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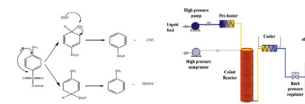
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Hassan S. Ghaziaskar, Jalal Razavizade, Khosrow F. Zare

Department of Chemistry, Isfahan University of Technology, Isfahan 84156-83111, Islamic Republic of Iran

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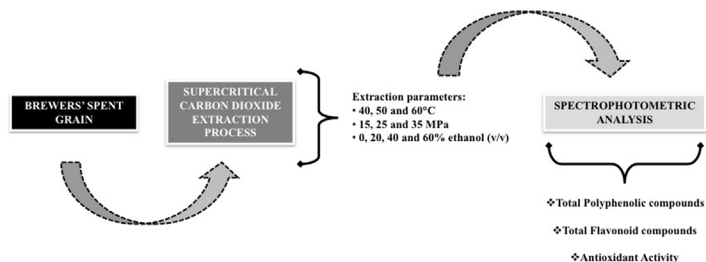


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Sara Spinelli, Amalia Conte, Lucia Lecce, Lucia Padalino, Matteo Alessandro Del Nobile

Department of Agricultural Sciences, Food and Environment, University of Foggia, Via Napoli, 25, 71122 Foggia, Italy

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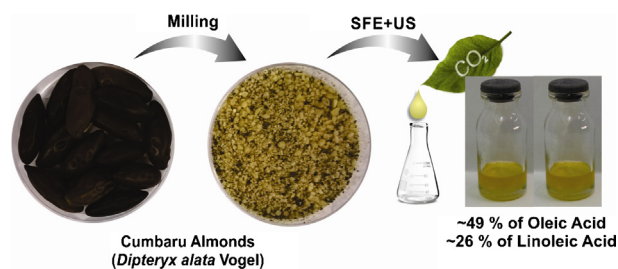
Supercritical CO₂ extraction of cumbaru oil (*Dipteryx alata Vogel*) assisted by ultrasound: Global yield, kinetics and fatty acid composition

Philippe dos Santos^a, Ana C. de Aguiar^a, Juliane Viganó^a, Joana Schuelter Boeing^b, Jesuí V. Visentainer^b, Julian Martínez^a

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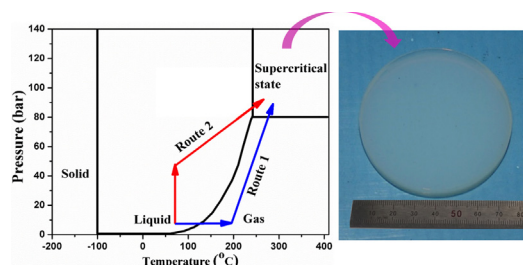
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D.B. Mahadik^a, Yoon Kwang Lee^a, N.K. Chavan^b, S.A. Mahadik^b, Hyung-Ho Park^a

^aDepartment of Materials Science and Engineering, Yonsei University, Seoul 120-749, Republic of Korea

^bDepartment of Physics, Shivaji University, Kolhapur 416-004, India

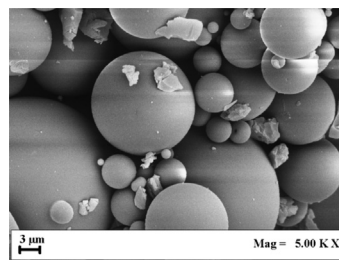


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Valentina Prosapio, Ernesto Reverchon, Iolanda De Marco

Department of Industrial Engineering, University of Salerno, Via Giovanni Paolo II, 132, 84084 Fisciano (SA), Italy



Enantiomeric separation of 1,4-dihydropyridines by liquid-phase microextraction with supercritical fluid chromatography

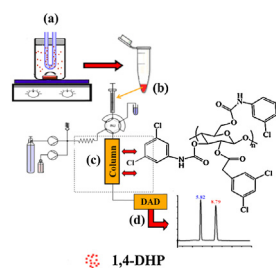
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^bTianjin Key Laboratory of Molecular Drug Research, Nankai University, Tianjin 300071, China

^cTianjin Sungene Biotech Co., Ltd., Tianjin 300450, China

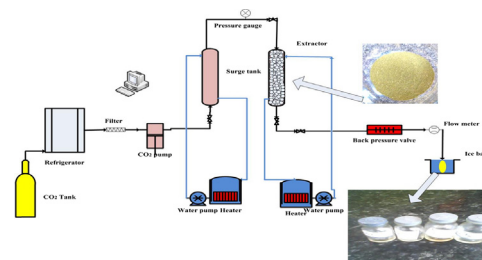


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Department of Chemical Engineering, Faculty of Engineering, University of Kashan, Postal Code: 87317-51167, Islamic Republic of Iran



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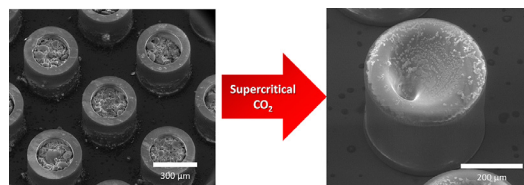
P. Marizza^a, L. Pontoni^b, T. Rindzevicius^a, J.F. Alopaeus^c, K. Su^c, J.A. Zeitler^c, S.S. Keller^a, I. Kikic^b, M. Moneghini^d, N. De Zordi^b, D. Solinas^b, A. Cortesi^b, A. Boisen^a

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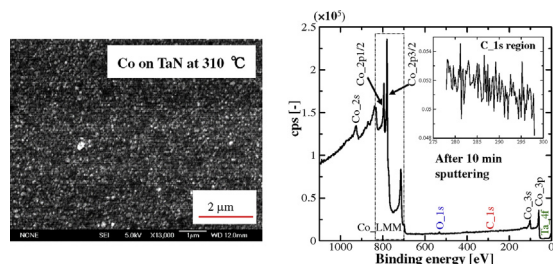
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Masashi Haruki^{a,b}, Shengkai Li^a, Gang Qian^a, James J. Watkins^a

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^bDepartment of Chemical Engineering, Graduate School of Engineering, Hiroshima University Japan, 1-4-1 Kagamiyama, Higashi-Hiroshima 739-8527, Japan



New soft and spongy resorcinol–formaldehyde aerogels

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Marina Schwan, René Tannert, Lorenz Ratke

Institute of Materials Research, German Aerospace Center, Linder Hoehe, 51170 Cologne, Germany



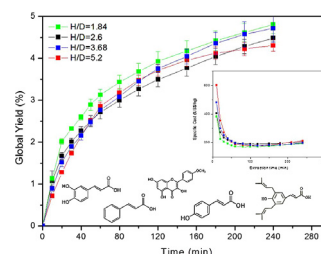
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Julia T. Paula^a, Ana C. Aguiar^a, Ilza M.O. Sousa^b, Pedro M. Magalhães^b, Mary A. Foglio^b, Fernando A. Cabral^a

^aDepartment of Food Engineering, State University of Campinas – UNICAMP 13083-862, Campinas, SP, Brazil

^bChemical, Biological and Agricultural Pluridisciplinary Research Center (CPQBA), State University of Campinas – UNICAMP 13083-970, Campinas, SP, Brazil



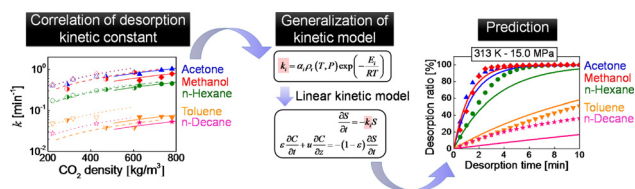
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Naoto Takahashi^a, Ikuo Ushiki^{a,b}, Yuri Hamabe^a, Masaki Ota^a, Yoshiyuki Sato^a, Hiroshi Inomata^a

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^bGraduate School of Environmental Studies, Tohoku University, Aramaki Aza Aoba, 6-6-11-414, Aoba-Ku, Sendai, Miyagi 980-8579, Japan



Supercritical and high pressure subcritical fluid extraction from Lemon balm (*Melissa officinalis* L., Lamiaceae)

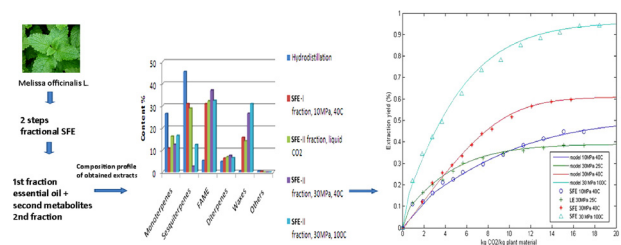
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Aleksandra Bogdanovic^a, Vanja Tadic^b, Ivana Arsic^c, Stoja Milovanovic^a, Slobodan Petrovic^a, Dejan Skala^a

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^cFaculty of Medicine, University of Nis, Bulevar dr Zorana Djindjica 81, 18000 Nis, Serbia

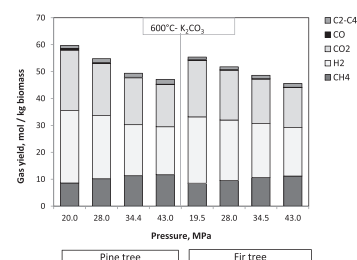


Influence of temperature and pressure on hydrogen and methane production in the hydrothermal gasification of wood residues

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Nihal Üremek Cengiz, Seda Eren, Mehmet Sağlam, Mithat Yüksel, Levent Ballice

Ege University, Engineering Faculty, Department of Chemical Engineering, 35100 Bornova, İzmir, Turkey



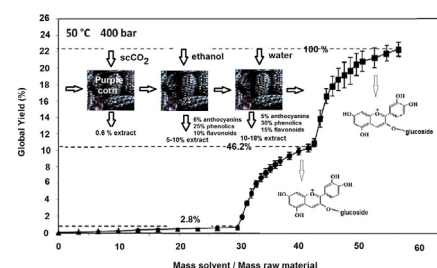
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Yaneth M. Monroy^a, Rodney A.F. Rodrigues^b, Adilson Sartoratto^b, Fernando A. Cabral^a

