19, Sibiu, Romania, September 2-5, 2015 (poster).

*Corresponding author

- Vi8. Simona Ioniță, **Catinca Secuianu**, Viorel Feroiu, Dan Geană, Phase equilibria of carbon dioxide + 1-octanol binary system, 28th European Symposium on Applied Thermodynamics (ESAT 2015): “Everything flows”, June 11-14, 2015, Athens, Greece (poster).
- Vi9. Sergiu Sima, **Catinca Secuianu**, Viorel Feroiu, Dan Geană, Phase equilibria of carbon dioxide + n-heptane binary system, 28th European Symposium on Applied Thermodynamics (ESAT 2015): “Everything flows”, June 11-14, 2015, Athens, Greece (poster).
- Vi10. Sergiu Sima, **Catinca Secuianu**, Viorel Feroiu, Dan Geană, Phase equilibria of CO₂ + cycloalkanes + alcohols mixtures at high-pressures, 28th European Symposium on Applied Thermodynamics (ESAT 2015): “Everything flows”, June 11-14, 2015, Athens, Greece (poster).
- Vi11. Sunita Andreea Moga, Nicolae Goga, **Catinca Secuianu**, Anton Hadăr, A proposal for Young’ modulus calculation using molecular dynamics simulation in GROMACS, in Conf. Proceedings of the Academy of Romanian Scientists Productica Scientific Sessions, 9th May 2014, Vol. 6 (1), pp. 51-58, **2014**, ISSN 2067-2160.
- Vi12. Juan M. Milanesio, Sergiu Sima, Julia Cruz-Doblas, Martin Cismondi, **Catinca Secuianu**, *Effect of cyclic and branched isomers on the VLE of CO₂ + alkane mixtures*, 27th European Symposium on Applied Thermodynamics (ESAT 2014): “Experiments meet Theory and Simulation” 6-9 July **2014**, Eindhoven - The Netherlands (comunicare orală).
- Vi13. Simona Ioniță, Cristian Dincă, **Catinca Secuianu**, Viorel Feroiu, Dan Geană, *High-pressures phase equilibrium of carbon dioxide + 1-undecanol binary mixtures*, in 27th European Symposium on Applied Thermodynamics (ESAT 2014): “Experiments meet Theory and Simulation” 6-9 July **2014**, Eindhoven - The Netherlands (poster).
- Vi14. **Secuianu, C.**, Dincă, C., Cismondi, M., *Phase behaviour & thermophysical properties of systems containing carbon dioxide and their role in carbon capture and storage*, in *CIEM 2013*, 6th International Conference on Energy and Environment, November 7-8, **2013**, Politehnica University Conference Center, Bucharest, Romania (comunicare orală).
- Vi15. Cristian Dincă, Adrian Badea, **Catinca Secuianu**, The desulphurization process influence on MEA absorption capacity, in *CIEM 2013*, 6th International Conference on Energy and Environment, November 7-8, **2013**, Politehnica University Conference Center, Bucharest, Romania (comunicare orală).
- Vi16. Nițulescu, G.M., Velescu, B.S., **Secuianu, C.**, Nedelcu, G., Design and computational studies on potential antiproliferative pyrazole compounds, 2nd Zagreb International Conference on Pharmaceutical Sciences, Sharing a Vision Towards Better and Safe Medicine, Zagreb, Croatia, 25-26 October, 2013, 65, ISBN 978-953-7897-01-7.
- Vi17. Moga, S.A., Goga, N., **Secuianu, C.**, Hadăr, A., *Effects of new thermostats on polymers: a case study*, ICSAAM 2013, 5th International Conference on Structural Analysis of Advanced Materials, pp. 1-10, 23-26 September **2013**, Island of Kos, Greece (poster).
- Vi18. Sima, S. Cruz Doblas, J., Cismondi, M., **Secuianu, C.**, *High pressure phase equilibria in carbon dioxide + branched alkanes mixtures*, in 18th Romanian International Conference on Chemistry and Chemical Engineering RICCCE 18, 4-7 September, **2013**, Sinaia, Romania (comunicare orală).

