

REFERENCES:

1. Hyeon-Lee, J.; Beaucage, G.; Pratsinis, S. E., *Chem. Mater.* **9** 2400 (1997).
2. Hyeon-Lee, J.; Beaucage, G.; Pratsinis, S. E., "Nano-structured Powders and Their Industrial Application", MRS Symposium Proceedings **520**, eds. Beaucage, G.; Mark, J. E., Burns, G. T.; Hua, D. W., Materials Research Society, Warrendale PA, p. 115 (1998).
3. Beaucage, G.; Hyeon-Lee, J.; Pratsinis, S. E., *Journal of Nanoparticle Research*, submitted (1998).
4. Brinker, C. J.; Scherer, G. W., "Sol-Gel Science", Academic Press, NY (1990).
5. Meakin, P. in "On Growth and Form", Eds. H. E. Stanley and N. Ostrowsky (Martinus-Nijhoff, Boston, p. 111 (1986).
6. Schaefer, D. W. *MRS Bulletin*, **8**, 22 (1988).
7. Witten, T. A.; Sanders, L. M., *Phys. Rev. Lett.* **47**, 1400 (1981).
8. Beaucage, G.; Sukumaran, S.; Rane, S.; Kohls, D., *J. Polym. Sci., Polym. Phys. Ed.* accepted (1998).
9. Sernetz, M.; Bittner, H. R.; Willems, H.; Baumhoer, C., in *The Fractal Approach to Heterogeneous Chemistry, Surfaces, Colloids, Polymers*, pp. 361, D. Avnir ed., John Wiley & Sons: NY, 1989.
10. Hyeon-Lee, J.; Beaucage, G.; Pratsinis, S. E.; Vemury, S., *Langmuir* accepted (1998). Also, AIChE proceedings, Fall Meeting 1997, Los Angeles CA.
11. Pratsinis, S. E.; Zhu, W.; Vemury, S., *Powder Technol.* **86**, 87 (1996).
12. Zhu, W.; Pratsinis, S. E. In *Nanotechnology*, Chow, G. M., Gonsalves, K.E., Eds.; ACS Symposium Series **622**; American Chemical Society; Washington, DC, pp. 64-78 (1996).
13. Vemury, S.; Pratsinis, S. E., *Appl. Phys. Lett.*, **66**, 3275 (1995).
14. Beaucage, G.; Schaefer, D. W., *J. Non-Cryst. Solids*, **172-174** 797 (1994).
15. Beaucage, G., *J. Appl. Cryst.*, **28**, 717 (1995).
16. Beaucage, G. *J. Appl. Cryst.*, **29**, 134 (1996).
17. Schaefer, D. W.; Beaucage, G.; Brow, R. K.; Olivier, B. J.; Rieker, T.; Hrubesh, L.; Lin, J. S., in "Modern Aspects of Small-Angle Scattering", H. Brumberger Editor., pp. 299, Kluwer Academic Publishers, Netherlands (1995).
18. Beaucage, G.; Rane, S.; Sukumaran, S.; Satkowski, M. M.; Schectman, L. A.; Doi, Y., *Macromolecules*, **30**, 4158, (1997).
19. Beaucage, G.; Mark, J. E., Burns, G. T.; Hua, D. W., "Nano-structured Powders and Their Industrial Application", MRS Symposium Proceedings **520**, Materials Research Society, Warrendale PA, p. 115 (1998).
20. Hyeon-Lee, J.; Guo, L.; Beaucage, G., *J. Polym. Sci., Polym. Phys. Ed.*, **34**, 3073 (1996).
21. Guo, L.; Beaucage, G.; Hyeon-Lee, J., *J. Non-Crystalline Solids*, in press (1998).
22. Beaucage, G.; Guo, L.; Hyeon-Lee, J., *Rubber Chemistry and Technology* in press (1998).
23. Beaucage, G.; Ulibarri, T. A.; Black, E. P.; Schaefer, D. W., *ACS Symp. Ser.*, **585**(Hybrid Organic--Inorganic Composites), 97 (1995).
