

Brief Biodata

Name: Dr. Sadiya Waseem

Designation:	Scientist	
DP No. and Name:	1.06 and Pressure, Vacuum & Ultrasonic Metrology	
DU No. and Name:	1.0 and Physico-Mechanical Metrology	
Email:	sadiya.nplindia@csir.res.in	
Date of Joining CSIR-NPL:	22-09-2025	
Phone (office)	+91-11-47091183	

Research Area/ Interest

Pressure & Vacuum Metrology with background in Carbon Materials, Raman Spectroscopy under high pressure and low temperatures

Educational Qualifications

(Please write latest qualification first)

Degree	Subject	University/ Institute	Year
Ph.D	Physical Sciences	CSIR-NPL, AcSIR, Delhi	2022
M.Sc.	Physics	Jamia Millia Islamia University, Delhi	2015
B.Sc. (Hons.)	Physics	Miranda House, University of Delhi, Delhi	2013

Academic / Research Experience

Grade / Post	Institute	Duration		Research Field
		From	To	
Scientist	CSIR-NPL, Delhi	22-09-2025	Date	Pneumatic Pressure Metrology
JRF & SRF	AcSIR, CSIR-NPL, Delhi	10-08-2016	28-04-2022	Development & Characterization of Carbon Fiber based Composites for Advanced Energy Applications

No. of Publications

No. of Publications in SCI Journals	No. of Publications in non-SCI Journals	No. of Publications in Conference Proceedings	Books (Chapters)	Books	Total
07	--	11	06	01	25

Selected Publications

- **Waseem, S.,** Dubey, P., Singh, M., Sundriyal, S., & Maheshwari, P. H. (2023). Chemically Oxidized Carbon Paper as a Free-Standing Electrode for Supercapacitor: An Insight into Surface and Diffusion Contribution. *ChemistrySelect*, 8(9), e202204377.
<https://doi.org/10.1002/slct.202204377>
- **Waseem, S.,** Nithya, C., Maheshwari, P. H., & Dhakate, S. R. (2020). Carbon Paper as a Promising Free Standing Anode for Sodium Ion Batteries. *Journal of The Electrochemical Society*, 167(16), 160538.
<https://doi.org/10.1149/1945-7111/abd1f5>
- **Waseem, S.,** Maheshwari, P. H., Maheshwari, P., Sahu, A. K., Saini, A., & Dhakate, S. R. (2020). Configuring the porosity and microstructure of carbon paper electrode using pore formers and its influence on the performance of PEMFC. *Energy & Fuels*, 34(12), 16736-16745.
<https://doi.org/10.1021/acs.energyfuels.0c02838>
- **Waseem, S.,** Maheshwari, P. H., Abinaya, S., Sahu, A. K., Saini, A., & Dhakate, S. R. (2019). Effect of matrix content on the performance of carbon paper as an electrode for PEMFC. *International Journal of Energy Research*, 43(7), 2897-2909.
<https://doi.org/10.1002/er.4432>
- Saini A., P.H. Maheshwari, S.S. Tripathy, **S. Waseem,** S. Dhakate, Processing of rice straw to derive carbon with efficient de-fluoridation properties for drinking water treatment, *Journal of Water Process Engineering*, 34 (2020) 101136.
<https://doi.org/10.1016/j.jwpe.2020.101136>
- Saini, A., Maheshwari, P. H., SwarupaTripathy, **S., Waseem,** S., Gupta, A., & Dhakate, S. R. (2021). A Novel Alum impregnated CaO/carbon composite for de-fluoridation of water. *Groundwater for Sustainable Development*, 100622.
<https://doi.org/10.1016/j.gsd.2021.100622>

Patents

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Current Activities

(Not more than 100 words)

- Operations, maintenance of National Pneumatic Primary & Secondary Pressure Standards & its dissemination through apex level calibrations.
- High Pressure and low temperature Raman Spectroscopy

Honour(s)/Award(s)/ Fellowship(s)

- Awarded Gold Medal for securing highest percentage in MSc (Physics), 2015.
- Awarded DST INSPIRE Fellowship, 2016.
- ESEP, summer school training program, The University of Tokyo, Japan, 2018.

Contributions to AcSIR

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Membership of Professional Societies/ Institutions

Indian Carbon Society (ICS)

Any other Information

(Not more than 100 words)

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