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^bChemical, Biological and Agricultural Pluridisciplinary Research Center (CPQBA), University of Campinas – UNICAMP, 13083-970 Campinas, SP, Brazil



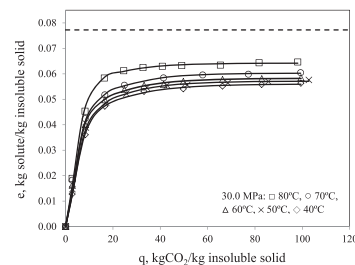
Study of the influence of process parameters on liquid and supercritical CO₂ extraction of oil from rendered materials: Fish meal and oil characterization

Silvia Liliana Bucio^{a,b}, M. Teresa Sanz^b, Sagrario Beltrán^b, Rodrigo Melgosa^b, Ángela G. Solaesa^b, María O. Ruiz^b

^aBiotechnology, Technological University of Morelia, 58200 Morelia, Mich., Mexico

^bDepartment of Biotechnology and Food Science, University of Burgos, Plaza Misael Bañuelos s/n, 09001 Burgos, Spain

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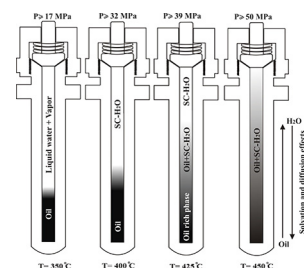
Deuterium tracing study of unsaturated aliphatics hydrogenation by supercritical water in upgrading heavy oil. Part I: Non-catalytic cracking

Morteza Hosseinpour^a, Seyed Javad Ahmadi^b, Shohreh Fatemi^a

^aSchool of Chemical Engineering, College of Engineering, University of Tehran, P.O. Box 11365-4563, Tehran, Iran

^bNuclear Science and Technology Research Institute, End of North Karegar Avenue, Tehran, Iran

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An experimental investigation of supercritical CO₂ accidental release from a pressurized pipeline

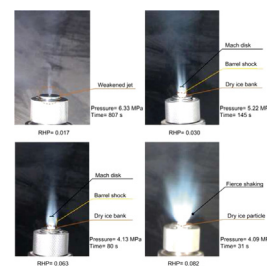
Kang Li^a, Xuejin Zhou^a, Ran Tu^b, Qiyuan Xie^a, Jianxin Yi^a, Xi Jiang^c

^aDepartment of Safety Science Engineering & State Key Laboratory of Fire Science, University of Science and Technology of China, Hefei, Anhui 230026, China

^bCollege of Mechanical Engineering and Automation, Huaqiao University, Jimei, Xiamen 361000, China

^cEngineering Department, Lancaster University, Lancaster LA1 4YR, UK

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Optimization of phenolic and flavonoid content and antioxidants capacity of pressurized liquid extraction from *Dracocephalum kotschy* via circumscribed central composite

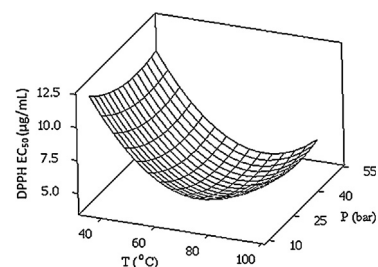
H. Kamali^a, E. Khodaverdi^a, F. Hadizadeh^b, S.H. Ghaziaskar^c

^aTargeted Drug Delivery Research Center, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran

^bBiotechnology Research Center, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran

^cDepartment of Chemistry, Isfahan University of Technology, Isfahan, Iran

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Simultaneous extraction of edible oil from avocado and capsanthin from red bell pepper using supercritical carbon dioxide as solvent

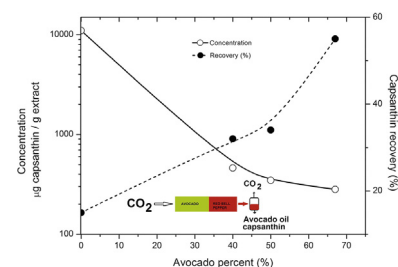
Helena D.F.Q. Barros^a, Janclei P. Coutinho^b, Renato Grimaldi^c, Helena T. Godoy^b, Fernando A. Cabral^a

^aDepartment of Food Engineering, University of Campinas – UNICAMP, 13083-862 Campinas, SP, Brazil

^bDepartment of Food Science, University of Campinas – UNICAMP, 13083-862 Campinas, SP, Brazil

^cDepartment of Food Technology, University of Campinas – UNICAMP, 13083-862 Campinas, SP, Brazil

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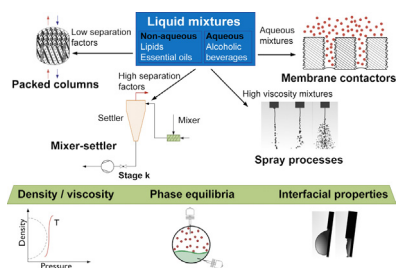
Fractionation technologies for liquid mixtures using dense carbon dioxide

Arturo Bejarano^a, Pedro C. Simões^b, José M. del Valle^a

^aDepartamento de Ingeniería Química y Bioprocesos, Pontificia Universidad Católica de Chile, Avda. Vicuña Mackenna 4860, Macul, Santiago, Chile

^bLAQV-REQUIMTE, Departamento de Química, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, 2829-516 Caparica, Portugal

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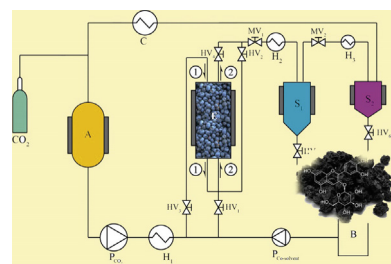
Extraction of bilberry (*Vaccinium myrtillus*) antioxidants using supercritical/subcritical CO₂ and ethanol as co-solvent

Oxana Babova^a, Andrea Occhipinti^{a,b}, Andrea Capuzzo^b, Massimo E. Maffei^{a,b}

^aDepartment of Life Sciences and Systems Biology, University of Turin, Via Quarellto 15/A, 10135 Turin, Italy

^bBiosfered S.r.l., Academic Spin-Off of the University of Turin, Via Quarellto 15/A, 10135 Turin, Italy

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Supercritical CO₂ extraction of açai (*Euterpe oleracea*) berry oil: Global yield, fatty acids, allelopathic activities, and determination of phenolic and anthocyanins total compounds in the residual pulp

Camila de Cássia Rodrigues Batista^a, Mozaniel Santana de Oliveira^a, Marilena Emmi Araújo^b, Antonio M.C. Rodrigues^a, José Rafael Santos Botelho^c, Antonio Pedro da Silva Souza Filho^d, Nélcio T. Machado^b, Raul N. Carvalho Junior^a

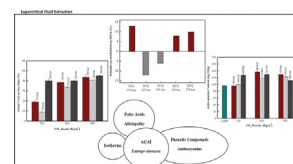
^aLABEX/FEA (Faculty of Food Engineering), Federal University of Pará, Rua Augusto Corrêa S/N, Guamá, 66075-900 Belém, Pará, Brazil

^bTERM@FEQ (School of Chemical Engineering)/UFPA, Rua Augusto Corrêa S/N, Guamá, 66075-900 Belém, Pará, Brazil

^cDepartment of Chemical Engineering, University of Coimbra, Pólo II, Rua Sílvio Lima, 3030-790 Coimbra, Portugal

^dLaboratory of Agro-industry, Embrapa Amazônia Oriental, Tv. Dr. Enéas Pinheiro S/N, Marco, 66095-100 Belém, Pará, Brazil

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Extraction of phytochemicals from saffron by supercritical carbon dioxide with water and methanol as entrainer

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Hazuki Nerome^a, Mika Ito^a, Siti Machmudah^b, Wahyudiono^a, Hideki Kanda^{a,c}, Motonobu Goto^a

^aDepartment of Chemical Engineering, Nagoya University, Nagoya 464-8603, Japan

^bSepuluh Nopember Institute of Technology, Kampus ITS, Sukolilo, Surabaya 60111, Indonesia

^cJapan Science and Technology Agency, Saitama 332-0012, Japan

Extraction amount by SC-CO₂ extraction (Area_{Component}/Area_{Internal standard} [-])

| Components | Temperature [°C] | | | Pressure [MPa] | | | Optimum conditions |
|-----------------------|------------------|--------|--------|----------------|--------|-------|--------------------|
| | 40 | 60 | 80 | 20 | 30 | 40 | |
| Picrocrocin | 0.744 | 1.260 | 2.419 | 1.400 | 2.419 | 1.292 | 80°C/30 MPa |
| HTCC | 0.154 | 0.263 | 0.313 | 0.130 | 0.313 | 0.569 | 80°C/40 MPa |
| Safranal | 0.012 | 0.061 | 0.091 | 0.053 | 0.091 | 0.279 | 80°C/40 MPa |
| α-crocin | 4.466 | 18.025 | 21.921 | 10.534 | 21.921 | 9.061 | 80°C/30 MPa |
| Deglycosylated crocin | 2.468 | 10.970 | 13.020 | 4.773 | 13.020 | 5.789 | 80°C/30 MPa |

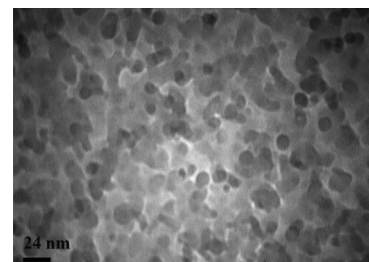
Supercritical fluid extraction followed by nanostructured supramolecular solvent extraction for extraction of levonorgestrel and megestrol from whole blood samples

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Fatemeh Rezaei^a, Yadollah Yamini^a, Hamid Asiabi^a, Shahram Seidi^b, Maryam Rezazadeh^a

^aDepartment of Chemistry, Tarbiat Modares University, P.O. Box 14115-175, Tehran, Iran

^bDepartment of Analytical Chemistry, Faculty of Chemistry, K.N. Toosi University of Technology, Tehran, Iran