24. Schaefer, D. W.; Ulibarri, T. A.; Beaucage, G., in "Sub-Micron Multi-Phase Materials, Ed. R. H. Baney et al., *Mater. Res. Soc. Symp. Proc.* **274**, Materials Research Society, Pittsburgh, PA, p. 85-90 (1992).
25. Ulibarri, T. A.; Schaefer, D. W.; Beaucage, G.; Olivier, B. J.; Assink, R. *Mater. Res. Soc. Symp. Proc.* **274** (Submicron Multiphase Materials) 91 (1992).
26. Prabakar, S.; Bates, S. E.; Black, E. P.; Ulibarri, T. A.; Schaefer, D. W.; Beaucage, G.; Assink, R. A., *Mater. Res. Soc. Symp. Proc.* **435** (Better Ceramics through Chemistry VII: Organic/Inorganic Hybrid Materials), 469 (1996).
27. Beaucage, G.; Schaefer, D. W.; Ulibarri, T.; Black, E., *Polym. Mater. Sci. Eng.* **70**, 268 (1993).
28. Black, E. P.; Ulibarri, T. A.; Beaucage, G.; Schaefer, D. W.; Assink, R. A.; Bergstrom, D. F.; Giwa-Agbomeirele, P. A.; Burns, G. T., *Polym. Mater. Sci. Eng.* **70**, 382 (1993).

29. Black, E. P.; Ulibarri, T. A.; Beaucage, G.; Schaefer, D. W.; Assink, Roger A.; Bergstrom, D. F.; Giwa-Agbomeirele, P. A.; Burns, G. T., *ACS Symp. Ser.* **585** (Hybrid Organic--Inorganic Composites), 237 (1995).
30. Schaefer, D. W.; Beaucage, G.; Brow, R. K.; Olivier, B. J.; Rieker, T.; Hrubesh, L.; Lin, J. S., in "Modern Aspects of Small-Angle Scattering", H. Brumberger Editor. p. 299, Kluwer Academic Publishers, Netherlands (1995).
31. Hua, D. W.; Anderson, J.; Di Gregorio, J.; Smith, D. M.; Beaucage, G., *J. Non-Cryst. Solids* **186**, 142 (1995).
32. Hua, D.W.; Anderson, J.; Hereid, S.; Smith, D.M.; Beaucage, G., *Mater. Res. Soc. Symp. Proc.* **346** (Better Ceramics through Chemistry VI), 985 (1994).
33. Roger, C.; Hampden-Smith, M. J.; Schaefer, D. W.; Beaucage, G. *J. Sol-Gel Sci. Technol.* (1994), B, 67-72.
34. Schaefer, D. W.; Olivier, B. J.; Ashley, C.; Beaucage, G.; Fischer, D. A. *J. Non-Cryst. Solids* **172-174** (Pt. 1), 647 (1994).
35. Schaefer, D. W.; Olivier, B. J.; Beaucage, G.; Hurd, A. J.; Ivie, J. J.; Herd, C. R., *J. Aerosol Sci.*, **22**, Suppl. 1, S447 (1991).
36. Loy, D. A., Schaefer, D. W., Beaucage, G., Shea, K. J., *J. Non-Crystalline Solids*, (1995).
37. Frisch, H. L. ; Maaref, S.; Xue, Y.; Beaucage, G.; Pu, Z. ; Mark, J. E. *J. Polym. Sci., Polym. Chem. Ed.*, **34**, 673 (1996).
38. Frisch, H. L.; Xue, Y.; Maaref, S.; Beaucage, G.; Pu, Z.; Mark, J. E. *Macromol. Symp.*, **106**, 147 (1996).
39. Pu, Z.; Mark, J. E.; Beaucage, G.; Maaref, S.; Frisch, H. L. *J. Polym. Sci., Polym. Phys. Ed.*, **34**, 2657 (1996).