*Corresponding author

- Vi19. Ioniță, S., **Secuianu, C.**, Feroiu, V., Geană, D., *High-pressures phase equilibria in the carbon dioxide + 1-undecanol system*, in 18th Romanian International Conference on Chemistry and Chemical Engineering RICCCE 18, 4-7 September, **2013**, Sinaia, Romania (comunicare orală).
- Vi20. Sima, S., Crișciu, A., Feroiu, V., **Secuianu, C.**, *Physical properties for binary and ternary mixtures of SDS with water and different alcohols*, in 18th Romanian International Conference on Chemistry and Chemical Engineering RICCCE 18, 4-7 September, **2013**, Sinaia, Romania (comunicare orală).
- Vi21. Dincă, C., **Secuianu, C.**, *Phase equilibria of CO₂ + systems of interest for CO₂ capture*, in 18th Romanian International Conference on Chemistry and Chemical Engineering RICCCE 18, 4-7 September, **2013**, Sinaia, Romania (comunicare orală).
- Vi22. Sima, S., **Secuianu, C.**, Feroiu, V., Geană, D., *Phase behaviour in carbon dioxide + butanol isomers*, in 18th Romanian International Conference on Chemistry and Chemical Engineering RICCCE 18, 4-7 September, **2013**, Sinaia, Romania (comunicare orală).
- Vi23. **Secuianu, C.**, Feroiu, V., Geană, D., *High Pressure Phase Equilibria of CO₂ + 1-Dodecanol*, in 26th European Symposium on Applied Thermodynamics ESAT 2012, 7-10 October **2012**, Kongresshotel Potsdam, Germany (comunicare orală).
- Vi24. Cadogan, S.P., Maitland, G.C., Trusler J.P.M., **Secuianu, C.**, *Measurement of the Diffusion Coefficients of CO₂ in Brines at High Pressures and Temperatures*, in 18th Symposium on Thermophysical Properties Boulder, CO, USA, June 24-29, **2012**, Paper 1458.
- Vi25. **Secuianu C.**, Feroiu, V., Geană, D., *High pressure phase equilibria of CO₂ + 1-dodecanol*, in The Romanian International Conference on Chemistry and Chemical Engineering – RICCCE XVII, 7-10 September, **2011**, Sinaia, Romania (poster).
- Vi26. **Secuianu C.**, Maitland G.C., Trusler J.P.M., *Diffusion coefficients of aqueous KCl at high pressures measured by the Taylor dispersion method*, in 25th European Symposium on Applied Thermodynamics ESAT 2011, June 24-27, **2011**, Saint Petersburg, Russia, pp 115-118 (comunicare orală), ISBN: 5-85263-061-6, Eds. Gotlib, I., Victorov, A., Smirnova, N.
- Vi27. **Secuianu C.**, Feroiu, V., Geană, D., *Phase Equilibria of Carbon Dioxide + 1-Pentanol System at High Pressures*, in 25th European Symposium on Applied Thermodynamics ESAT 2011, June 24-27, **2011**, Saint Petersburg, Russia, pp 395-398 (poster), ISBN: 5-85263-061-6, Eds. Gotlib, I., Victorov, A., Smirnova, N.
- Vi28. **Secuianu, C.**, Feroiu, V., Geană, D., *High-Pressure Phase Equilibria for Carbon Dioxide (1) + 1-Pentanol (2) Binary System* in Molecular Modelling & Simulation for Process and Product Design, March 22 - 23, **2010**, pp 1-2 (poster), Würzburg, Germany, EFCE-Event No. 687.
- Vi29. **Secuianu, C.**, Feroiu, V., Geană, D., *Phase equilibria in the ternary system carbon dioxide + 1-hexanol + pentadecane* in The Romanian International Conference on Chemistry and Chemical Engineering (RICCCE) 16, 9-12 September, **2009**, Sinaia, Romania, pp 123-138 (poster), ISBN: 978-606-521-349-4.
- Vi30. **Secuianu, C.**, *Densities, refractive indices, and derived excess properties of the 2-hexanol + 2-octanol + n-octane ternary system at 298.15 K* in RICCCE 16, 9-12 September, **2009**, Sinaia, Romania, pp 131-138 (poster), ISBN: 978-606-521-349-4.