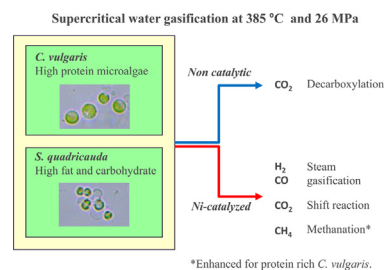
Catalytic supercritical water gasification of microalgae: Comparison of *Chlorella vulgaris* and *Scenedesmus quadricauda*

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Laura Tiong^a, Masaharu Komiyama^a, Yoshimitsu Uemura^b, Tien Thanh Nguyen^b

^aClean Energy Research Center, University of Yamanashi, 4-3-11 Takeda, Kofu 400-8511, Japan

^bCenter for Biofuel and Biochemical Research (CBBR), Universiti Teknologi PETRONAS, 32610 Bandar Seri Iskandar, Perak, Malaysia

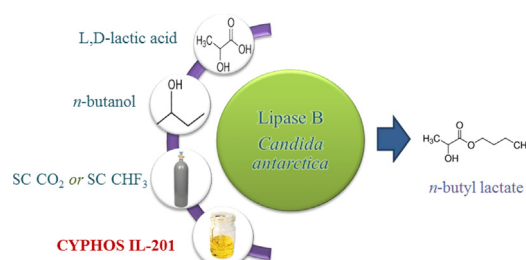


Enzyme-catalyzed esterification of D,L-lactic acid in different SCF/IL media

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Mateja Primožič, Sabina Kavčič, Željko Knez, Maja Leitgeb

University of Maribor, Faculty of Chemistry and Chemical Engineering, Laboratory for Separation Processes and Product Design, Smetanova 17, 2000 Maribor, Slovenia



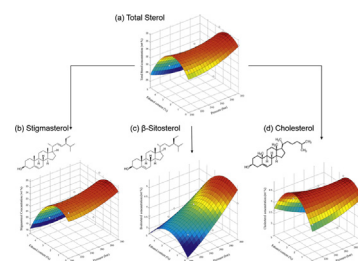
Supercritical fluid extraction of sterols from *Eichhornia crassipes* biomass using pure and modified carbon dioxide. Enhancement of stigmasterol yield and extract concentration

Pedro F. Martins^a, Marcelo M.R. de Melo^a, Pedro Sarmento^b, Carlos M. Silva^a

^aCICECO, Department of Chemistry, University of Aveiro, Aveiro 3810-193, Portugal

^bRAIZ – Forest and Paper Research Institute, Quinta de S. Francisco, Eixo, Aveiro, Portugal

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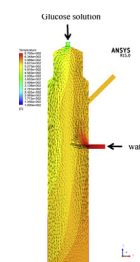
Experimental and fluid dynamic study of continuous supercritical water gasification of glucose

Giuseppe Caputo^{a,b}, Patricia Rubio^b, Francesca Scargiali^a, Gaspare Marotta^a, Alberto Brucato^a

^aDipartimento di Ingegneria chimica, gestionale, meccanica e informatica, Università di Palermo, Palermo, Italy

^bDipartimento di Ingegneria industriale, Università di Salerno, Italy

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Biomedical Applications

Sterilization of PMMA microfluidic chips by various techniques and investigation of material characteristics

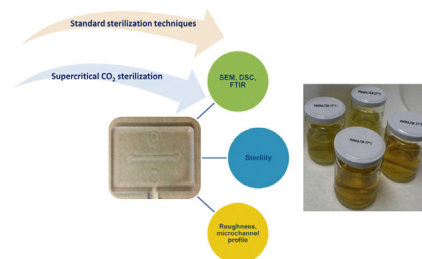
Cansu Yavuz^a, Samad Nadimi Bavi Oliaei^b, Barbaros Cetin^c, Ozlem Yesil-Celiktas^a

^aNovel Fluidic Technologies and Applications Group, Department of Bioengineering, Faculty of Engineering, Ege University, 35100 Bornova, Izmir, Turkey

^bMicrosystem Design and Manufacturing Center, Mechanical Engineering Department, Ihsan Dogramaci Bilkent University, 06800 Ankara, Turkey

^cMicrofluidics & Lab-on-a-chip Research Group, Mechanical Engineering Department, Ihsan Dogramaci Bilkent University, 06800 Ankara, Turkey

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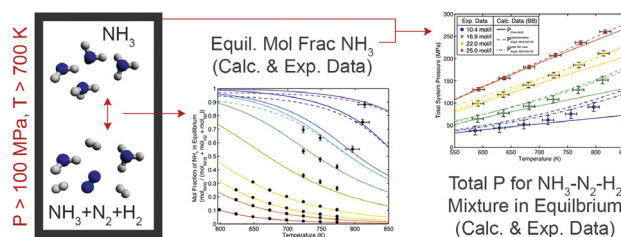
Thermodynamics, Solubility, Phase Equilibria

Decomposition of supercritical ammonia and modeling of supercritical ammonia–nitrogen–hydrogen solutions with applicability toward ammonothermal conditions

Siddha Pimputkar, Shuji Nakamura

Materials Department, Solid State Lighting and Energy Electronics Center, University of California, Santa Barbara, CA 93106, USA

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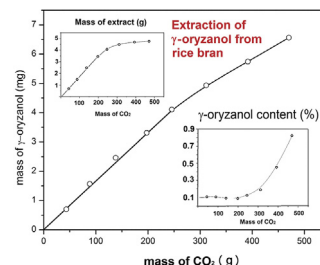
Solubility of γ -oryzanol in supercritical carbon dioxide and extraction from rice bran

Raphaela G. Bitencourt^a, Walter A. Rammazzina Filho^b, Julia T. Paula^a, Tábata T. Garmus^a, Fernando A. Cabral^a

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^bFederal Technological University of Paraná, 86300-000 Cornélio Procópio, PR, Brazil

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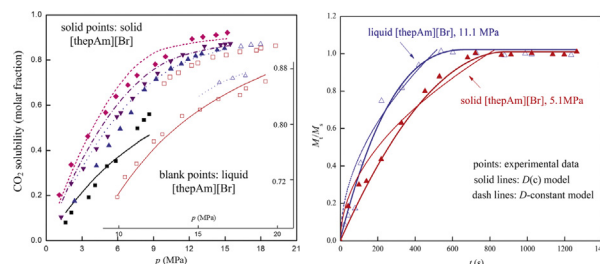
Phase equilibria and diffusion behavior of high pressure CO₂ in tetra-n-heptyl ammonium bromide

Guifeng Ma^a, Yulan Zhou^a, Tiezhu Su^a, Wenxin Wei^a, Yanan Gong^a, Xiaohui Hu^b, Yanzhen Hong^a, Yuzhong Su^a, Hongtao Wang^a, Jun Li^a

^aDepartment of Chemical and Biochemical Engineering, College of Chemistry and Chemical Engineering, Xiamen University, National Engineering Laboratory for Green Chemical Productions of Alcohols, Ethers and Esters, Xiamen 361005, PR China

^bCollege of Energy and School of Energy Research, Xiamen University, Xiamen 361005, PR China

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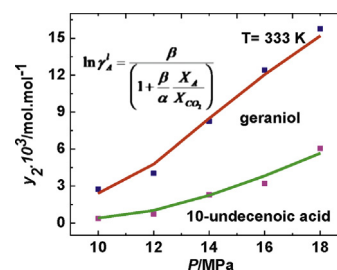


Solubilities of 10-undecenoic acid and geraniol in supercritical carbon dioxide

Neha Lamba, Ram C. Narayan, Jayant Modak, Giridhar Madras

Department of Chemical Engineering, Indian Institute of Science, Bangalore 560012, India

The Journal of Supercritical Fluids, 107 (2016) 384

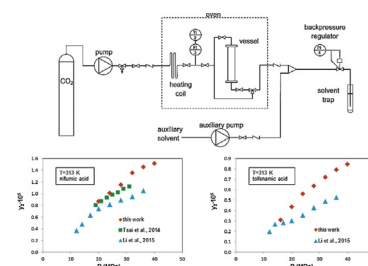


Solubility of fenamate drugs in supercritical carbon dioxide by using a semi-flow apparatus with a continuous solvent-washing step in the depressurization line

Mauro Banchemo, Luigi Manna

Dipartimento Scienza Applicata e Tecnologia, Politecnico di Torino, Corso Duca degli Abruzzi, 24, Torino, Italy

The Journal of Supercritical Fluids, 107 (2016) 400



Volume translation methods for real-gas computational fluid dynamics simulations

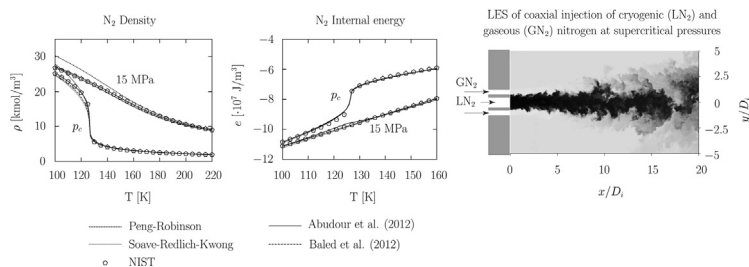
The Journal of Supercritical Fluids, 107 (2016) 422

Jan Mathejs^a, Hagen Müller^b, Cornelia Lenz^a,
Michael Pfitzner^b, Stefan Hickel^{a,c}

^aInstitute of Aerodynamics and Fluid Mechanics, Technische Universität München, D-85747 Garching bei München, Germany

^bInstitute for Thermodynamics, Universität der Bundeswehr München, 85577 Neubiberg, Germany

^cFaculty of Aerospace Engineering, Technische Universiteit Delft, P.O. Box 5058, 2600 GB Delft, The Netherlands



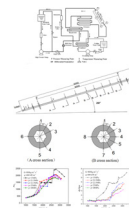
Transport Properties

Experimental investigation on heat transfer and pressure drop of supercritical water flows in an inclined rifled tube

