

Industrial Engineering and Systems Management Conference 2013

Rabat, Morocco - October 28-30, 2013

<http://www.univ-valenciennes.fr/evenement/iesm2013>

Special Session on Petroleum Refinery Optimization Modeling

Session Chair and Organizer:

Dr. Ali Diabat, Masdar Institute of Science and Technology, Abu Dhabi, UAE

In today's challenging economy, the petroleum refining industry remains one of the most important industries in the world. However, this industry is facing many challenges, including price volatility and role of speculators, depletion of oil reservoirs, corporate social responsibility, clean-fuel legislation, strict greenhouse gas (GHG) regulations to reduce CO₂ emissions into the atmosphere, and the large amount of water usually being used at the refineries. Therefore, petroleum refineries face a serious need to increase the efficiency and optimize the productivity of their conversion units, such as the hydrocracker and fluid catalytic cracking units (FCCs) and distillation towers.

The organizer of this special session would like to invite theoretical and/or empirical contributions that advance the current state of knowledge in this area. The session addresses issues related to various aspects of using optimization modeling in petroleum refineries.

Potential topics include, but are not limited to:

- Refinery-wide optimization modeling
- Optimization modeling of the fluid catalytic cracking units and distillation units
- Reducing carbon emission at petroleum refineries
- Minimization of water usage at petroleum refineries
- Optimization of hydrogen production at petroleum refineries
- Maximization of propylene production in the RFCC units
- Case studies or new formulations of the pooling and blending problems

Submission:

The authors are requested to submit their papers to: adiabat@masdar.ac.ae

Important Deadline:

Paper submission: June 7, 2013