- Vi31. **Secuianu, C.**, Feroiu, V., *Physical properties for 1-pentanol + pentadecane and 1-hexanol + pentadecane binary systems* in RICCCE 16, 9-12 September, **2009**, Sinaia, Romania.
- Vi32. **Secuianu, C.**, Feroiu, V., Geană, D., *High-Pressure Phase Equilibria in the Carbon Dioxide + 1-Pentadecane System* in 24th ESAT European Symposium on Applied Thermodynamics June 27 – July 1, **2009**, Santiago de Compostela, Spain (poster), ISBN: 978-84-692-2664-3, Eds. Arce, A., Soto, A.
- Vi33. **Secuianu, C.**, Crişciuc, A., *Physical properties for binary and ternary mixtures of hexadecyl-trimethyl-ammonium bromide with water, and different alcohols* in BraMat 2009 – International Conference on Materials Science and Engineering, February 26-28, **2009**, Braşov, România, P6.20 (poster), ISBN: 973-635-454-7.
- Vi34. **Secuianu, C.**, Feroiu, V., Geană, D., *High-Pressure Vapor-Liquid and Vapor-Liquid-Liquid Equilibria in the Carbon Dioxide + 1-Hexanol System* in ESAT 2008 Proceedings of 23rd European Symposium on Applied Thermodynamics, May 29th-June 1st, **2008**, Cannes, France, pp. 31, CD: pp. 79-86, ISBN: 2-905267-59-3 (comunicare orală), Ed. Jaubert, J.-N.
- Vi35. Crişciuc, A., **Secuianu, C.**, *New methods from old: using modern techniques to improve graphical data processing routine* in 15th Romanian International Conference on Chemistry and Chemical Engineering RICCCE 15, Sinaia, Romania, 19-22 September **2007**, RICCCE XV Book of abstracts, pp 3-4 (poster), ISBN: 978-973-718-758-7.
- Vi36. **Secuianu, C.**, Feroiu, V., Geană, D., *Phase equilibria calculations for carbon dioxide + methanol binary mixture with the Huron-Vidal infinite dilution (HVID) mixing rules* in 15th Romanian International Conference on Chemistry and Chemical Engineering RICCCE 15, Sinaia, Romania, 19-22 September **2007**, RICCCE XV Book of abstracts, ISBN: 978-973-718-758-7, pp 1-2 (comunicare orală).
- Vi37. **Secuianu, C.**, Feroiu, V., Geană, D., *Phase equilibria calculations for carbon dioxide + alcohols binary mixtures with the Huron-Vidal infinite dilution (HVID) mixing rules* in “Romphyschem-12” International Conference on Physical Chemistry, Bucharest, Romania, 6-8 September **2006**, pp. 235 (comunicare orală).
- Vi38. **Secuianu, C.**, Feroiu, V., Geană, D., *High-Pressure Vapor-Liquid and Vapor-Liquid-Liquid Equilibria in the Carbon Dioxide + 1-Heptanol System* in “ESAT 2006” 22nd European Symposium on Applied Thermodynamics, Elsinore, Denmark, 28 June-1 July **2006**, pp 199-202 (poster), ISBN: 87-91435-39-0.
- Vi39. **Secuianu, C.**, Feroiu, V., Geană, D., *High-Pressure Vapor-Liquid-Liquid Equilibria in the Carbon Dioxide + 1-Nonanol System* in 14th Romanian International Conference on Chemistry and Chemical Engineering RICCCE 14, Bucharest, Romania, 22-24 September **2005**, RICCCE XIV Proceedings Volume 2, pp 9-15 (comunicare orală), ISBN: 978-973-718-785-7.
- Vi40. **Secuianu, C.**, Feroiu, V., Geană, D., *High-Pressure Vapor-Liquid and Vapor-Liquid - Liquid-Equilibria in the Carbon Dioxide + 1-Nonanol System* in “Thermodynamics 2005” Thermodynamics and statistical mechanics with industrial applications, Sesimbra, Portugal, 6-8 April **2005**, PS a 43a, pp 130 (poster).

- Vi41. **Secuianu, C.**, Feroiu, V., Geană, D., *High-Pressure Vapor-Liquid Equilibria in the System Carbon Dioxide + 2-Butanol at Temperatures from 298.15 K to 318.15 K* in “BRAMAT 2005” Proceedings International Conference on Materials Science and Engineering, Braşov – România, 24-26 February **2005**, P5A15, CD, pp 1-8 (poster), ISBN: 973-635-454-7 (Book of Abstracts, pp. 281, ISBN: 937-635-454-7).
- Vi42. **Secuianu, C.**, Feroiu, V., Geană, D., *Measurements of Vapor-Liquid Equilibria for Carbon Dioxide + 1-Butanol System Using a Variable-Volume Visual Cell* in 13th Romanian International Conference on Chemistry and Chemical Engineering RICCCCE 13, Volume 2, Bucharest, Romania, September **2003**, pp. 104-109 (comunicare orală), ISBN: 973-652-824-3.
- Vi43. **Secuianu, C.**, Feroiu, V., and Geană, D., *High-Pressure Vapor-Liquid Equilibria in the System Carbon Dioxide and Methanol at Temperatures from 298.15 K to 323.15 K* in 11th Physical Chemistry Conference with International Participation, Timișoara, România, September 2-5, **2003** (comunicare orală).
- Vi44. **Secuianu, C.** and Geană, D., *Vapor-Liquid Equilibria Calculation in Binary Mixtures of Carbon Dioxide with n-Alkanes* in 12th Romanian International Conference on Chemistry and Chemical Engineering RICCCCE 12, Bucharest, Romania, September 13-15, **2001**, pp. 91-96 (poster), ISBN: 973-652-382-9.

