

## French American Seminar Series

Wednesday May 3, 2017 - 8:15am – 5pm

Rice University – Dell Butcher Hall 180

### 08:15-08:30am: Welcome Remarks

08:30-08:45am: **Yongchao Zeng**, Rice Univ., Chemical and Biomolecular Engineering: *“Visualization of Crude Oil Displacement on a Pore-scale Micro-model”*

08:45-09:00am: **Christopher Yeates**, IFPEN: *“Multi-Scale study of foam flow dynamics in porous media”*

09:00-09:15am: **Li Chen**, Rice Univ., Chemical and Biomolecular Engineering: *“Ring-locking enables selective anhydrosugar synthesis from carbohydrate pyrolysis”*

09:15-09:30am: **Jinlu Liu**, Rice Univ., Chemical and Biomolecular Engineering: *“Adsorption and phase behavior of mixed alkanes in nano slit graphite pores: an iSAFT application”*

09:30-09:45am: **Saifuddin Ahmed**, IFPEN: *“Study of the liquid-liquid equilibrium of electrolytes using an Equation of State”*

09:45-10:00am: **Xiaoqun (Kevin) Mu**, Rice Univ., Chemical and Biomolecular Engineering: *“The application of the stabilized density gradient theory (SDGT) in interfacial property calculations”*

### 10:00-10:15am: Coffee Break

10:15-10:30am: **André Morgado Lopes**, IFPEN: *“Reactive Transport through Nanoporous Material”*

10:30-10:45am: **Anna Morgan Crumbley**, Rice Univ., Chemical and Biomolecular engineering: *“Industrial Biomanufacturing: The Future of Chemical Production”*

10:45-11:00am: **Ana Rita Costa Da Cruz**, IFPEN: *“Compositional and kinetic modeling of bio-oils from fast pyrolysis from lignocellulosic biomass”*

11:00-11:15am: **Damien Dussol**, IFPEN: *“Experimental study and kinetics modeling of the transformation of ethanol into butadiene”*

11:15-11:30am: **Luca Gemello**, IFPEN: *“Gas-liquid reactors and bioreactors: population balance modelling and impact on global hydrodynamics”*

11:30-11:45am: **Clément Toupoint**, IFPEN: *“Path and wake of cylindrical particles falling in a liquid at rest or in a bubble swarm, towards the hydrodynamical modeling of ebullated bed reactors”*

### 11:45-01:30pm : Lunch Break

01:30-01:45pm: **Federico Bussolati**, IFPEN: *“Multi-scale modeling of the fatigue of mooring wire ropes for offshore floating wind turbines”*

01:45-02:00pm: **Mahdi Haddad**, UT Austin, petroleum engineering: *“Mechanistic Simulation of Multi-Stage Multi-Wellbore Hydraulic Fracturing in Naturally Fractured Reservoirs”*

02:00-02:15pm: **Marwa Moula**, IFPEN: *“Mechanical properties of highly porous alumina for catalysts supports, influence of the microstructural morphology”*

02:15-02:30pm: **Ramatou Ly**, Texas A&M, corrosion center: *“A Promising Extrusion Process of High Strength Aluminum Base Alloys for the manufacturing of Dissolvable Downhole Tools”*

02:30-02:45pm: **Cherelle Thomas**, UT Austin, Department of Chemical Engineering: *“Chemical Mechanisms of Copper Indium Diselenide Nanocrystal Synthesis Studied by <sup>31</sup>P Nuclear Magnetic Resonance Spectroscopy”*

#### 02:45-03:00pm: Coffee Break

03:00-03:15pm: **Ryan Poling-Skutvik**, UoH., Chemical and Biomolecular Engineering: *“Dynamics of polymer-grafted nanoparticles for enhanced oil recovery applications”*

03:15-03:30pm: **Yu-Jiun (Nate) Lin**, Rice Univ., Chemical and Biomolecular Engineering: *“A Combined Microfluidic and Interfacial Rheological Investigation of the Coalescence of Asphaltene-Stabilized Emulsions”*

03:30-03:45pm: **Mohammed I.L. Abutaqiya**, Rice Univ., Chemical and Biomolecular Engineering: *“Advances in Modeling Asphaltene Precipitation and PVT Properties of Crude Oils”*

03:45-04:00pm: **Jun Kuang**, Rice Univ., Chemical and Biomolecular Engineering: *“On the Development of a Reliable Method to Assess the Performance of Asphaltene Deposition Inhibitors”*

04:00-04:15pm: **Ana Teresa Fialho Batista**, IFPEN: *“Location and proximity of metallic and acid sites on alumina based catalysts”*

04:15-04:30pm: **Céline Pagis**, IFPEN: *“Synthesis and evaluation of hollow Y zeolite crystals”*

#### 04:30-04:45pm : Concluding Remarks