The Journal of Supercritical Fluids, 107 (2016) 209

Alireza Taklifi, Pedram Hanafizadeh, Mohammad Ali Akhavan Behabadi, Abbas Aliabadi

Center of Excellence in Design and Optimization of Energy Systems (CEDOES), School of Mechanical Engineering, College of Engineering, University of Tehran, PO Box: 11155-4563, Tehran, Iran



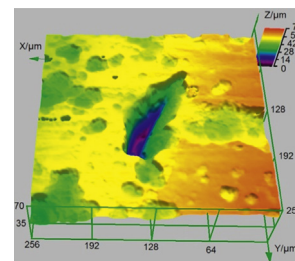
Impact of surface roughness and humidity on X70 steel corrosion in supercritical CO₂ mixture with SO₂, H₂O, and O₂

The Journal of Supercritical Fluids, 107 (2016) 286

Minghe Xu^a, Qian Zhang^b, XiaoXian Yang^a, Zhe Wang^a, Jianmin Liu^b, Zheng Li^a

^aState Key Laboratory of Power Systems, Department of Thermal Engineering, Tsinghua University, Beijing 100084, PR China

^bGuodian Science and Technology Research Institute, Nanijing 210023, PR China



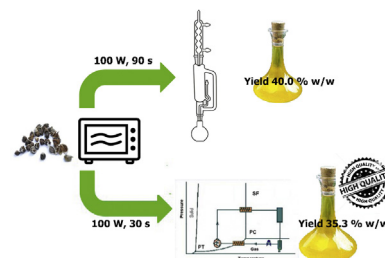
Extractions

Microwave pretreatment of *Moringa oleifera* seed: Effect on oil obtained by pilot-scale supercritical carbon dioxide extraction and Soxhlet apparatus

The Journal of Supercritical Fluids, 107 (2016) 38

Carla Da Porto, Deborha Decorti, Andrea Natolino

Department of Food Science, University of Udine, Italy



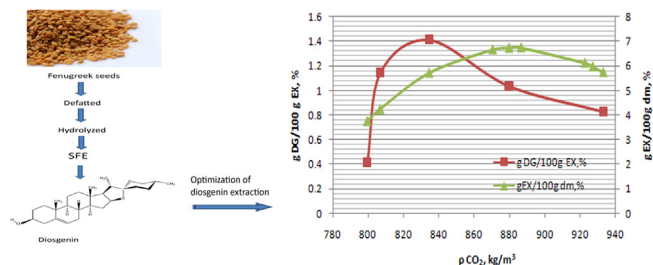
Supercritical carbon dioxide extraction of *Trigonella foenum-graecum* L. seeds: Process optimization using response surface methodology

The Journal of Supercritical Fluids, 107 (2016) 44

Aleksandra Bogdanovic^a, Vanja Tadic^b, Marko Stamenic^a, Slobodan Petrovic^a, Dejan Skala^a

^aUniversity of Belgrade, Faculty of Technology and Metallurgy, Karnegijeva 4, 11120 Belgrade, Serbia

^bInstitute for Medical Plant Research "Dr Josif Pancic", Tadeusa Koscuska 1, 11000 Belgrade, Serbia



Particle Formation

Synthesis of alkali niobate $K_{1-x}Na_xNbO_3$ nanoparticles using a supercritical water flow system

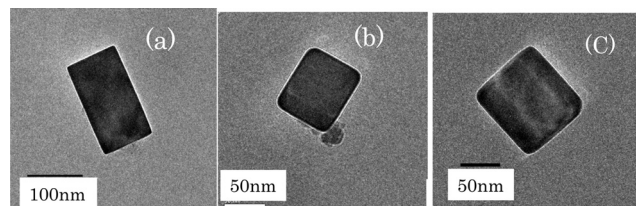
The Journal of Supercritical Fluids, 107 (2016) 1

Suguru Toyama^a, Hiromichi Hayashi^b, Masafumi Takesue^c, Masaru Watanabe^c, Richard L. Smith Jr.^{a,c}

^aGraduate School of Environmental Studies, Research Center of Supercritical Fluid Technology, Tohoku University, 6-6-11, Aramaki Aza Aoba, Aoba-ku, Sendai 980-8579, Japan

^bResearch Institute for Chemical Process Technology, National Institute of Advanced Industrial Science and Technology, 4-2-1, Nigatake, Miyagino-ku, Sendai 983-8551, Japan

^cGraduate School of Engineering, Research Center of Supercritical Fluid Technology, Tohoku University, 6-6-11, Aramaki Aza Aoba, Aoba-ku, Sendai 980-8579, Japan



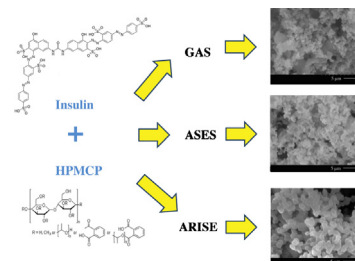
Supercritical fluid micronization techniques for gastroresistant insulin formulations

The Journal of Supercritical Fluids, 107 (2016) 9

A. Tandy^a, H.Q. Zhuang^b, R. Mammucari^a, N.R. Foster^a

^aSchool of Chemical Engineering, University of New South Wales, Sydney 2052, NSW, Australia

^bSchool of Chemical Engineering, China University of Petroleum (Huadong), Beijing 266555, Shandong, People's Republic of China

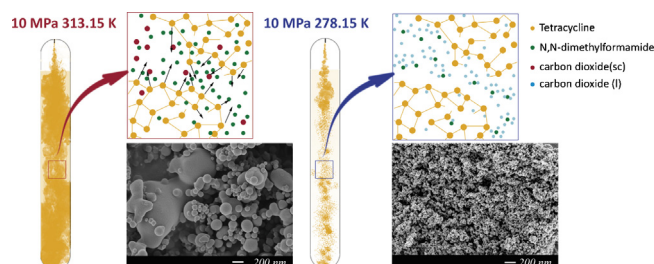


Tetracycline nanoparticles precipitation using supercritical and liquid CO₂ as antisolvents

The Journal of Supercritical Fluids, 107 (2016) 51

Tae Jun Yoon, Won-Su Son, Hee Jeong Park, Bumjoon Seo, Taewan Kim, Youn-Woo Lee

School of Chemical and Biological Engineering and Institute of Chemical Processes, Seoul National University, 1 Gwananank-ro, Gwanak-gu, Seoul 151-744, Republic of Korea



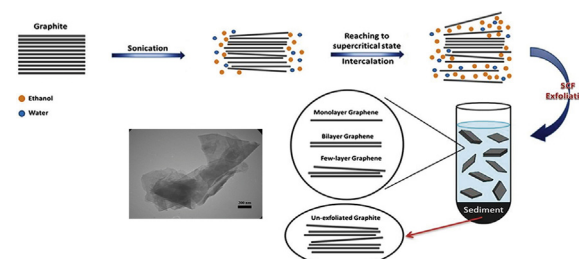
Optimization of graphene production by exfoliation of graphite in supercritical ethanol: A response surface methodology approach

Alireza Hadi^a, Javad Karimi-Sabet^b, Seyed Mohammad Ali Moosavian^a, Sohrabali Ghorbanian^a

^aDepartment of Chemical Engineering, Faculty of Engineering, University of Tehran, Tehran, Iran

^bNFCRS, Nuclear Science and Technology Research Institute, Tehran, Iran

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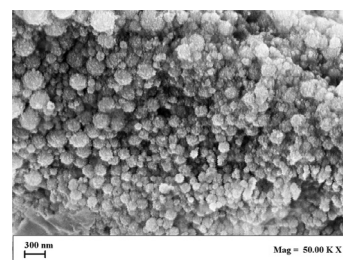
Efficient encapsulation of proteins in submicro liposomes using a supercritical fluid assisted continuous process

Roberta Campardelli^a, Islane Espirito Santo^{a,b}, Elaine Cabral Albuquerque^b, Silvio Vieira de Melo^b, Giovanna Della Porta^a, Ernesto Reverchon^a

^aDepartment of Industrial Engineering, University of Salerno, Via Giovanni Paolo II, 132, Fisciano, SA 84084, Italy

^bPEI, Industrial Engineering Program, Department of Chemical Engineering, Federal University of Bahia, Rua Prof. Aristides Novis, 2, Federação, 40210-630 Salvador, BA, Brazil

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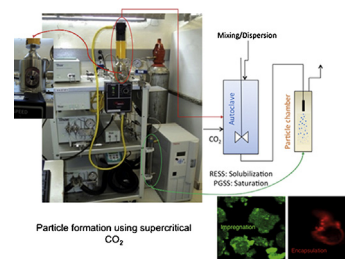
Study of simple microparticles formation of limonene in modified starch using PGSS – Particles from gas-saturated suspensions

L.C. Machado^a, V.B. Pelegati^b, A.L. Oliveira^a

^aDepartamento de Engenharia de Alimentos, Faculdade de Zootecnia e Engenharia de Alimentos (FZEA), Universidade de São Paulo (USP), Av. Duque de Caxias Norte, 225, Pirassununga, SP, 13635-900, Brazil

^bINFABiC – National Institute of Science and Technology on Photonics Applied to Cell Biology, Rua Sergio Buarque de Holanda, 777, Campinas, SP CEP 13083-859, Brazil

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Evaluation of changes in physicochemical properties in a supercritical antisolvent (SAS) process using 3D turbulent CFD approach

F.A.R. Cardoso^a, R.A. Almeida^b, R.V.P. Rezende^c, H.F. Meier^d, D. Noriler^d, H.P. Guerra^d, V.F. Cabral^b, L. Cardozo-Filho^b

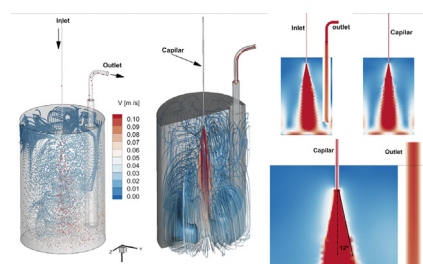
^aDepartment of Chemical Engineering, Universidade Tecnológica Federal do Paraná, Campo Mourao 87301-005, Brazil