g) GRANTS

- Pi1.** *Phase behaviour & thermophysical properties of systems containing carbon dioxide and their role in carbon capture and storage*, Bilateral project Romania-Argentina, 2013-2015, Capacities program, Modul III – Projects to support Romania’s participation in international research grants, project director **C. Secuianu**.
- Pi2.** *Carbonate reservoir pore/fracture-scale physics and chemistry*, Qatar Carbonates and Carbon Storage Research Centre, Imperial College London, UK, member in the research team, 2009-2011.
- Pn1.** *Experimental measurements and phase behavior modelling at high pressures in binary systems containing dioxid de carbon + 1-pentanol and dioxid de carbon + 1-hexanol*. Grant CNCSIS (Cod CNCSIS 3), type AT, 2007, project director **C. Secuianu**.
- Pn2.** *Experimental measurements and phase behavior modelling at high pressures in binary systems containing dioxid de carbon + 1-pentanol and dioxid de carbon + 1-hexanol*. Grant CNCSIS (Cod CNCSIS 3), type AT, 2006, project director **C. Secuianu**.
- Pn3.** *Experimental measurements of high-pressures vapour-liquid equilibria in binary systems of carbon dioxide + 2-butanol. Correlations with equations of state*. Grant CNCSIS (Cod CNCSIS 445) type Td, 2004, project director **C. Secuianu**.

- Pn4.** *Cosolvency effects, miscibility windows, and holes in the critical holes in phase equilibria at high pressures* Grant CNCSIS (Cod CNCSIS 1088), type Ideas, 2010, project director Prof. dr. eng. Dan Geană.
- Pn5.** *Cosolvency effects, miscibility windows, and holes in the critical holes in phase equilibria at high pressures* Grant CNCSIS (Cod CNCSIS 1088), type Ideas, 2009, project director Prof. dr. eng. Dan Geană.
- Pn6.** *Refrigerants + carbon dioxide mixtures - alternatives for supercritical extractions.* Grant CNCSIS (Cod CNCSIS 83) Type A, 2008, project director Prof. dr. ing. Viorel Feroiu.
- Pn7.** *Cosolvency effects, miscibility windows, and holes in the critical holes in phase equilibria at high pressures* Grant CNCSIS (Cod CNCSIS 1088), type Ideas, 2008, project director Prof. dr. eng. Dan Geană.
- Pn8.** *Refrigerants + carbon dioxide mixtures - alternatives for supercritical extractions.* Grant CNCSIS (Cod CNCSIS 83) Type A, 2007, project director Prof. dr. eng. Viorel Feroiu.
- Pn9.** *Cosolvency effects, miscibility windows, and holes in the critical holes in phase equilibria at high pressures* Grant CNCSIS (Cod CNCSIS 1088), type Ideas, 2007, project director Prof. dr. eng. Dan Geană.
- Pn10.** *Dezvoltarea unui pachet software inteligent pentru echilibre de faze (PHEQ) în sisteme aplicate în chimie, biochimie, inginerie chimică și biochimică.* Grant CNCSIS (Cod CNCSIS 279), Tip A, 2007, project director Prof. dr. eng. Dan Geană.
- Pn11.** *Dezvoltarea unui pachet software inteligent pentru echilibre de faze (PHEQ) în sisteme aplicate în chimie, biochimie, inginerie chimică și biochimică.* Grant CNCSIS (Cod CNCSIS 279), Tip A, 2006, project director Prof. dr. eng. Dan Geană.
- Pn12.** *Echilibre de faze la presiuni înalte cu aplicații la extracția supercritică în sisteme biotehnologice.* Grant CNCSIS (Cod CNCSIS 1473), Tip A, 2006, project director Prof. dr. eng. Viorel Feroiu.
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- Pn15.** *Echilibre de faze la presiuni înalte cu aplicații la extracția supercritică în sisteme biotehnologice.* Grant CNCSIS (Cod CNCSIS 1473), Tip A, 2004, project director Prof. dr. eng. Viorel Feroiu.
- Pn16.** *Ecuatii de stare termodinamic-statistice pentru reprezentarea proprietăților termodinamice și echilibrelor de faze ale fluidelor.* Grant CNCSIS (Cod CNCSIS 462), Tip A, 2004, project director Prof. dr. eng. Dan Geană.

- Pn17.** *Ecuatii de stare termodinamic-statistice pentru reprezentarea proprietatilor termodinamice si echilibrelor de faze ale fluidelor.* Grant CNCSIS (Cod CNCSIS 462) Tip A, 2003, proiect director Prof. dr. eng. Dan Geană.
- Pn18.** *Ecuatii de stare termodinamic-statistice pentru reprezentarea proprietatilor termodinamice si echilibrelor de faze ale fluidelor.* Grant CNCSIS (Cod CNCSIS 440), Tip A, 2002, proiect director Prof. dr. eng. Dan Geană.

Secuianu, Catinca