

**Publications G. Beaucage**

Total publications listed below: 113 (as of 8/2007). (Links to submitted and in press papers can be found at <http://www.eng.uc.edu/~gbeaucag/CV/LinksToPDFs.html>.)

**2007**

*Physical Relationship Between Reinforcement and Orientation in Clay Nanocomposites.* Bafna A, Beaucage G, Mirabella F submitted *J. Polym. Sci. Polym. Phys.* 2007

*Integrated Mechanism for the Morphological Structure Development in HDPE Melt-Blown and Machine-Direction-Oriented (MDO) Films* Bafna A, McFaddin D, Beaucage G, Merrick-Mack J, Mirabella FM in press *J. Polym. Sci. Polym. Phys.* **45** 1834-1844 (2007).

*Modeling the Mechanical Properties of Highly Oriented Polymer Films: A Fiber/Gel Composite Theory Approach* Breese DR, Beaucage G Submitted *J. Polym. Sci. Polym. Phys.* 2007.

*Towards resolution of ambiguity for the unfolded state of proteins.* Beaucage G submitted *Biophysical Journal* 9/2007.

*Nanomaterial growth dynamics in jet flames* Jossen R, Beaucage G, Heine MC, Narayanan T and Pratsinis SE Submitted *Adv. Mat.* 9/2007

*Dimensional Description of Cyclic Polymers* Kulkarni AS and Beaucage G Submitted *Phys. Rev. Lett.* 9/2007.

*Small Angle X-ray Scattering Study of Phase Separation Kinetics in Segmented-Polyurea* Kulkarni AS, Beaucage G, Wilkes GL, Das S, Yilgor I Submission planned in the near future *Macromolecules*.

Chapter *Chain Structure Characterization*, A. S. Kulkarni and G. Beaucage in *Characterization of Synthetic Polymers* Edited by J. M. Chalmers and R. Meier John Wiley & Sons 2007 in press.

*Investigating the Molecular Architecture of Hyperbranched Polymers* Kulkarni AS and Beaucage G, *Macromol. Rap. Comm.* **28**, 1312-1316 (2007).

*In situ study of aggregation of soot particles in an acetylene flame by small-angle x-ray scattering.* Sztucki M, Narayanan T, Beaucage G *J. Appl. Phys.* **101** 114304 (2007).

4 Chapters in *Polymer Data handbook 2e* edited by J. E. Mark *Polypyrrole;Polyquinolin; Polythiophene; Poly(p-xylylene)* 2007. Oxford University Press, NY, NY.

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*Neutron scattering from equilibrium-swollen networks.* Sukumaran SK, Beaucage G, Mark JE, Viers B *Eur. Phys. J. E* **18** 29-36 (2005).

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*A review of modeling approaches for oriented semi-crystalline polymers.* Breese DR, Beaucage G *Curr. Opin. Sol. St. Matls. Sci.* **8** 439-448 (2004).

*Novel mesoporous mixed Nb-M ( $M = V$ , Mo, and Sb) oxides for oxidative dehydrogenation of propane.* Yuan L, Bhatt S, Beaucage G, Gulianti VV, Mamedov S, and Soman RS *J. Phys. Chem. B* **109** 23250-23254 (2005).

*How does surface modification aid in the dispersion of carbon nanofibers?* Zhao J, Schaefer DW, Shi D, Lian J, Brown J, Beaucage G, Wang L, and Ewing RC *J. Phys. Chem. B* **109** 23351-23357 (2005).

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*A disposable plastic biochip cartridge with on-chip power sources for blood analysis* Choi J-W, Puntambekar A, Hong C-C; Gao C, Zhu X, Trichur R, Han J, Chilukuru S, Dutta,M, Murugesan,S, Kim,S, Sohn,Y-S, Nevin,JH.; Beaucage,G, Lee J-B, Ahn CH *Proceedings of the IEEE Micro Electro Mechanical Systems (MEMS)* 447-450 (2003).

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**Editorial:**

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