^bDepartment of Chemical Engineering, Universidade Estadual de Maringá, Maringá 87020-900, Brazil

^cDepartment of Chemical and Food Engineering, Universidade Federal de Santa Catarina, Florianópolis 88040-970, Brazil

^dDepartment of Chemical Engineering, University of Blumenau, Blumenau 89030-000, Brazil

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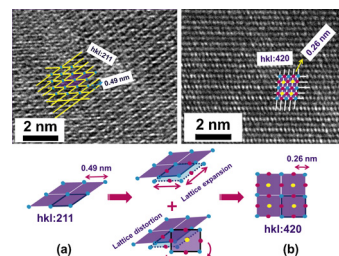


Solvothermal nanoYAG synthesis: Mechanism and particle growth kinetics

P. Ramanujam^{a,b}, B. Vaidhyanathan^a, J.G.P. Binner^{a,b}, S. Ghanizadeh^{a,c}, C. Spacie^{d,e}

^aDepartment of Materials, Loughborough University, Loughborough, UK
^bSchool of Metallurgy and Materials, University of Birmingham, Birmingham, UK
^cWolfson School of Mechanical and Manufacturing Engineering, Loughborough University, Loughborough, UK
^dMorgan Advanced Materials, Swansea, UK
^eHaydale Graphene Industries plc, Swansea, UK

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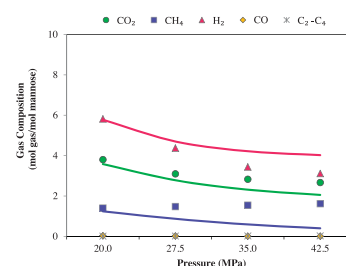
Biofuels

Catalytic gasification of mannose for hydrogen production in near- and super-critical water

Tülay Güngören Madenoğlu, Nihal Üremek Cengiz, Mehmet Sağlam, Mithat Yüksel, Levent Ballice

Ege University, Engineering Faculty, Department of Chemical Engineering, 35100 Bornova, İzmir, Turkey

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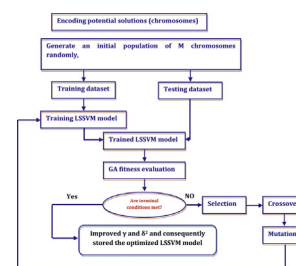
Interfacial properties

Development of robust model to estimate gas-oil interfacial tension using least square support vector machine: Experimental and modeling study

Mohammad Ali Ahmadi^{a,b}, Behnam Mahmoudi^c

^aAhwaz Faculty of Petroleum Engineering, Petroleum University of Technology (PUT), P.O. Box 63431, Ahwaz, Iran
^bIOR/EOR Research Institute, Tehran, Iran
^cResearch Institute of Petroleum Industry (RIPI), Tehran, Iran

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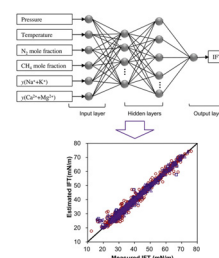


Estimation of CO₂-brine interfacial tension using an artificial neural network

Jiyuan Zhang^a, Qihong Feng^a, Shuhua Wang^b, Xianmin Zhang^a, Shoulei Wang^c

^aSchool of Petroleum Engineering, China University of Petroleum (East China), No. 66 Changjiang West Road, Economic & Technological Development Zone, Qingdao, China
^bSchulich School of Engineering, University of Calgary, Calgary, Canada
^cResearch Institute of China National Offshore Oil Corporation, Beijing, China

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Activity of immobilized lipase from *Candida antarctica* (Lipozyme 435) and its performance on the esterification of oleic acid in supercritical carbon dioxide

Philippe dos Santos^a, Camila A. Rezende^b, Julian Martínez^a

^aCollege of Food Engineering, Food Engineering Department, UNICAMP, 13083-862 Campinas, SP, Brazil

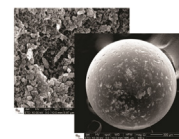
^bInstitute of Chemistry, University of Campinas, UNICAMP, 13083-862 Campinas, SP, Brazil

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SF-CO₂ Home-made Unit Batch Reactor

Lipozyme 435 Activity



FESEM

Unusual transformations of aliphatic nitro compounds in a flow reactor in high-pressure isopropanol on alumina. Part 2. Formation of esters

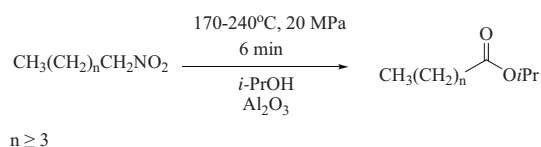
V.P. Sivceva^a, K.P. Volcho^{b,c}, N.F. Salakhutdinov^{b,c}, V.I. Anikeev^a

^aBoskov Institute of Catalysis, SB RAS, Novosibirsk, Russia

^bN.N. Vorozhtsov Novosibirsk Institute of Organic Chemistry, SB RAS, Novosibirsk, Russia

^cNovosibirsk State University, Novosibirsk, Russia

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Hydrothermal conversion of *Ulva* macro algae in supercritical water

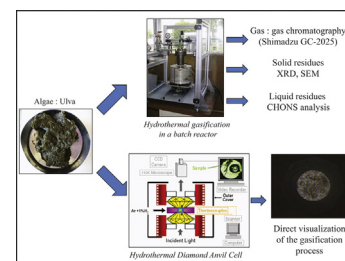
Y. Graz^{a,b}, S. Bostyn^a, T. Richard^{a,b}, P. Escot Bocanegra^c, E. de Bilbao^b, J. Poirier^b, I. Gokalp^a

^aICARE, Institut de Combustion, Aérothermique, Réactivité et Environnement, UPR 3021 CNRS, 1c avenue de la recherche scientifique, 45071 Orléans, France

^bCEMHTI – Conditions Extrêmes et Matériaux: Haute Température et Irradiations, UPR 3079 CNRS, Université d'Orléans, 1b avenue de la recherche scientifique, 45071 Orléans Cedex, France

^cGREMI, UMR7344, CNRS/Université d'Orléans, 14 rue d'Issoudun, BP6744, 45067 Orléans Cedex 2, France

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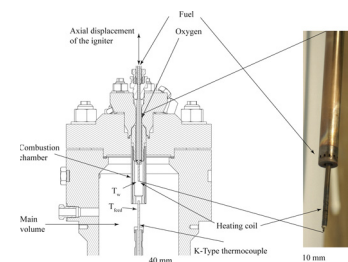
Hot surface ignition of oxygen–ethanol hydrothermal flames

T. Meier^a, P. Stathopoulos^b, Ph. Rudolf von Rohr^a

^aInstitute of Process Engineering, Swiss Federal Institute of Technology (ETH), CH-8092 Zurich, Switzerland

^bInstitute of Fluid Dynamics and Technical Acoustics, Technical University (TU-Berlin), DE-10623 Berlin, Germany

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Preparation and characterization of simvastatin nanoparticles using rapid expansion of supercritical solution (RESS) with trifluoromethane

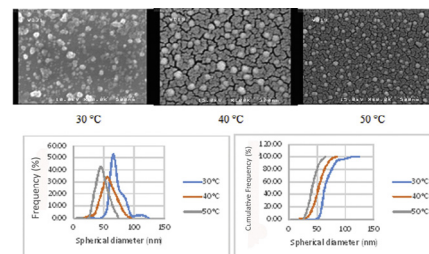
The Journal of Supercritical Fluids, 107 (2016) 469

Alborz Fattahi^a, Javad Karimi-Sabet^b, Ali Keshavarz^a, Abooali Golzary^c, Morteza Rafiee-Tehrani^a, Farid A. Dorkoosh^a

^aDepartment of Pharmaceutics, Faculty of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran

^bNFCRS, Nuclear Science and Technology Research Institute, Tehran, Iran

^cDepartment of Environmental Engineering, Graduate Faculty of Environment, University of Tehran, P.O. Box 14155-6135, Tehran, Iran



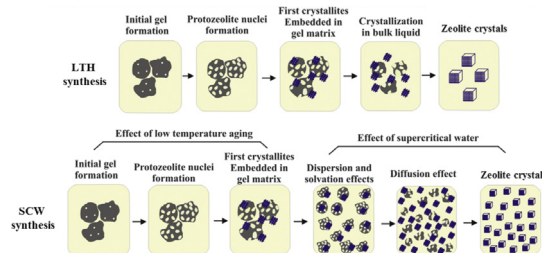
The role of supercritical water on the rapid formation of ZSM-5 nanocatalyst

The Journal of Supercritical Fluids, 107 (2016) 479

Morteza Hosseinpour^a, Hadi Amiri^a, Seyed Javad Ahmadi^b, Mohammad Ali Mousavian^a

^aSchool of Chemical Engineering, College of Engineering, University of Tehran, Tehran, Iran

^bNuclear Science and Technology Research Institute, End of North Karegar Ave., Tehran, Iran



Supercritical CO₂ sorption kinetics and thymol impregnation of PCL and PCL-HA

The Journal of Supercritical Fluids, 107 (2016) 486

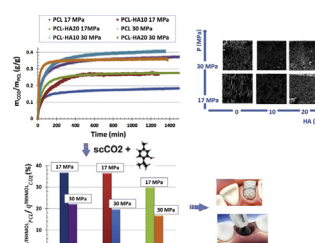
Jasna Ivanovic^a, Sandra Knauer^b, Alejandra Fanovich^c, Stoja Milovanovic^a, Marko Stamenic^a, Philip Jaeger^b, Irena Zizovic^a, Rudolf Eggers^d

^aDepartment of Organic Chemical Technology, Faculty of Technology and Metallurgy, University of Belgrade, Karnegijeva 4, 11000 Belgrade, Serbia

^bEurotechnica GmbH, An den Stücken 55, 22941 Bargteheide, Germany

^cINTEMA (University Nacional de Mar del Plata, CONICET), Av. J. B. Justo 4302, 7600 Mar del Plata, Argentina

