



## WCCE11 - 11th WORLD CONGRESS OF CHEMICAL ENGINEERING

IACCHE - XXX Inter-American Congress of Chemical Engineering  
 CAIQ2023 - XI Argentinian Congress of Chemical Engineering  
 CIBIQ2023 - II Ibero-American Congress of Chemical Engineering

Buenos Aires - Argentina - June 4-8, 2023

"The global chemical engineering working for a better future world"



### GS04-Global Symposium on Supercritical Fluids and Other High-Pressure Processes

Thursday, June 8<sup>th</sup>  
 Auditorium 3  
 (Ground floor)

## PROGRAM

### ORAL SESSIONS

#### SESSION 1. SUPERCRITICAL FLUIDS AND OTHER HIGH-PRESSURE PROCESSES (I)

Chairs: J.P. Coelho, University of Lisbon, Portugal  
 D. A. Cantero, University of Valladolid, Spain

Thursday, June 8<sup>th</sup>  
 Auditorium 3

ID2996	9:00-9:15	"Sublimation Pressure from Solubility Data in Supercritical Fluids—The Case of Naproxen in Supercritical CO <sub>2</sub> " <u>Estévez, L.A.</u> ; Vázquez, C.E. <i>University of Puerto Rico (Puerto Rico)</i>
ID2035	9:15-9:30	"High-pressure phase equilibria measurements of eugenol + paraffins + CO <sub>2</sub> mixtures" Fortunatti-Montoya, M. <sup>1,2</sup> ; <u>Hegel, P.</u> <sup>1,2</sup> ; Pereda, S. <sup>1,2,3</sup> <sup>1</sup> <i>Universidad Nacional del Sur (Argentina)</i> . <sup>2</sup> <i>PLAPIQUI (UNS-CONICET) (Argentina)</i> . <sup>3</sup> <i>University of KwaZulu Natal (South Africa)</i>
ID2062	9:30-9:45	"Valorization of biomasses through supercritical fluid extraction" <u>Coelho, J.P.</u> <sup>1,2</sup> ; Filipe, R.M. <sup>1,3</sup> ; Robalo, M.P. <sup>1,2</sup> ; Stateva, R.P. <sup>4</sup> <sup>1</sup> <i>Centro de Investigação de Engenharia Química e Biotecnologia, ISEL, IPL (Portugal)</i> . <sup>2</sup> <i>Centro de Química Estrutural, 3Centro de Recursos Naturais e Ambiente (CERENA)-Universidade de Lisboa (Portugal)</i> . <sup>4</sup> <i>Bulgarian Academy of Sciences (Bulgaria)</i>
ID2067	9:45-10:00	"Sustainable aviation fuel by hydrothermal liquefaction" Fernández, A.; Casas, A.; <u>Cantero, D.</u> <i>University of Valladolid (Spain)</i>
ID2324	10:00-10:15	"Production of micro and nano particles of astaxanthin by the supercritical anti-solvent process" Nobre, B.P. <sup>1</sup> ; Costa, J.J. <sup>1</sup> ; Palavra, A.M.F. <sup>1</sup> ; <u>Coelho, J.P.</u> <sup>1,2</sup> <sup>1</sup> <i>Universidade de Lisboa (Portugal)</i> . <sup>2</sup> <i>ISEL, IPL (Portugal)</i>
ID2331	10:15-10:30	"Mathematical modelling of supercritical fluid extraction of oils from grape seeds and spent coffee grounds" Filipe, R.M. <sup>1,2</sup> ; Coelho, J.P. <sup>1,3</sup> ; Cholakov, G. St. <sup>4</sup> ; Stateva, R.P. <sup>5</sup> <sup>1</sup> <i>Instituto Politécnico de Lisboa (Portugal)</i> . <sup>2</sup> <i>Centro de Recursos Naturais e Ambiente</i> , <sup>3</sup> <i>Centro de Química Estrutural-Instituto Superior Técnico, Universidade de Lisboa (Portugal)</i> . <sup>4</sup> <i>University of Chemical Technology and Metallurgy (Bulgaria)</i> . <sup>5</sup> <i>Bulgarian Academy of Sciences (Bulgaria)</i>

