

## **BIO DATA**

Dr. Bhaskar Prasad Saha did his B.Tech. from Calcutta University in ceramic engineering followed by his Masters in Metallurgy from IIT Kanpur. He has also obtained his Ph.D. in Material Engineering from Indian Institute of Science (IISc), Bangalore. Dr. Saha has vast work experience in the field of powder metallurgy, oxide and non-oxide ceramic processing specially in SiC based optics, nitride and boride based structural ceramics, Cellular ceramics, Solid Oxide Fuel cells, low dielectric and thermal Shock resistant materials etc. Dr. Saha is at present a senior scientist in International Advanced



Research Centre for Powder Metallurgy and New Materials (ARCI) and heads the of Non Oxide Ceramics group at ARCI. He has authored more than 40 technical papers and a book chapter in national and international reputed journals and has 9 patents in his credit. He is a recipient of Malaviya Award – 2019 conferred by Indian Ceramic Society. He is a member of both Indian and American Ceramic Society

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| Fields of Research Interest           | : Oxide and Non Ceramic Processing<br>Cellular ceramics, Optical Ceramics<br>Solid Oxide Fuel cells, Composite<br>Thermal Shock resistant materials                          |
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| Affiliation to professional societies | : American Ceramic Society<br>Indian Ceramic Society.  |

## **LIST OF PAPERS PUBLISHED**

1. Swathi Manivannan, Papiya Biswas, Prasenjit Barick, Sweety Kumari, **Bhaskar Prasad Saha**, Roy Johnson , Comparative Study on Compaction and Sintering Behavior of Spray and Freeze Granulated Magnesium Aluminate Spinel Powder, Transactions of the Indian Ceramic Society
2. Prasenjit Barick and **Bhaskar Prasad Saha**, Effect of boron nitride addition on densification, microstructure, mechanical, thermal and dielectric properties of  $\beta$ -SiAlON ceramic, Journal of Materials Engineering and Performance (Accepted)
3. Shaik Mubina, M. Ilaiyaraja, Asit Kumar Khanra, **Bhaskar Prasad Saha** “Fabrication and microstructure analysis of continuous C fibers reinforced SiC-Cnfs hybrid composite tubes”, Materials and Manufacturing Processes, Accepted-2020, <https://doi.org/10.1080/10426914.2020.1832685>.
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6. P. Barick, B.V. Shalini, M. Srinivas, D.C. Jana, **Bhaskar Prasad Saha**, “A facile route for producing spherical granules comprising water reactive AlN added composite powder”, *Advanced Powder Technology*, Vol. 31, No. 5( 2020), pp 2119-2027, DOI : <https://doi.org/10.1016/j.appt.2020.03.009>. I.F. 4.217.
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9. Ummen Sabu, Bhaskar Majumdar, **Bhaskar Prasad Saha** & Dibakar Das, “Spark Plasma Sintering of Silicon Carbide with Al<sub>2</sub>O<sub>3</sub> and CaO: Densification Behavior, Phase Evolution and Mechanical Properties,” Transactions of the Indian Ceramic Society, vol. 77, no. 4, pp. 1-7 (2018).

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11. D.C. Jana, P. Barick, **Bhaskar Prasad Saha**, "Effect of sintering temperature on densities and mechanical properties of solid-state sintered silicon carbide ceramics and evaluation of failure origin", *Journal of Materials Engineering and Performance*, Published online 15<sup>th</sup> May 2018.
12. S.V. Amrut Raj, D.C. Jana, P. Barick, **Bhaskar Prasad 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.
13. P. Barick, R. Mitra, **Bhaskar Prasad 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.
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27. **Bhaskar Prasad Saha**, SweetyKumari, N. Eswar Prasad and Roy Johnson, “Effect of Relative Density on the Compressive Flow Behaviour of Cordierite and Cordierite: Mullite Honeycombs”. *Transactions of the Indian Institute of Metals* (2010) 63:701-706.
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### **BOOK CHAPTER**

1. D. C. Jana and **Bhaskar Prasad Saha**, "Silicon carbide based lightweight mirror blanks for space optics applications". In: Y. R Mahajan and R. Johnson (Eds) Handbook of Advanced Ceramics and Composites Applications, First Edition, Springer, NY (Accepted).

### **PATENTS (INDIAN) AWARDED/FILED**

1. An Indirectly Heated Catalytic Convertor for use in Vehicles. G.S. Bhattacharjee, Roy Johnson, Bhaskar Prasad Saha, (Indian Patent. No. 185433 Dated August 25, 1994)
2. New Composite Material (Ceramic Honeycomb based) having good Shock Attenuating Properties, Roy Johnson, Bhaskar Prasad Saha and YR Mahajan (Indian Patent. No. 194524 Dated 06-05-1998)
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7. Bhaskar Prasad Saha, Roy Johnson, I. Ganesh, S. Bhattacharjee, and Y.R. Mahajan, Improved additive composition useful for the preparation of alumina based abrasion resistant material having improved wear properties and methods for their preparation, (Appl. No. 122/MAS/2000, Date of filing: 18 February, 2000)
8. Iouri Fomichev, I.Ganesh, Bhaskar Prasad Saha, Roy Johnson, N. Thiyagarajan, Y.R. Mahajan, and V. Mahender. An improved method for making honeycomb extrusion die and a process for producing Ceramic honeycomb structures using the die, (Indian Patent. No. 198045, Dated : 3-07-2001). Roy Johnson, Bhaskar Prasad Saha and V.V.S. Rao (Indian Patent. Filed on 11-05-2020), A device for disinfecting and/or decontaminating personal protective ceramic equipment and the method