40. Frisch, H. L. ; Xue, Y.; Maaref, S.; Beaucage, G.; Pu, Z.; Mark, J. E. accepted *Macromolecules* (1997).
41. Schaefer, D. W.; Pekala, R.; Beaucage, G. *J. Non-Cryst. Solids* **186** 142 (1995).
42. Singhal, A.; Toth, L. M.; Harris, M.; Hu, M.; Beaucage, G.; Keefer, K. D.; Lin, J. L. *J. Non-Crystalline Solids* (1998).
43. Singhal, A.; Toth, L. M.; Beaucage, G.; Lin, J. S.; Peterson, J., **194**, 470 *Journal of Colloidal and Interface Science* (1997).
44. Jethmalani, J. M.; Ford, W. T.; Beaucage, G. **13**, 5515 *Langmuir*, (1997).
45. Beaucage, G.; Aubert, J. H.; Lagasse, R. R.; Schaefer, D. W.; Rieker, T. P.; Ehrlich, P.; Stein, R. S.; Kulkarni, S.; Whaley, P. D. *J. Polym. Sci., Part B: Polym. Phys.*, **34**(17), 3063 (1996). Also, Lagasse, R. R.; Beaucage, G. Submitted *Macromolecules* (1998) and *MRS Symposium Proceedings* Fall 1997.
46. Whaley, P. D. ; Kulkarni, S. ; Ehrlich, P.; Stein, R. S.; Winter, H. H. Beaucage, G. *J. Polym. Sci., Polym. Phys.*, **36**, 617 (1998).
47. Matijevic, E., and Visca, M. Ger. Offen. 2, 924,072, 20 December (1979).
48. Visca, M. and Matijevic, E., *J. Coll. Inter. Sci.*, **68**, 308 (1979).
49. Matijevic, E. in "Heterogeneous Atmospheric Chemistry", I. Schryer and R. David eds., American Geophysical Union, Washington, D. C. (1982).
50. Ingebrethsen, B. J.; Matijevic, E. and Partch, R. E. *J. Colloid and Interf. Sci.* **95**, 228 (1983).
51. Cortesi, P.; Donati, G. and Saggese, G. European Patent Application EP0117755 A2 (1984).
52. Rubio, J.; Oteo, J. L.; Villegas, M. and Duran, P. *J. Mater. Sci.* **32**, 643 (1997).
53. Kostic, E. M.; Kiss, S. J.; Boskovic, S. B. and Zec, S. P. *Am. Ceram. Soc. Bull.* **76**, 60 (1997).
54. Gablenz, S.; Voltzke, D.; Abicht, H. -P.; Newmann-Zdralek, J. *J. Mat. Sci. Let.* **17**, 537 (1998).
55. Ocana M., Fornes, V., Serna C. J., *Ceramics Inter.* **18**, 99 (1992).
56. E. Matijevic, Q. P. Zhong, R. E. Partch, *Aerosol Sci. and Tech.* **22**, 162 (1995).
57. Greg, S. J.; Sing, K. S. W., "Adsorption, Surface Area, and Porosity, 2nd ed.", Academic Press, NY, p. 25 (1982).
58. Mark, J. E. *Heterogeneous Chemistry Reviews*, **3**, 307 (1996).

59. Mark, J. E. in "Polymers and Other Advanced Materials. Emerging Technologies and Business Opportunities", ed. by P. N. Prasad, J. E. Mark, and J. F. Ting, Plenum Press, New York (1995).
60. Pekala, R. W.; Schaefer, D. W., *Macromolecules* **26** 5487 (1996).
61. Pekala, R. W. *J. Mater. Sci.*, **24** 3221, (1989).
62. Pekala, R. W.; Kong, F. M. *J. Phys. Colloq.* **C4-33**, 50 (1989).
63. Pekala, R. W.; Kong, F. M. *Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.)* **30** 221 (1989).
64. Gebert, M. S.; Pekala, R. W., *Chem. of Mat.*, **6** 220 (1994).
65. J.-B. Donnet, R. C. Bansal, M.-J. Wang; "Carbon Black, Second Edition, Revised and Expanded", Marcel Dekker, Inc. NY (1993).
