



The Society of Rheology 77<sup>th</sup> Annual Meeting – Vancouver, British Columbia, Canada

## Program Updates

**Paper SC7** [Monday, 1:55, Salon 1 (Track 2)] has been withdrawn.

**Paper SS2** [Tuesday, 10:10, Seymour (Track 4)] has been replaced with “**An overview of food texture and rheology**” by Sumana Chakrabarti (listed as **PO11** in the Abstract Booklet).

**Paper SS3** [Tuesday, 10:35, Seymour (Track 4)] has been replaced with “**Gelation point determination using fast Fourier transform rheometry**” by Jaepyoung Cho, Marie-Claude Heuzey, Andre Begin, and Pierre J. Carreau (listed as **PO2** in the Abstract Booklet).

**Paper SC27** [Tuesday, 4:50, Salon 1 (Track 2)] has been replaced with “**Study on the transferability of the time temperature superposition principle to emulsions**” by Ruediger Brummer, Mandy Muehlbach, and Rudolf Eggers (listed as **PO14** in the Abstract Booklet).

**Paper IR1** [Wednesday, 9:45, Seymour (Track 4)] has been replaced with “**Effect of non-linear thermal history on the viscosity of polymer melts**” by J. P. Ibar (listed as **PO60** in the Abstract Booklet).

**Paper SC36** [Wednesday, 2:20, Salon 1 (Track 2)] has been replaced with “**Rheology of highly filled propylene/ethylene copolymers**” by Cheng Huang, Paula M. Wood-Adams, Teresa P. Karjala, and Patricia Ansems (listed as **PO49** in the Abstract Booklet).

**Paper BS9** [Wednesday, 2:45, Oak 1 & 2 (Track 1)] has been replaced with “**Drag reducing polymers as a potential treatment for microvascular impairment in diabetes**” by Philip J. Marascalco, Joie N. Marhefka, and Marina V. Kameneva (listed as **PO43** in the Abstract Booklet).

**Paper SS18** [Wednesday, 2:45, Seymour (Track 4)] has been replaced with “**Modelling liquid phase maldistribution in paste flows**” by Milan J. Patel, Salvatore Mascia, Stuart Blackburn, and Ian Wilson (listed as **PO12** in the Abstract Booklet).

**Paper SC41** [Wednesday, 4:50, Salon 1 (Track 2)] has been replaced with:

### **Hydrodynamic interactions in the induced-charge electrophoresis of colloidal rod dispersions**

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The behavior of a dilute dispersion of ideally polarizable slender rods in an applied electric field is studied theoretically and numerically. The polarization of a rod results in the formation of a dipolar charge cloud around its surface, leading to a non-linear fluid slip, which causes particle alignment and creates a disturbance flow in the surrounding fluid. We derive a simple slender-body formulation for this phenomenon based on the thin double layer approximation and valid for high aspect ratio particles, and use it to study hydrodynamic interactions between a pair of aligned rods. In particular, the pair probability density function in a dilute dispersion is calculated, and indicates that particle pairing can be expected. We also present results from large-scale numerical simulations that include both far-field and near-field hydrodynamic interactions as well as Brownian motion. Particle pairing is indeed observed to occur at high values of the Péclet number (weak Brownian motion), and results are reported for pair probabilities, orientation distributions and hydrodynamic diffusivities.

**Paper PO2** [Wednesday, 6:00, Salon A (Poster Session)] has moved to **Paper SS3** [Tuesday, 10:35, Seymour (Track 4)].

**Paper PO11** [Wednesday, 6:00, Salon A (Poster Session)] has moved to **Paper SS2** [Tuesday, 10:10, Seymour (Track 4)].

**Paper PO12** [Wednesday, 6:00, Salon A (Poster Session)] has moved to **Paper SS18** [Wednesday, 2:45, Seymour (Track 4)].

**Paper PO14** [Wednesday, 6:00, Salon A (Poster Session)] has moved to **Paper SC27** [Tuesday, 4:50, Salon 1 (Track 2)].

**Paper PO43** [Wednesday, 6:00, Salon A (Poster Session)] has moved to **Paper BS9** [Wednesday, 2:45, Oak 1 & 2 (Track 1)].

**Paper PO49** [Wednesday, 6:00, Salon A (Poster Session)] has moved to **Paper SC36** [Wednesday, 2:20, Salon 1 (Track 2)].

**Paper PO60** [Wednesday, 6:00, Salon A (Poster Session)] has moved to **Paper IR1** [Wednesday, 9:45, Seymour (Track 4)].

**Paper IR12** [Thursday, 11:00, Salon 3 (Track 4)] has been withdrawn.