The Society of Rheology 83rd Annual Meeting – *Cleveland, Ohio*

Program Updates

- **Industry/Faculty/Student Forum and Mixer: *Rational Design with Soft Materials*** [Sunday, 4:00, Room 204].
- **Paper IR3** [Monday, 10:50, Room 207 (Track 6)] has been withdrawn.
- The **Society Business Meeting** [Monday, 12:15] has moved to **Founders Ballroom C**.
- **Paper BS6** [Monday, 1:30, Amphitheater A (Track 1)] has been withdrawn.
- **Paper IR7** [Monday, 1:55, Room 207 (Track 6)] has been withdrawn.
- **Paper BS14** [Monday, 5:15, Amphitheater A (Track 1)] has been withdrawn.
- **Paper MB18** [Tuesday, 2:45, Founders Ballroom B (Track 4)] has been moved to the Poster Session. It is now **Paper PO108** [Wednesday, 5:30, Founders Ballroom (Poster Session)].
- **Paper MB22** [Tuesday, 4:50, Founders Ballroom B (Track 4)] has been moved to the Poster Session. It is now **Paper PO109** [Wednesday, 5:30, Founders Ballroom (Poster Session)].
- **Paper SA7** [Wednesday, 10:25, Room 204 (Track 5)] has been withdrawn.
- **Paper MB26** [Wednesday, 10:50, Founders Ballroom B (Track 4)] has been withdrawn.
- **Papers PO14**, **PO41**, and **PO37** [Wednesday, 5:30, Founders Ballroom (Poster Session)] have been withdrawn.
- The author list of **Paper PO83** [Wednesday, 5:30, Founders Ballroom (Poster Session)] has been changed to:

  New interfacial surface generator for the co-extrusion of micro- and nano-layered polymers
  Patrick Harris[1], Jessica Patz[1], Jorge Silva[1], Erwan Chabert[2], Roger T. Bonnecaze[2], and João Maia[1]
  [1]Dept. of Macromolecular Science and Engineering, Case Western Reserve University, Cleveland, OH 44106-7202; [2]Department of Chemical Engineering, The University of Texas at Austin, Austin, TX

- **Paper PO107** [Wednesday, 5:30, Founders Ballroom (Poster Session)] has been added:

  Structural evolution and rheology in blends with interfacially-active particles
  Shailesh P. Nagarkar and Sachin S. Velankar
  Department of Chemical Engineering, University of Pittsburgh, Pittsburgh, PA 15213

  Particles that adsorb at the interface between two immiscible polymers can be used to control the morphology of polymer blends. We are examining the fundamentals of morphology control using a model system composed of ~500 nm hydrophobically-modified silica particles, polyethylene oxide (PEO) drops, and polyisobutylene (PIB) matrix. Since the melting temperature of PEO is 65°C a blend morphology created under flow at high temperature can be quenched and examined at the particle scale by SEM. Such imaging shows that the silica particles are preferentially wetted by PIB (i.e. the particles protrude substantially outside the drop) and bridge across two PEO drops to form clusters. The bridging region between the drops is nearly-close packed with particles. However, bridging does not prevent coalescence; in fact, addition of particles promotes shear-induced coalescence. Such coalescence reduces the interfacial area and allows the particles to cover almost the entire interfacial area even at a particle loading as low as 0.15 vol%. The resulting morphology is composed of particle-jammed non-spherical drops that are heavily clustered in a fashion similar to polyhedral foam bubbles. Consistent with drop clustering, an oscillatory rheometry shows a plateau in G' at low frequency indicating the gel-like behavior. Yet, steady shear viscosity is not affected significantly indicating that bridging clusters can be disrupted by applied flow.

- **Paper SG30** [Thursday, 9:30, Amphitheater B (Track 1)] will be presented by Marie C, Heuzey.