

## **Mr. Anshuman Seal**

### **List of Publications**

1. A. Seal, S. K. Dalui, M. Banerjee, A. K. Mukhopadhyay and K. K. Phani, "Mechanical Properties of Very Thin Cover Slip Glass Disk", Bull. Mater. Sci., Vol. 24, No. 2, April 2001, pp 151-155.
2. A. Seal, N. R. Bose, S. K. Dalui, A. K. Mukhopadhyay, K. K. Phani and H. S. Maiti, "Mechanical Properties of Glass Polymer Multilayer Composites", Bull. Mater. Sci., Vol. 24, No. 2, April 2001, pp 197-201.
3. A. K. Mukhopadhyay , M. Ray Chaudhuri, A. Seal, S. K. Dalui, M. Banerjee, and K. K. Phani, "Mechanical Characterization of Microwave Sintered Zinc Oxide", Bull. Mater. Sci., Vol. 24, No. 2, April 2001, pp 125-128.
4. A. Seal, S. K. Dalui, A. K. Mukhopadhyay, K. K. Phani and H. S. Maiti, "Novel Glass Polymer Multilayer Composites with High Toughness", Trans. Ind. Ceram. Soc., Vol. 62, January - March 2003, pp 22 – 26.
5. A. Seal, S. K. Dalui, A. K. Mukhopadhyay, K. K. Phani and H. S. Maiti, "Mechanical Behaviour of Glass Polymer Multilayer Composites" J. Mater. Sci., Vol. 38, March 2003, pp 1063-1071.
6. A. Seal, A. Sen and H. S. Maiti, "Effect of Temperature on Rheological Behaviour of Alumina Suspension" , Trans. Ind. Ceram. Soc., Vol. 62, October - December 2003, pp 205 – 207.
7. A. Seal, D. Chattopadhyay, A. Das Sharma, A. Sen and H. S. Maiti, "Influence of ambient temperature on rheological properties of alumina tape casting slurry", J. Euro. Ceram. Soc., Vol. 24, July 2004, pp 2275-2283.
8. A. Seal, P. Chakraborti, Nihar Ranjan Roy, S. Mukherjee, M. K. Mitra and G. C. Das, "Effect of phase separation on the fracture toughness of  $\text{SiO}_2\text{-B}_2\text{O}_3\text{-Na}_2\text{O}$  glass", Bull. Mater. Sci., Vol. 28, No. 5, August 2005, pp 457-460.
9. R. Mazumder, A. Seal, A. Sen, H.S. Maiti, "Effect of Boron Addition on the Dielectric Properties of Giant Dielectric  $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ " Ferroelectrics, Vol. 326, 2005, pp 103-108
10. A. Seal, R. Mazumder, A. Sen, and H. S. Maiti, "Fast firing of lead zirconate titanate ceramics at low temperature", Mat. Chem. Phys. Vol. 97, May 2006, pp 14-18

11. A.Seal, S.Das, R.Mazumder and A.Sen "Low-frequency dispersion in low-temperature fast-fired PZT", J.Phys.D: Appl.Phys. 40, 7560 (2007).
12. A. Bose, T. Maity, S. Bysakh, A. Seal and Suchitra Sen, "Influence of plasma pressure on the growth characteristics and ferroelectric properties of sputter-deposited PZT thin films" accepted on March 25<sup>th</sup> 2010 in Applied Surface Science

### **Proceedings**

1. A. Sen, A. Seal, N. Das, R. Mazumder and H. S. Maiti, "Technological challenges of making PZT based piezoelectric wafers", in proceedings of ISSS 2005, International Conference on Smart Materials Structures and Systems, July 28-30, 2005, Bangalore, India.

2. R.Mazumder, A.Seal, A.Sen "Low Temperature Sintering of PZT Nanoparticles using LiBiO<sub>2</sub> as a Sintering aid" in proceedings of National Seminar on Advances in Electroceramics, May 5-6' 2006, ARDE, Pune. Page 272-276, Allied Publisher PVT. LTD.

3. R.Mazumder, A.Seal, A.Sen and H.S. Maiti, "A mixture of CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> and B<sub>2</sub>O<sub>3</sub> as a sintering aid for low temperature densification of PZT" in proceedings of XIII National Seminar on Ferroelectrics and Dielectrics, November 23- 25,2004, Delhi University, Delhi. Page 19-22, Allied Publisher PVT. LTD.

4. "PZT-ZrO<sub>2</sub> Composites as Piezo Wafers for Structural Health Monitoring" by A.Seal, T.Dasgupta, R.Chakraborty, A.K Mukhopadhyay, A.Sen and H. S. Maiti ,accepted in "Behavior and Mechanics of Multifunctional Materials and Composites III" conference, This conference is part of the SPIE Symposium on The 16th International Symposium on: Smart Structures and Materials & Nondestructive Evaluation and Health Monitoring which was held on 8-12 March 2009 in San Diego, United States.

### **Poster/Oral Presentations:**

1. A. Seal, R. Mazumder, N. Das, S. Mondal, S. Goswami, C. R. L. Murthy and A. Sen "From PZT based multiplayer actuators to wafers: Some criticalities in their development" presented at the National Conference on "Sensors and Actuators: Emerging Technological Challenges" (NCSA-06) at Central Glass and Ceramic Research Institute, Kolkata, INDIA. Dec 21-22 2006

2. A. Seal, A. Sen and H. S. Maiti, "Effect of Temperature on Rheological Behaviour of Alumina Suspension", Trans. Ind. Ceram. Soc., presented at 66<sup>th</sup> annual conference of Indian Ceramic Society' December 2002 ,Kolkata