#### SESSION 2. SUPERCRITICAL FLUIDS AND OTHER HIGH-PRESSURE PROCESSES (II)

Chair: J. Romero, University of Santiago de Chile, Chile  
 L.A. Estevez, University of Puerto Rico, USA

Thursday, June 8<sup>th</sup>  
 Auditorium 3

ID2348	14:00-14:15	"Solubility of Glibenclamide in Supercritical Carbon Dioxide assisted by Ethanol as Co-solvent" Sajadian, S.A. <sup>1,2</sup> ; Esfandiari, N. <sup>3</sup> ; Saadati Ardestani, N. <sup>4</sup> ; Garlapati, Ch. <sup>5</sup> ; <u>Estévez, L.A.</u> <sup>6</sup> <sup>1</sup> <i>University of Kashan (Iran)</i> . <sup>2</sup> <i>National Iranian Oil Company (Iran)</i> . <sup>3</sup> <i>Islamic Azad University (Iran)</i> . <sup>4</sup> <i>Research Institute of Petroleum Industry (Iran)</i> . <sup>5</sup> <i>Puducherry Technological University (India)</i> . <sup>6</sup> <i>University of Puerto Rico (Puerto Rico)</i>
ID2436	14:15-14:30	"Supercritical CO <sub>2</sub> Extraction of Chamomile flowers head "Matricaria chamomila L"" <u>Garcia-Díaz, B.</u> ; Rodríguez Varela, L.; Gil I.D. <i>Universidad Nacional de Colombia (Colombia)</i>

ID2542	14:30-14:45	"Supercritical impregnation of inclusion complexes for the incorporation of carvacrol in active biopolymer films" Rivera, P. <sup>1,2</sup> ; Torres, A. <sup>2</sup> ; Rodríguez, F. <sup>2</sup> ; <u>Romero, J.<sup>1</sup></u> <sup>1</sup> Laboratory of Membrane Separation Processes (LabProSeM), <sup>2</sup> Packaging Innovation Center (LABEN)-University of Santiago de Chile (Chile)
ID2554	14:45-15:00	"Solubility of Lenalidomide in Supercritical Carbon Dioxide with/without Ethanol as Co-Solvent" Sajadian, S.A. <sup>1,2</sup> ; Ardestani, N.S. <sup>3</sup> ; Rojas, A. <sup>4,5</sup> ; Galotto, M.J. <sup>4,5</sup> ; Estévez, L.A. <sup>6</sup> <sup>1</sup> University of Kashan (Iran). <sup>2</sup> National Iranian Oil Company (Iran). <sup>3</sup> Research Institute of Petroleum Industry (Iran). <sup>4</sup> Packaging Innovation Center (LABEN), <sup>5</sup> Center for the Development of Nanoscience and Nanotechnology (CEDENNA)-University of Santiago of Chile (Chile). <sup>6</sup> University of Puerto Rico (Puerto Rico)
ID2717	15:00-15:15	"Computation of phase diagrams at set initial global composition involving fluid and solid phases for multicomponent chemically reactive systems" Molina, M.J. <sup>1,2</sup> ; Rodriguez-Reartes, S.B. <sup>1,2,3</sup> ; <u>Zabaloy, M.S.<sup>1,2</sup></u> <sup>1</sup> Universidad Nacional del Sur (Argentina). <sup>2</sup> PLAPIQUI (UNS-CONICET) (Argentina). <sup>3</sup> Universitat Rovira i Virgili (Spain)
ID1871	15:15-15:30	"Obtención de extractos de aceite esencial y oleoresina a partir del jengibre ( <i>Zingiber officinale</i> ) utilizando dióxido de carbono supercrítico" Meza, J.H.; Cárdenas-Toro, F.P. Pontificia Universidad Católica del Perú (Perú)



## Coordinators

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