

“Education is the Manifestation of Perfection Already in Man”

– Swami Vivekananda

Dr. Soumya Sarkar

Joined CSIR-CGCRI, Kolkata on 1st November 2012

Dr. Soumya Sarkar

Senior Technical Officer (3),

Advanced Ceramics & Composites Division (A.C.C.D.),

CSIR-Central Glass & Ceramic Research Institute (CSIR–CGCRI), Kolkata, W.B., India.

Education:

Degree	Discipline	University: Year of Passing
<i>Ph.D.</i>	<i>Engineering</i>	<i>Jadavpur University, Kolkata, W.B., India : 2014</i>
<i>M. Tech.</i>	<i>Materials Science</i>	<i>Indian Institute of Technology, Kanpur, U.P., India : 2007</i>
<i>B. Tech.</i>	<i>Ceramic Technology</i>	<i>University of Calcutta, Kolkata, W.B., India : 2003</i>

Professional Career:

Institution	Designation	Span
<i>CSIR-CGCRI, Kolkata-700032</i>	<i>Senior Technical Officer (2)</i>	<i>2012 – 2017</i>
<i>CSIR-CGCRI, Kolkata-700032</i>	<i>Senior Technical Officer (3)</i>	<i>2017 – Present</i>

Projects (As PI, Co-PI & Member):

Project outline	Funding Agency	Span	Role
<i>“Fabrication & Characterizations of Non-oxide Fibre Reinforced Carbide Matrix Based Composites for Aerospace Applications”</i>	<i>CSIR, Delhi, India</i>	<i>Feb’ 2021 – Jan’ 2024</i>	<i>Member</i>
<i>“Pressure Assisted Sintering & Tribo-mechanical Characterizations of Carbide & Oxy-nitride Based Composites for Cutting & Milling Operations”</i>	<i>CSIR, Delhi, India</i>	<i>Aug’ 2018 – Mar’ 2020</i>	<i>Co-PI</i>
<i>“Processing of High Heat-resistant Enamel Frits for Aero-engine Applications”</i>	<i>HAL, India</i>	<i>Sep’ 2017 – Dec’ 2019</i>	<i>Co-PI</i>
<i>“Pressure Assisted Sintering & Characterizations of Oxy-nitride Based Ceramics for High Speed Cutting Applications”</i>	<i>CSIR, Delhi, India</i>	<i>Oct’ 2016 – Oct’ 2018</i>	<i>Member</i>
<i>“Formability & Thermo-mechanical Testing of Carbide based Open/Closed Cell Ceramics for Thermal Insulation”</i>	<i>DMSRDE, Kanpur, India</i>	<i>Jul’ 2014 – Jul’ 2016</i>	<i>PI</i>
<i>“Pressure Assisted Sintering & Thermo-</i>	<i>DMSRDE,</i>	<i>Aug’ 2013 – Aug’ 2015</i>	<i>Member</i>

<i>mechanical Testing of Dense Monolithic Carbide Ceramics for Aerospace Applications”</i>	<i>Kanpur, India</i>		
<i>“Pressureless & Pressure Assisted Sintering, Assembling & Testing of Dense Monolithic Oxide & Carbide Ceramics for Strategic Applications”</i>	<i>CSIR, Delhi, India</i>	<i>Apr’ 2012 – Mar’ 2017</i>	<i>Member</i>

SCI & Non-SCI Journal Publications:

- **SCI:** 32 nos.
- **Non-SCI:** 08 nos.
- **Total Citations 2018 onwards: 414; h-index: 12; Source: Google Scholar).**

Conference Contributions:

- 28 nos. (International & National Conferences: Oral & Poster).

Book Chapters:

- 2 nos.

Patents:

- None.

Five Selected Publications:

1. **S. Sarkar, P. K. Das**, “*Temperature and load dependent mechanical properties of pressureless sintered carbon nanotube/alumina nanocomposites*”, Mater. Sci. Eng.: A–Struct, 531 (2012) 61-69.
Impact Factor: 6.044 (Year: 2021; Update: 2022).
2. **Sk. S. Hossain, S. Sarkar, N. K. Oraon, A. Ranjan**, “*Pre-ceramic polymer derived open/closed cell silicon carbide foam: microstructure, phase evaluation, and thermal properties*”, J. Mater. Sci., 51 [21] (2016) 9865–9878.
Impact Factor: 4.682 (Year: 2021; Update: 2022).
3. **S. Sarkar, S. Datta, S. Das, D. Basu**, “*Oxidation protection of gamma-titanium aluminide using glass-ceramic coatings*”, Surf. Coat. Technol., 203 [13] (2009) 1797-1805.
Impact Factor: 4.865 (Year: 2021; Update: 2022).
4. **S. Sarkar, R. Halder, M. Biswas, S. Bandyopadhyay**, “*Densification, microstructure and tribomechanical properties of SPS processed β -SiAlON bonded WC composites*”, Int. J. Refract. Metal Hard Mater., 92 (2020) 105318.
Impact Factor: 4.804 (Year: 2021; Update: 2022).
5. **S. Sarkar, A. Dey, P. K. Das, A. K. Mukhopadhyay, A. Kumar**, “*Evaluation of micromechanical properties of carbon/carbon and carbon/carbon-silicon carbide composites at ultra-low load*”, Int. J. Appl. Ceram. Technol., 8 [2] (2011) 282-297.
Impact Factor: 2.328 (Year: 2021; Update: 2022).

Research & Technical Interests:

- Carbon Nanotubes & Chopped Carbon Fibres Reinforced Oxide & Non-oxide Based Composites: Fabrication, Tribo-mechanical & Thermal Characterizations.
- Operation of Sophisticated & State-of-the-Art Instruments, especially, for Non-oxide Ceramics & Composites: Processing & Characterizations.

Doctoral/PG/UG Supervision:

- Ph. D.: None.
- M. Tech.: 3 nos.
- B. Tech.: 1 no.

Awards/Recognitions:

1. *Production Engineering Division Prize by The Institution of Engineers (India) on 27th December 2019 for a paper published in Journal of The Institution of Engineers (India): Series C, 99 [6] (2018) 693-699.*
2. *Senior Research Fellowship, Council of Scientific and Industrial Research (CSIR), India, for Ph. D. (Engineering) during 2008–2012.*
3. *2nd Topper in the Batch of 2007 in Materials Science Programme at I.I.T., Kanpur (CPI: 9.1 out of 10.0).*
4. *Academic Excellence Award, I.I.T., Kanpur, India, Year of Award: 2006.*
5. *Scholarship, Ministry of Human Resource Development (MHRD), India for Studying M. Tech. during 2005–2007 through qualifying GATE–2005 (All India Rank: 79 in XE Category).*
6. *Certificate of Proficiency for B. Tech. Project, Year of Award: 2003.*

*"কষ্ট যদি দাও হে প্রভু, শক্তি দিও সহিবারে।
হৃদয় আমার যোগ্য কর, তোমার বাণী বহিবারে।।"
--রবীন্দ্রনাথ ঠাকুর*