^dInst. Thermal Process Engineering, Hamburg University of Technology, Eißendorfer Str. 38, 21073 Hamburg, Germany



Extraction of kerogen from oil shale with supercritical carbon dioxide: Molecular dynamics simulations

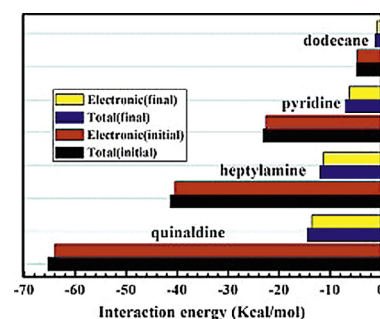
The Journal of Supercritical Fluids, 107 (2016) 499

Tiantian Wu^{a,b}, Qingzhong Xue^{a,b}, Xiaofang Li^b, Yehan Tao^b, Yakang Jin^b, Cuicui Ling^b, Shuangfang Lu^c

^aState Key Laboratory of Heavy Oil Processing, China University of Petroleum, Qingdao 266580, Shandong, PR China

^bCollege of Science and Key Laboratory of New Energy Physics & Materials Science in Universities of Shandong, China University of Petroleum, Qingdao 266580, Shandong, PR China

^cInstitute of Unconventional Oil & Gas and New Energy, China University of Petroleum, Qingdao 266580, Shandong, PR China

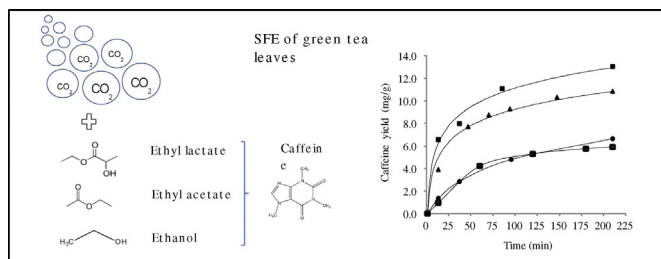


Effect of cosolvents (ethyl lactate, ethyl acetate and ethanol) on the supercritical CO₂ extraction of caffeine from green tea

The Journal of Supercritical Fluids, 107 (2016) 507

David Villanueva Bermejo, Elena Ibáñez, Guillermo Reglero, Tiziana Fornari

Institute of Food Science Research CIAL (CSIC-UAM). CEI UAM+CSIC. C/Nicolás Cabrera 9, Campus de Cantoblanco, 28049 Madrid, Spain



Supercritical fluid immobilization of horseradish peroxidase on high surface area mesoporous activated carbon

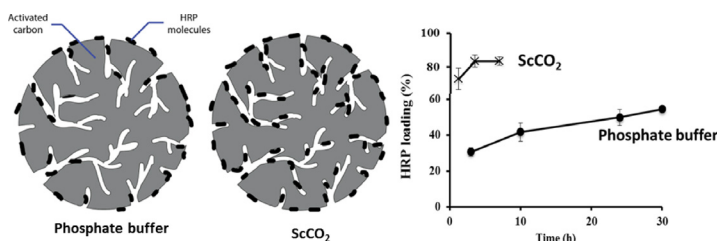
The Journal of Supercritical Fluids, 107 (2016) 513

Akshay Jain^a, Veronica Ong^a, Sundaramurthy Jayaraman^a, Rajasekhar Balasubramanian^b, M.P. Srinivasan^c

^aDepartment of Chemical and Biomolecular Engineering, National University of Singapore, Singapore 117585, Singapore

^bDepartment of Civil and Environmental Engineering, National University of Singapore, Singapore 117585, Singapore

^cSchool of Civil, Environmental and Chemical Engineering, RMIT University, Melbourne 3001, Australia

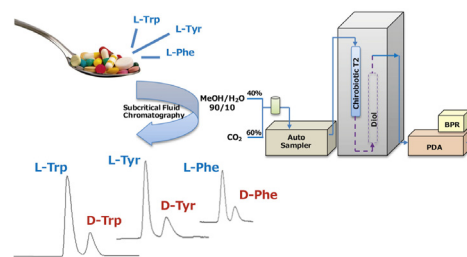


Chiral analysis of aromatic amino acids in food supplements using subcritical fluid chromatography and Chirobiotic T2 column

The Journal of Supercritical Fluids, 107 (2016) 519

Laura Sánchez-Hernández, José L. Bernal, María Jesús del Nozal, Laura Toribio

I.U. CINQUIMA, Analytical Chemistry Group, University of Valladolid, Paseo Belen 8, 47011 Valladolid, Spain



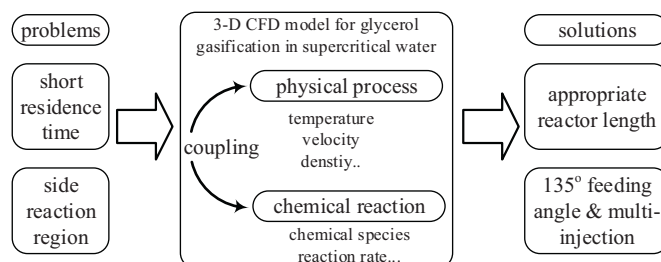
A mathematical model and numerical investigation for glycerol gasification in supercritical water with a tubular reactor

The Journal of Supercritical Fluids, 107 (2016) 526

Hui Jin^a, Simao Guo^a, Liejin Guo^{a,b}, Changqing Cao^a

^aState Key Laboratory of Multiphase Flow in Power Engineering, Xi'an Jiaotong University, Xi'an 710049, China

^bThe College of Engineering, Department of Mechanical Thermal Engineering and Chemical & Material Engineering, King Abdulaziz University, Jeddah 21589, Saudi Arabia



Curcumin-loaded solid lipid particles by PGSS technology

The Journal of Supercritical Fluids, 107 (2016) 534

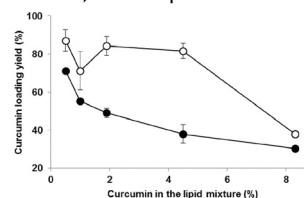
André São Pedro^{a,b}, Stefania Dalla Villa^b, Paolo Caliceti^c, Silvio A.B. Vieira de Melo^a, Elaine Cabral Albuquerque^a, Alberto Bertucco^b, Stefano Salmaso^c

^aPrograma de Engenharia Industrial, Escola Politécnica, Universidade Federal da Bahia, Salvador-Bahia, Brazil

^bDepartment of Industrial Engineering, Università degli Studi di Padova, Padova, Italy

^cDepartment of Pharmaceutical and Pharmacological Sciences, Università degli Studi di Padova, Padova, Italy

PGSS → Solid Lipid Particles impregnated with Curcumin



Effect of operational parameters on the performance of carbonated water injection: Experimental and numerical modeling study

The Journal of Supercritical Fluids, 107 (2016) 542

Mohammad Ali Ahmadi^{a,b}, Mahdi zeinali Hasanvand^c, Sara Shokrollahzadeh Behbahani^d, Alireza Nourmohammad^b, Akram Vahidi^b, Mojtaba Amiri^e, Goodarz Ahmadi^f

^aDepartment of Petroleum Engineering, Ahwaz Faculty of Petroleum Engineering, Petroleum University of Technology (PUT), Ahwaz, Iran

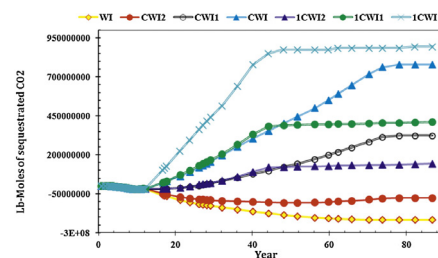
^bIOR/EOR Research Institute, Tehran, Iran

^cResearch Institute of Petroleum Industry (RIPI), Tehran, Iran

^dDepartment of Petroleum Engineering, Amirkabir University of Technology, Tehran, Iran

^eDepartment of Petroleum Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran

^fDepartment of Mechanical and Aeronautical Engineering, Clarkson University, Potsdam, NY, United States



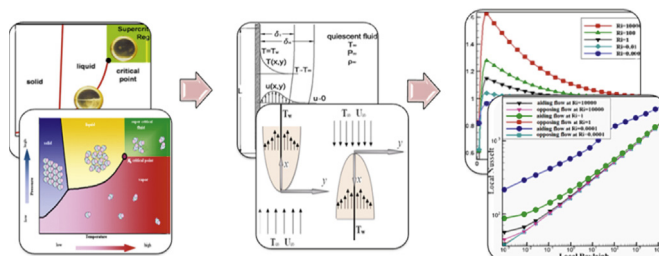
Mixed convection on a vertical plate in supercritical fluids by selecting the best equation of state

The Journal of Supercritical Fluids, 107 (2016) 549

Danyal Rezaei Khonakdar^a, Mohammad Reza Raveshi^b

^aFaculty of Mechanical Engineering, Ferdowsi University of Mashhad, Mashhad, Iran

^bFaculty of Mechanical Engineering, K.N. Toosi University of Technology, Tehran, Iran



Advantages of supercritical fluid extraction for recovery of squalene from wine lees

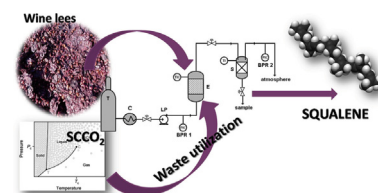
The Journal of Supercritical Fluids, 107 (2016) 560

Eleni Naziri^a, Sandra B. Glisic^b, Fani Th. Mantzouridou^a, Maria Z. Tsimidou^a, Viktor Nedovic^c, Branko Bugarski^b

^aLaboratory of Food Chemistry and Technology, School of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

^bDepartment of Chemical Engineering, Faculty of Technology and Metallurgy, University of Belgrade, 11000 Belgrade, Serbia

^cDepartment of Food Technology and Biochemistry, Faculty of Agriculture, University of Belgrade, 11000 Belgrade, Serbia

