

InSPACE-2 Publications and Presentations

◆ Journal Papers

- Biswal, S.L. and Gast, A. P. "Micromixing with linked chains of paramagnetic particles" *Analytical Chemistry*, 76 (21), 6448-6455, (2004).
- Biswal, S.L. and Gast, A. P. "Rotational dynamics of semiflexible paramagnetic particle chains" *Physical Review E*, 69 (4), Art No. 041406, Part 1 Apr 2004.
- Lyles, B.F., Terrot, M.S., Hammond, P.T. and Gast, A. P. "Directed patterned adsorption of magnetic beads on polyelectrolyte multilayers on glass" *Langmuir*, 20 (8), 3028-3031 (2004).
- Biswal, S.L. and Gast, A. P. "Mechanics of semiflexible chains formed by poly(ethylene glycol)-linked paramagnetic particles" *Physical Review E*, 68 (2), Art No. 021402, Part 1 Aug 2003.
- Furst, E.M. and Gast, A. P. "Dynamics and lateral interactions of dipolar chains" *Physical Review E*, 62 (5), 6916-6925 (2000).
- Furst, E.M. and Gast, A. P. "Micromechanics of magnetorheological suspensions " *Physical Review E*, 61 (6), 6732-6739 (2000).
- Furst, E. M., and Gast, A. P. "Micromechanics of dipolar chains using optical tweezers" *Physical Review Letters*, 82 (20), 4130-4133 (1999).
- Furst, E. M., and Gast, A. P. "Particle dynamics in magnetorheological suspensions using diffusing wave spectroscopy," *Physical Review E*, 58, 3372 (1998).
- Furst, E. M., Suzuki, C., Fermigier, M., and Gast, A. P. "Permanently-linked monodisperse paramagnetic chains" *Langmuir*, 14 (26), 7334 -7336 (1998).
- Promislow, J.H.E.; and Gast, A.P., "Magnetorheological Fluid Structure in a Pulsed Magnetic Field. *Langmuir*," vol. 12, no. 17, 1996, pp. 4095-4102.
- Promislow J.H.E and Gast, A.P, "Low-Energy Suspension Structure of a Magnetorheological Fluid," *Phys.Rev. E* 56 (1997) 642:651.
- Promislow, J.H.E, Gast, A.P. and Fermigier, M., "Aggregation Kinetics of Paramagnetic Colloidal Particles." *J.Chem. Phys.* 102 (1995) 5492:5498.

◆ Conference Presentations:

- P.A. Vasquez, J. Agui, and E. M. Furst "Structural Transitions of MR Fluids in Microgravity," Poster presentation, 79th Society of Rheology meeting, October 7-11, 2007, Salt Lake City, UT.

- A. Gast, B. Lyles, K. Bentley, J. Agui, and D. Pettit. "Magnetic Emulsions in Space". Symposium in Honor of Darsh Wasan I: Interfacial and Colloidal Phenomena. AIChE annual meeting, November 16-21, 2003, San Francisco, CA.