



Session Chair: Sergio S. Ribeiro

08:40/  
09:30

**Plenary Lecture – Computational rheology of structured materials**  
(J. Esteban López-Aguilar – Universidad Nacional Autónoma de México)

09:30/  
09:50

**Mathematical model of waxy oil gelation to assess material shrinkage**  
(Nezia de Rosso, Denis B. Barbara, Júlio J. A. Abdala, Silvio L. M. Junqueira, Cezar O. Ribeiro Negrão)

09:50/  
10:10

**Annular displacement flows in oil well cementing operations**  
(Frederico de Carvalho Gomes, Sergio S. Ribeiro, Priscilla R. Vargas, Rodrigo L. Fernandez, Lucas C. Mendonça, Matheus A. Mendes Freitas, Mônica F. Naccache, Paulo R. de Souza Mendes, Marcio da Silveira Carvalho, Carlos P. C. Carvalho, Umberto Sansoni Júnior, André L. Mardins, José Marcelo S. Rocha, Ingrid E. da Silva)

10:10/  
10:40

Coffee-Break

Session Chair: Ivan Rosa de Siqueira

10:40/  
11:00

**Thixotropic dynamics of three-dimensional flow in coating dies**  
(Stélio Henrique Lopes, Sergio S. Ribeiro, Marcio da Silveira Carvalho)

11:00/  
11:20

**Modeling the inline mixing of non-Newtonian and Newtonian fluids**  
(Ricardo Knesebeck, Cezar O. Ribeiro Negrão)

11:20/  
11:40

**Numerical study of free surface flows with a generalized Newtonian interface**  
(Filipe Oliveira da Silva, Ivan Rosa de Siqueira, Roney L. Thompson)

11:40/  
12:00

**Improvement capabilities of MCR series: capillary extensional and automation rheological measurements**  
(Jorge Maia – Anton Paar)

12:00/  
13:00

Lunch

13:00/  
14:00

SBR Assembly (Optional)

Session Chair: Bruna Costa Leopércio

14:00/  
14:50

**Plenary Lecture – Yielding and plasticity in disordered materials: microstructure, memory, and flow**  
(Paulo E. Arratia – University of Pennsylvania)

14:50/  
15:10

**Rheological behaviour of nanostructured complex fluids with two-dimensional (2D) materials**  
(Ricardo J. E. Andrade, Josué Cremonezzi, Ely Cargnin, Nathália M. Moraes Fernandes, Hélio Ribeiro, Lorena R. da C. Moraes, Yago Soares, Monica Naccache)

15:10/  
15:30

**Rheology of graphene oxide nanosheets in xanthan gum**  
(José Canazas R., Nathalia M. Moraes Fernandes, Lorena R. da C. Moraes, Hélio Ribeiro, Ricardo J. E. Andrade, Monica F. Naccache)

15:30/  
15:50

Coffee-Break

Session Chair: Ricardo J. E. Andrade

16:00/  
16:20

**Improving efficiency of polymer injection in enhanced oil recovery processes with silica nanoparticles**  
(Andrea Mora, Anthony Hutin, Jorge Avendano, Marcio S. Carvalho)

16:20/  
16:40

**How the morphology and structure of innovative graphene oxide (GO) dispersed in xanthan gum (XG) affects the rheological behavior**  
(Nathália M. Moraes Fernandes, Hélio Ribeiro, Monica F. Naccache, Lorena R. da C. Moraes, Matheus S. Dias, Camila M. Maronezze, Ricardo J. E. Andrade)

16:40/  
17:00

**Exploring the role of rheology in enhancing performance of lithium-ion battery manufacturing**  
(Danmer Maza Quinones, Marcio da Silveira Carvalho)

17:00/  
17:2017:20/  
17:3019:00/  
23:00

**BCR 2024 Cocktail at Maguje Restaurant,**  
Jardim Botânico Street 1003, Jardim Botânico, Rio de Janeiro.

Session Chair: Priscilla Vargas

**Plenary Lecture – Use of tribo-rheological techniques to improve technological properties of dairy products**  
(María Laura Olivares – Universidad Nacional del Litoral)

**W/O emulsions stabilized solely by cocoa butter-based oleogels: effect of crystal-crystal interactions on rheological performance**  
(Elizabeth Tenorio-García, Andrea Araiza-Calahorra, Michael Rappolt, Elena Simone and Anwasha Sarkar)

**Analysis of wall shear stress for hematocrit dependent blood model in hemodialysis fistulae**  
(Janaína A. Silva, José Karam-Filho)

Coffee-Break

Session Chair: Elias Rodrigues

**Power law fluid flow in partially porous and fractures channel: numerical model and validation**  
(Sergio Yoshio Ogata Junior, Vinicius Gustavo Poletto, Ayrton Cavallini Zotelle, Fernando Cesar De Lai, Silvio Luiz de Mello Junqueira)

**Reformulation of constitutive equations based on the generalized Lie derivative**  
(Débora de Oliveira Medeiros)

**Direct numerical simulations of power-law fluids in smooth and rough channels**  
(Hamidreza R. Anbarlooei, Daniel Onofre de Almeida Cruz, Gustavo Eduardo Oviedo Celis, Matheus de Souza S. Macedo, Roney L. Thompson)

**A short introduction to tribo-rheometry**  
(Hans Michael Petri – Reoterm)

Lunch

Visit to the GReo Laboratory (Optional)

Session Chair: Flávio H. Marchesini

**Plenary Lecture – Porous particle suspensions: the reduction of lubrication forces is at the origin of their behavior**  
(Mario Minale, Johanna Vargas Clavijo, Hajar Nassiri, Claudia Carotenuto – University of Campania)

**Squeeze flow of suspensions supported by pressure mapping and interparticle distances with microstructural representation**  
(Franco Ancona Grandes, Victor K. Sakano, Andressa C.A. Rego, Markus S. Rebmann, Fábio Alonso Cardoso, Rafael Giuliano Pileggi)

**Impact of particle motion on viscosity measurement in non-colloidal suspension flows: a numerical study**  
(Nezia de Rosso, Cezar O. R. Negrão)

**Continuum modeling of non-Newtonian flow in porous media**  
(Allan B. G. Motta, Roney L. Thompson)

Session Chairs: Eliana P. M. Castañó and Lorena R. da C. Moraes

Poster Session

Conference Closing