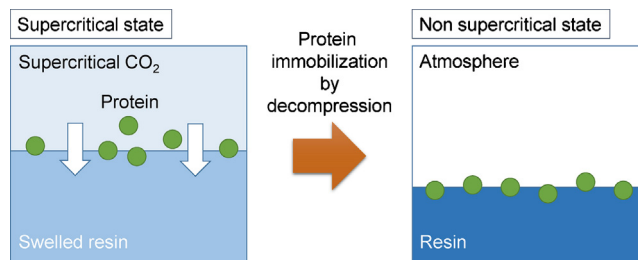


Immobilization of proteins on synthetic resins using supercritical carbon dioxide

Ryosuke Yamada, Yamato Suzuki, Masahiro Yasuda, Hiroyasu Ogino

Department of Chemical Engineering, Osaka Prefecture University,
1-1 Gakuen-cho, Naka-ku, Sakai, Osaka 599-8531, Japan

The Journal of Supercritical Fluids, 107 (2016) 566



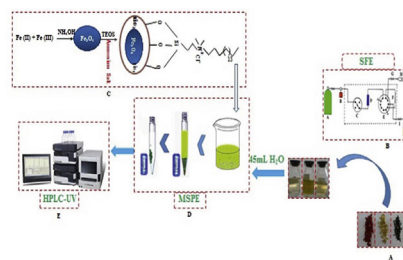
Simultaneous determination of pyrethroids residues in fruit and vegetable samples via supercritical fluid extraction coupled with magnetic solid phase extraction followed by HPLC-UV

Hasan Bagheri^a, Yadollah Yamini^b, Meysam Safari^b, Hamid Asiabi^b, Meghdad Karimi^b, Akbar Heydari^b

^aChemical Injuries Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran

^bDepartment of Chemistry, Tarbiat Modares University, P.O. Box 14115-175, Tehran, Iran

The Journal of Supercritical Fluids, 107 (2016) 571



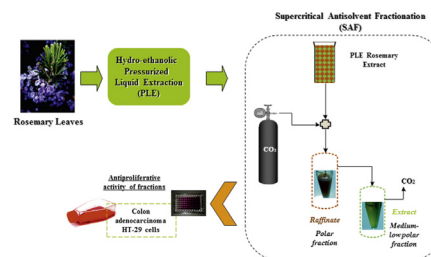
Supercritical antisolvent fractionation of rosemary extracts obtained by pressurized liquid extraction to enhance their antiproliferative activity

A.P. Sánchez-Camargo^a, J.A. Mendiola^a, A. Valdés^a, M. Castro-Puyana^b, V. García-Cañas^a, A. Cifuentes^a, M. Herrero^a, E. Ibáñez^a

^aLaboratory of Foodomics, Institute of Food Science Research (CIAL, CSIC-UAM), Nicolas Cabrera 9, Campus de Cantoblanco, 28049 Madrid, Spain

^bDepartment of Analytical Chemistry, Physical Chemistry and Chemical Engineering, Faculty of Biology, Environmental Science and Chemistry, University of Alcalá, Ctra. Madrid-Barcelona, Km. 33.600, 28871 Alcalá de Henares, Community of Madrid, Spain

The Journal of Supercritical Fluids, 107 (2016) 581



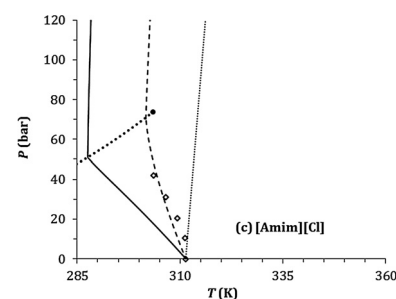
Melting point depression effect with CO₂ in high melting temperature cellulose dissolving ionic liquids. Modeling with group contribution equation of state

Joana M. Lopes^a, Francisco A. Sánchez^b, S. Belén Rodríguez Reartes^b, M. Dolores Bermejo^a, Ángel Martín^a, M. José Cocero^a

^aHigh Pressure Process Group, Departamento de Chemical Engineering and Environmental Technology, University of Valladolid, Spain

^bPlanta Piloto de Ingeniería Química (PLAPIQUI-UNS-CONICET), Camino La Carrindanga Km 7, 8000 Bahía Blanca, Argentina

The Journal of Supercritical Fluids, 107 (2016) 590

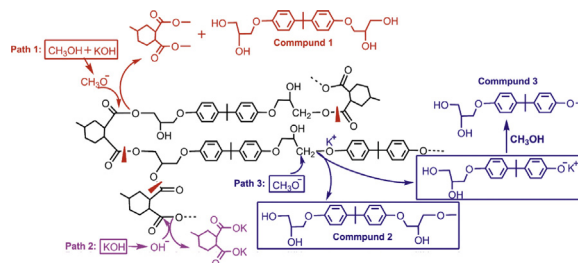


Insight into the role of potassium hydroxide for accelerating the degradation of anhydride-cured epoxy resin in subcritical methanol

The Journal of Supercritical Fluids, 107 (2016) 605

Jie Liu, Kai Wang, Li Ma, Tao Tang

State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, China



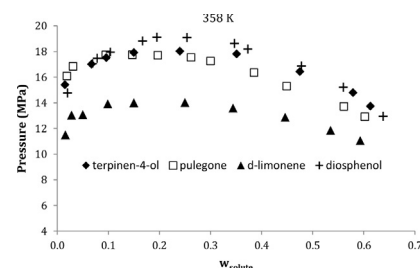
Supercritical fractionation of *Agathosma* (buchu) essential oil. Part I: Measurement of binary phase equilibria

The Journal of Supercritical Fluids, 107 (2016) 612

T.F.N. Madzimbamuto^{a,b}, C.E. Schwarz^a, J.H. Knoetze^a

^aDepartment of Process Engineering, Stellenbosch University, Private Bag X1, Matieland 7602, South Africa

^bDepartment of Chemical Engineering, Cape Peninsula University of Technology, P.O. Box 1906, Bellville 7535, South Africa

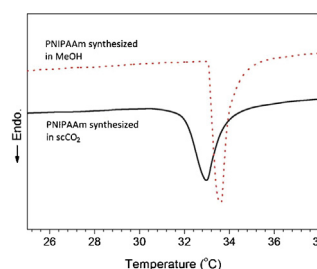


Effect of carbon nanotubes on free radical polymerization of *N*-isopropylacrylamide in supercritical carbon dioxide and in methanol

The Journal of Supercritical Fluids, 107 (2016) 624

Yeong-Tarng Shieh, Bo-Hong Chen

Department of Chemical and Materials Engineering, National University of Kaohsiung, Kaohsiung 811, Taiwan

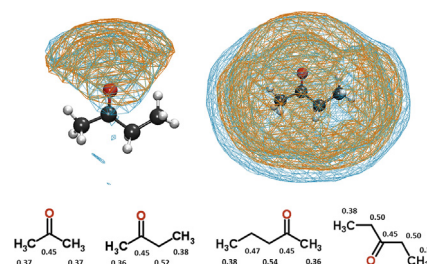


Molecular dynamics simulation of diffusion coefficients and structural properties of ketones in supercritical CO₂ at infinite dilution

The Journal of Supercritical Fluids, 107 (2016) 630

Raquel V. Vaz, José R.B. Gomes, Carlos M. Silva

CICECO—Aveiro Institute of Materials, Department of Chemistry, University of Aveiro, Aveiro 3810-193, Portugal



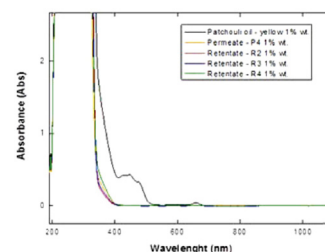
Performance of reverse osmosis and nanofiltration membranes in the fractionation and retention of patchouli essential oil

Adriana Doneliana^a, Patrícia F. de Oliveira^a, Alírio E. Rodrigues^b, Vera G. Mata^b, Ricardo A.F. Machado^a

^aLaboratório de Controle e Processos de Polimerização, Departamento de Engenharia Química e Engenharia de Alimentos, Universidade Federal de Santa Catarina (UFSC), Campus Universitário, Trindade, P.O. Box: 476, Zip Code: 88010-970 Florianópolis, SC, Brazil

^bLaboratory of Separation and Reaction Engineering (LSRE), Departamento de Engenharia Química, Faculdade de Engenharia, Universidade do Porto, Rua Dr. Roberto Frias s/n, Zip Code: 4200-465, Porto, Portugal

The Journal of Supercritical Fluids, 107 (2016) 639

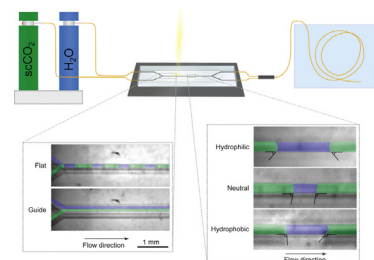


Influence of surface modifications and channel structure for microflows of supercritical carbon dioxide and water

S. Knaust, M. Andersson, K. Hjort, L. Klintberg

Uppsala University, Ångströmlab, Lägerhyddsvägen 1, Uppsala 75237, Sweden

The Journal of Supercritical Fluids, 107 (2016) 649



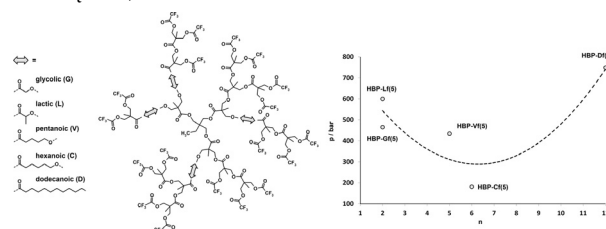
The phase behavior in supercritical carbon dioxide of hyperbranched copolymers with architectural variations

Paweł G. Parzuchowski^a, Jacek Gregorowicz^b, Edyta P. Wawrzyńska^a, Dominik Wiącek^a, Gabriel Rokicki^a

^aWarsaw University of Technology, Faculty of Chemistry, Noakowskiego 3, 00-664 Warsaw, Poland

^bInstitute of Physical Chemistry of the Polish Academy of Sciences, Kasprzaka 44/52, 01-224 Warsaw, Poland

