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## PUBLICATIONS

## Journal Papers

- Jhalendra, R. K. and **Kumar, A.** (2018) Thermodynamically Consistent Criteria for Developing Reliable Equation of State Model for Compositional Simulation. *Fuel*, 234, 770-784.
- Kumar, A. and Okuno, R. (2016) Reliable characterization of bitumen based on perturbation from n-alkanes for steam-solvent coinjection simulation. *Fuel*, 182, 141-153.
- **Kumar, A.** and Okuno, R. (2016) A New Algorithm for Multiphase Fluid Characterization for Solvent Injection. *SPE J*, 1-17
- Kumar, A. and Okuno, R. (2015). Direct Perturbation of the Peng-Robinson Attraction and Covolume Parameters for Reservoir Fluid Characterization. *Chemical Engineering Science*, 127, 293-309.
- Kumar, A. and Okuno, R. (2014). Reservoir Oil Characterization for Compositional Simulation of Solvent Injection Processes. *Industrial and Engineering Chemistry Research*, 53, 440-455.
- Kumar, A. and Okuno, R. (2013). Characterization of Reservoir Fluids using an EOS based on Perturbation from n-Alkanes. *Fluid Phase Equilibria*, 358, 250-271.
- Kumar, A. and Henni, A. (2013). A Unique Approach to Predict Accurate Heavy Oil Density with New Three Parameter Cubic Equation of State. *Canadian Journal of Chemical Engineering*, 91, 391-398.
- **Kumar, A.** and Okuno, R. (2012). Critical Parameters Optimized for Accurate Phase Behavior Modeling for Heavy n-Alkanes up to C<sub>100</sub> using the Peng–Robinson Equation of State. *Fluid Phase Equilibria*, 335, 46-59.
- Kumar, A. and Henni, A. (2011). Three Parameter Cubic Equation of State for Pure Components of Heavy oils. *Canadian Journal of Chemical Engineering*, 89, 869-878.
- Kumar, A., Henni, A., and Shirif, E. (2011). Heavy Oil Viscosity Modeling with Friction Theory. *Energy & Fuels*, 25, 493-498.

## **Conference Papers**

**Kumar, A.** and Okuno, R. (2015). *Characterization of Three-Hydrocarbon-Phase Behavior by Use of a Cubic EOS for Solvent Injection Processes*. Presented at Society of Petroleum Engineering Annual Technical Conference and Exhibition 2015, September 28-30, 2015. Houston, Texas, USA.

**Kumar, A.** and Okuno, R. (2013). *Universal Fluid Characterization Using an EOS Based on Perturbation from n-Alkanes*. Presented at Society of Petroleum Engineering Annual Technical Conference and Exhibition 2013, September 30-3 October 2013, New Orleans, Louisiana, USA.

**Kumar, A.** and Okuno, R. (2012). *Fluid Characterization Using an EOS for Compositional Simulation of Enhanced Heavy-Oil Recovery*. Presented at Society of Petroleum Engineering Annual Technical Conference and Exhibition 2012, October 8-10 2012, San Antonio, Texas, USA.

**Kumar, A.**, Henni, A. and Shirif, E. (2010). *New Tuning Method to Improve Viscosity Prediction of Heavy Oils*. Poster presentation in 11th International Conference on Petroleum Phase Behavior and Fouling schedule from June 13-17 2010 (Petrophase XI-2010), Jersey City, USA. (Note: No paper)