66. S. Wolff and M.-J. Wang, in ref. 1 p. 289.
67. K. A. Grosch, *Rubber Chem. Technol.*, **69**, 495 (1996).
68. J. S. Ferry, "Viscoelastic Properties of Polymers, 3rd Edition" John Wiley, NY (1980).
69. W. H. Waddell, L. R. Evans, *Rubber Chem. Technol.*, **69**, 377 (1996).
70. E.-H. Tan, S. Wolff, M. Haddeman, H. P. Grewatta, M.-J. Wang, *Rubber Chem. Technol.*, **66**, 594 (1993).
71. H. Eggers, P. Schummer, *Rubber Chem. Technol.*, **69**, 253 (1996).
72. C. J. Brinker, G. W. Scherer, "Sol-Gel Science", Academic Press, NY (1990).
73. J. T. Byers and A. A. McNeish, Symposium Proceedings for "Carbon Black World '97" San Antonio, TX, March, 1997, in press.
74. Hunt, B. J.; James, M. I. "Polymer Characterization", Blackie Academic & Professional Press, Chapman & Hall, NY, p. 10 (1993).
75. Deanin, R. D., "Polymer Structure, Properties and Applications", Cahners Publishing, Boston, p. 45 (1972).
76. Braun, J. H.; Cobranchi, D. P., *J. Coatings Tech.*, **67** 55 (1995).
77. Fotou, G. P.; Kodas, T. T., *Adv. Mat.*, **9** 420 (1997).
78. Braun, J. H.; Baidins, A., Marganski, R. E., *Prog. Org. Coatings*, **20** 105 (1992).
79. Braun, J. H., *J. Coatings Tech.*, **62** 37 (1990).
80. Cowie, A. G., United States Patent: 4,927,464 (1990).
81. Bhat, G. R.; Martin, K. O.; Naik-Satam, P., United States Patent 5,028,417 (1991).
82. Nicoll, G. A.; Ojo-Osagie, A. C.; Scott, I. R., United States Patent 5,188,831 (1993).
83. Elfenthal; L.; Klein; E; Rosendahl; F., United States Patent 5,215,580 (1993).
84. Nicoll; G. A.; Scott; I. R., United States Patent 5,215,749 (1993).
85. Zecchino; J. R.; Corcoran; C.; Chung; K. T., United States Patent 5,468,471 (1995).
86. Zecchino; J. R.; Messin; S.; Corcoran; C.; Chung; K. T., United States Patent 5,468,471 (1995).
87. Kyprianidou-Leodidou, T.; Margraf, P.; Caseri W.; Suter, U. W.; Walther, P., *Polym. for Adv. Tech.*, **8** 505 (1997).
88. Fotou, G. P.; Vemury, S.; Pratsinis, S. E., *Chem. Eng. Sci.* Jan. (1995). Also, S. Vemury, PHD dissertaion, University of Cincinnati, Department of Chemical Engineering 1996.
89. Odian, G., "Principles of Polymerization", John Wiley & Sons, NY p. 133 (1970).
90. Haro-Poniatowski, E.; Rodrigues-Talavera, R., de la Cruz Heredia, M.; Cano-Corona, O. *J Mater. Res.* **9** 2102 (1994).
91. See for instance: Windholz, M.; Budavari, S.; Blumetti, R. F.; Otterbein, E. S., "The Merck Index, 10th Edition", Merck & Co. Rahway, N. J. (1983).
92. El-Shall, M. S.; Tarkki, T.; Graiver, D.; Pernisz, U. C.; Baraton, M. I., *J. Phys. Chem.*, **99** 1780 (1996).