The Journal of Supercritical Fluids, 107 (2016) 657



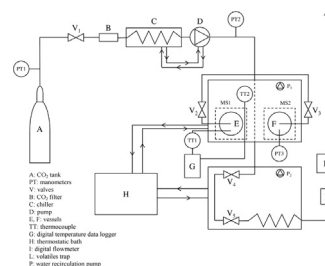
Inactivation of mushroom polyphenoloxidase in model systems exposed to high-pressure carbon dioxide

Lara Manzocco^a, Alexandra Ignat^a, Fabio Valoppi^a, Krystel Rita Burratato^a, Giovanna Lippe^a, Sara Spilimbergo^b, Maria Cristina Nicolai^a

^aUniversità di Udine, Dipartimento di Scienze degli Alimenti, Via Sondrio 2/A, 33100 Udine, Italy

^bUniversità di Padova, Dipartimento di Ingegneria Industriale, Via Marzolo 9, 35131 Padova, Italy

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Experimental measurement and thermodynamic modelling of hydrate phase equilibrium conditions for krypton + *n*-butyl ammonium bromide aqueous solution

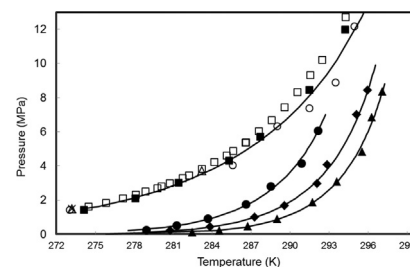
Saeedeh Babae^a, Hamed Hashemi^a, Amir H. Mohammadi^{a,b,c}, Paramespri Naidoo^a, Deresh Ramjugernath^a

^aThermodynamics Research Unit, School of Engineering, University of KwaZulu-Natal, Howard College Campus, King George V Avenue, Durban 4041, South Africa

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^cDépartement de Génie des Mines, de la Métallurgie et des Matériaux, Faculté des Sciences et de Génie, Université Laval, Québec, Québec, QC G1V 0A6, Canada

The Journal of Supercritical Fluids, 107 (2016) 676

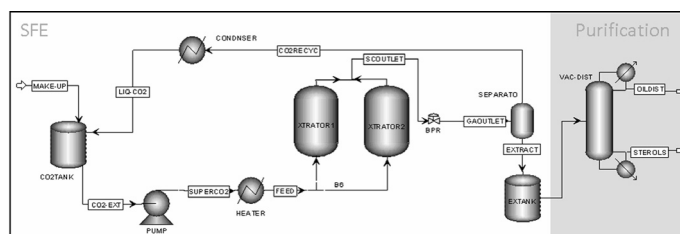


Techno-economic optimization of the subcritical fluid extraction of oil from *Moringa oleifera* seeds and subsequent production of a purified sterols fraction

Pedro F. Martins, M.M.R. de Melo, C.M. Silva

CICECO, Department of Chemistry, University of Aveiro, Aveiro 3810-193, Portugal

The Journal of Supercritical Fluids, 107 (2016) 682

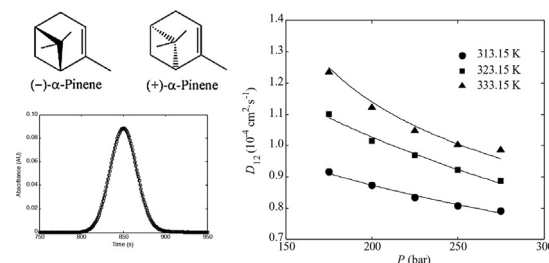


Measurement and modeling of tracer diffusivities of α -pinene in supercritical CO₂, and analysis of their hydrodynamic and free-volume behaviors

Raquel V. Vaz, Ana L. Magalhães, Anabela A. Valente, Carlos M. Silva

Department of Chemistry, CICECO, University of Aveiro, 3810-193 Aveiro, Portugal

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An investigation into the formation and conversion of metal complexes to metal oxide nanoparticles in supercritical water

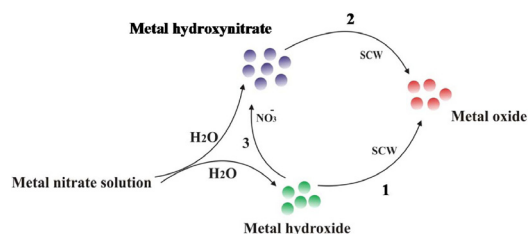
Morteza Golmohammadi^a, Jafar Towfighi^a, Morteza Hosseinpour^b, Seyed Javad Ahmadi^c

^aDepartment of Chemical Engineering, Tarbiat Modares University, P.O. Box 14115-143, Tehran, Iran

^bSchool of Chemical Engineering, College of Engineering, University of Tehran, P.O. Box 11365-4563, Tehran, Iran

^cNuclear Science and Technology Research Institute, End of North Karegar Ave., Tehran 1439951113, Iran

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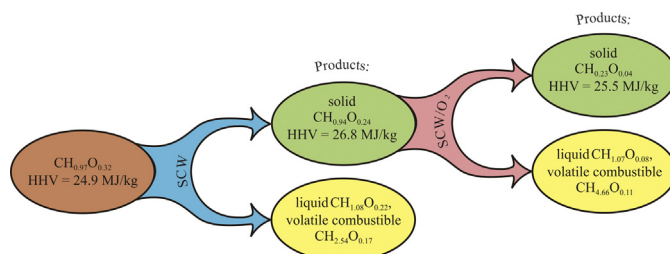
Conversion of brown coal continuously supplied into the reactor as coal–water slurry in a supercritical water and water–oxygen mixture

Anatoly A. Vostrikov^{a,b}, Andrey V. Shishkin^{a,b}, Mikhail Ya. Sokol^a,
Dmitriy Yu. Dubov^{a,b}, Oxana N. Fedyeva^a

^aKutateladze Institute of Thermophysics SB RAS, 1, Acad. Lavrentiev Av.,
Novosibirsk, Russia

^bNovosibirsk State University, 2, Pirogova Str., Novosibirsk, Russia

The Journal of Supercritical Fluids, 107 (2016) 707

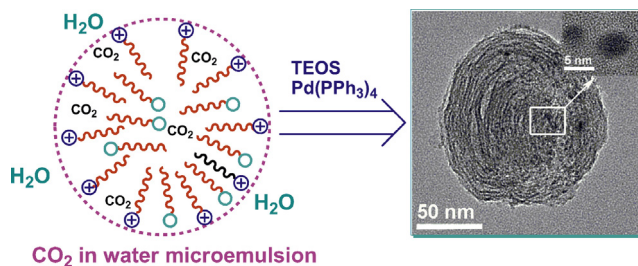


Mesoporous spherical silica encapsulating Pd nanoparticles prepared by CO₂-induced microemulsion and catalytic application in Suzuki coupling reaction

Li Guo, Xiuge Zhao, Ran Zhang, Chen Chen, Jizhong Chen,
Angjun Chen, Xuerui Liu, Zhenshan Hou

Key Laboratory for Advanced Materials, Research Institute of Industrial Catalysis,
East China University of Science and Technology, Shanghai 200237, China

The Journal of Supercritical Fluids, 107 (2016) 715

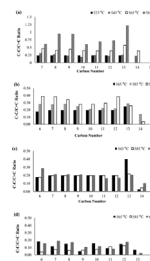


Sub and supercritical water reforming of n-hexadecane in a tubular flow reactor

Y.M. Alshammari, K. Hellgardt

Department of Chemical Engineering and Chemical Technology, Imperial College London, South Kensington
Campus, London SW7 2AZ, UK

The Journal of Supercritical Fluids, 107 (2016) 723

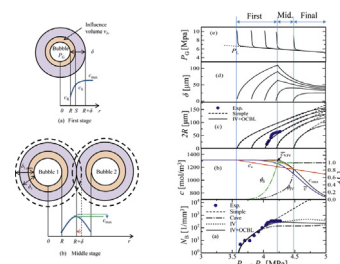


Experimental and simulation study of the physical foaming process using high-pressure CO₂

Ying Sun, Yumi Ueda, Hiroyuki Suganaga, Masashi Haruki, Shin-ichi Kihara,
Shigeki Takishima

Department of Chemical Engineering, Graduate School of Engineering, Hiroshima University,
1-4-1 Kagamiyama, Higashi-Hiroshima 739-8527, Japan

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***In situ* X-ray diffraction for millisecond-order dynamics of BaZrO₃ nanoparticle formation in supercritical water**

The Journal of Supercritical Fluids, 107 (2016) 746

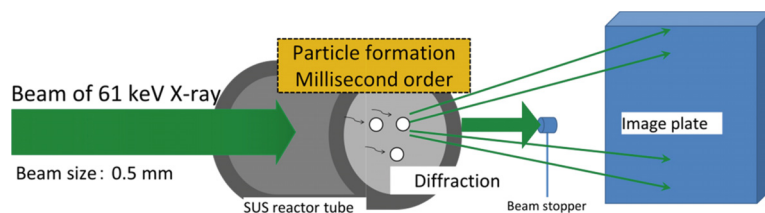
Akira Yoko^a, Makoto Akizuki^a, Naohisa Hirao^b,
Shinji Kohara^c, Mukesh Kumar^d, Naoto Umezawa^d,
Takahisa Ohno^d, Yoshito Oshima^a

^aDepartment of Environment Systems, Graduate School of Frontier Sciences, The University of Tokyo, Kashiwanoha 5-1-5, Kashiwa 277-8563, Chiba, Japan

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^cNational Institute for Materials Science, Kouto 1-1-1, Sayo-cho, Sayo-gun 679-5148, Hyogo, Japan

^dNational Institute for Materials Science, Namiki 1-1, Tsukuba 305-0044, Ibaraki, Japan



Measurement of solid solubilities of diuron in supercritical carbon dioxide and analysis of recrystallization by using the rapid expansion of supercritical solutions process

The Journal of Supercritical Fluids, 107 (2016) 753

Jhih-Long Ciou, Chie-Shaan Su

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