a. **Name** : **DR. PRASENJIT BARICK**

b. **Designation** : Scientist-D

c. Contact address :

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d. **Academic qualification** :

- B.Sc.(Tech) in Ceramic Technology from College of Ceramic Technology (University of Calcutta) (*Presently, Govt. college of Engineering and Ceramic Technology*), Kolkata, W.B., India.

- M. Tech in Ceramic Engineering from Institute of Technology-Banaras Hindu University (*Presently, Indian Institute of Technology - Banaras Hindu University*), Varanasi, U.P., India.

- Ph.D. in Metallurgical and Materials Engineering from Indian Institute of Technology Kharagpur, Kharagpur, W.B., India.
  Thesis title: Processing and structure - property relationships of nanocrystalline silicon carbide.

e. **Professional experience :**

(i) 2001-2002 : Site Engineer in 'Industrial Associates', Kolkata.
(ii) 2002-2003 : Project Assistant in 'C.G.C.R.I.', Kolkata.
(iii) 2005-2006 : Assistant Manager in 'Mishra Dhatu Nigam Limited (MIDHANI)', Hyderabad.
(iv) 2006 onwards : Scientist at 'ARCI', Hyderabad.

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

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

g. List of publications :

1) S.V. Amrut Raj, D.C. Jana, **P. Barick**, B. P. Saha, Microstructure evolution in densification of SiC ceramics by aluminium vapour infiltration and investigation of mechanical properties, Ceramics International, doi.org/10.1016/j.ceramint.2018.02.132, 2018, Article in press.

2) **P. Barick**, R. Mitra , B.P. Saha, Influence of a few important parameters on the rheological behaviour of silicon carbide nanoparticles dispersed aqueous suspension, Ceramics International, https://doi.org/10.1016/j.ceramint.2018.02.113, 2018, Article in press.

3) **P. Barick,** A. Chatterjee, B. Majumdar, B.P. Saha, R. Mitra, Comparative evaluations and microstructure - mechanical property relations of sintered silicon carbide consolidated by various techniques, Metallurgical and Materials Transaction A (2018) 49(4) : 1182-1201.

4) **P. Barick,** B.P. Saha, S.V. Joshi, R. Mitra, Spray-freeze-dried nanosized silicon carbide containing granules: Properties, compaction behaviour and sintering, Journal of European Ceramic Society, 36(2016) 3863-3877.

5) **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 β-SiC nanopowder and sintering additives, Ceramics International 42(2016) 3836-3848.

6) **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.

7) **P. Barick**, D.C. Jana, B.P. Saha, Load-dependent indentation behavior of β-SiAlON and α-Silicon carbide, Journal of Advanced Ceramics 2 (2013) 185-192.

8) **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.

9) I.Ganesh, N. Thiyagarajan, D.C. Jana, **P. Barick,** and G. Sundararajan, An aqueous gelcasting route to dense β-$Si_4Al_2O_2N_6$-0.5SiO_2 ceramics, Journal of American Ceramic Society, 91 (2008) 1566 –1571.

10) I.Ganesh, N. Thiyagarajan, D.C. Jana, **P. Barick,** G. Sundararajan, and J.M.F. Ferreira, Dense β- SiAlONs consolidated by a modified hydrolysis assisted solidification route, Journal of European Ceramic Society, 28 (2008) 879-885.

11) S. Ghosh, R. Lodha, **P. Barick,** S. Mukhopadhayay, Improvement of thermal characteristics of refractory castable by addition of gel-route spinel nanoparticles, Materials and Manufacturing processes 22 (2007) 81-90.

12) S. Mukhopadhayay, 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 poster on ‘Effect of processing parameters on the characteristics of spray -freeze - dried silicon carbide granules and its importance on the improvement of mechanical properties, in ‘81st annual session of Indian Ceramic Society and International Conference on Expanding Horizons of Technological Applications of Ceramics and Glasses (EH-TACAG’17)’, on 14 - 16 December, 2017, held at COEP, Pune, Maharashtra, India.

2. 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, India.

3. 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, U.P. India.

4. Presented a paper on ‘Synthesis and characterization of nanozirconia powder’ in ‘68 th anuual session of Indian Ceramic Society’, on 21-24 December, 2004, held at BARC, Mumbai, Maharashtra, India.

i. Affiliation to Professional society :

(a) Life member of Materials Research Society of India (MRSI).
(b) Life member of Indian Ceramic Society (InCerS).