

a. **Name** : PRASENJIT BARICK

b. **Designation** : Scientist-D

c. **Contact address** :

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d. **Qualification** :

- B.Sc (Tech) in Ceramic Technology from College of Ceramic Technology (University of Calcutta) (*Presently Govt. college of Engineering and Ceramic Technology*)
- M. Tech in Ceramic Engineering from Institute of Technology-Banaras Hindu University (*Presently Indian Institute of Technology- Banaras Hindu University*)
- Pursuing Ph.D. in MME from Indian Institute of Technology Kharagpur

e. **Professional experience** :

- (i) 2001-2002 : Site Engineer, Industrial Associates, Kolkata
- (ii) 2002-2003 : Project Assistant (C.G.C.R.I., Kolkata)
- (iii) 2005-2006 : Assistant Manager in 'Mishra Dhatu Nigam Limited (MIDHANI)', Hyderabad
- (iv) 2006-2010 : Scientist-B
- (v) 2010-2015 : Scientist-C
- (vi) 2015- Till date : Scientist-D

f. **Research interests (on non-oxide ceramics)** :

- Processing (Rheology, gel casting, freeze granulation, extrusion)
- Sintering
- Mechanical behaviour

g. **List of Journal Publications** :

- 1) **P. Barick**, D. Chakravarty, B.P. Saha, R. Mitra, S.V.Joshi, Effect of pressure and temperature on microstructure and mechanical properties of spark plasma sintered silicon carbide processed with  $\beta$ -SiC nanopowder and sintering additives, *Ceramics International* 42(2016) 3836-3848.

- 2) **P. Barick**, B.P. Saha, R. Mitra, S.V.Joshi, Effect of concentration and molecular weight of polyethylenimine on zeta potential, isoelectric point of nanocrystalline silicon carbide in aqueous and ethanol medium, *Ceramics International* 41(2015) 4289-4293.
- 3) **P. Barick**, D.C. Jana, B.P. Saha, Load-dependent indentation behavior of  $\beta$ -SiAlON and  $\alpha$ -Silicon carbide, *Journal of Advanced Ceramics* 2 (2013) 185-192.
- 4) **P. Barick**, D.C. Jana, N. Thiyagarajan, Effect of particle size on the mechanical properties of reaction bonded boron carbide ceramics, *Ceramics International* 39 (2013) 763-770.
- 5) I.Ganesh, N. Thiyagarajan, D.C. Jana, **P. Barick**, and G. Sundararajan, An aqueous gelcasting route to dense  $\beta$ -Si<sub>4</sub>Al<sub>2</sub>O<sub>2</sub>N<sub>6</sub>-0.5SiO<sub>2</sub> ceramics, *Journal of American Ceramic Society*, 91 (2008) 1566–1571.
- 6) I.Ganesh, N. Thiyagarajan, D.C. Jana, **P. Barick**, G. Sundararajan, and J.M.F. Ferreira, Dense  $\beta$ - SiAlONs consolidated by a modified hydrolysis assisted solidification route, *Journal of European Ceramic Society*, 28 (2008) 879-885.
- 7) S. Ghosh, R. Lodha, **P. Barick** and S. Mukhopadhyay, Improvement of thermal characteristics of refractory castable by addition of gel-route spinel nanoparticles, *Materials and Manufacturing processes* 22 (2007) 81-90.
- 8) S. Mukhopadhyay, S. Ghosh, M.K. Mahapatra, R. Mazumder, **P. Barick**, S. Gupta, S. Chakraborty, Easy-to-use mullite and spinel sols as bonding agents in a high-alumina based ultra low cement castable, *Ceramics International* 28(2002) 719-729.

**h. Conference proceedings :**

- 1) Presented a paper on ‘Microstructure, mechanical properties and Weibull modulus of reaction bonded boron carbide Ceramics’ in ‘International Conference on Ceramics (ICC-12)’ on 12-13 December, 2012, held at Bikaner, Rajasthan.
- 2) Presented a paper on ‘Application of alumina bearing sol in no cement alumina based refractory monolithics’ in ‘National seminar on recent development on monolithic refractories’ on 5 March 2005, held at IT-BHU, Varanasi.
- 3) Presented a paper on ‘Synthesis and characterization of nanozirconia powder’ in ‘68<sup>th</sup> annual session of Indian Ceramic Society’, on 21-24 December, 2004, held at BARC, Mumbai.

**i. Affiliation to Professional society :**

Life member of Materials Research Society of India (MRSI).

