Detailed Bio Data

Name of the faculty	Dr. Sudheshna Moka		
Designation	Assistant Professor		
Department	Chemical Engineering		
Date of Joining the Institute	22-Aug-2017		
University / Institute	**UG**	**PG**	**Ph.D. (Title)**
	IIT Madras	IISc Bangalore	IIT Delhi (Fractal patterns formed by pollution-preventing microemulsion and bi-liquid foam inks at the air-water interface)
Total Experience in years **(Post Ph.D)**	**Teaching**	**Research**	**Industry**
	11 months	NIL	5.5 (before PhD)
Paper Published	**National**		**International**
	-		3
Conference Attended	**National**		**International**
	4		4
Details of Research work/Area	• Pollution preventing printing inks based on microemulsion and bi-liquid foams. • Pattern formation at interfaces • Alternative fuels • Rheology of viscoelastic fluids • Pollution preventing technologies • Granular flows • Population balance modeling ; Image processing techniques		
Book Published/IPRS/Patents	2 Patents (filed) (Pollution-preventing Microemulsion inks)		
Professional Membership	Society of Rheology		

Awards	-
Grants Fetched	-
Contact Information (Email)	sudheshna.che@iipe.ac.in

List of Publications:

(i) Sudheshna Moka, Prabhu R Nott, "Statistics of Particle Velocities in Dense Granular Flows" **Physical Review Letters (PRL), American Physical Society**: [PRL 95, 068003 (2005)]

(ii) Ananda K. S, Sudheshna Moka, Prabhu R. Nott " Kinematics and statistics of dense, slow granular flow through vertical channels ", **Journal of Fluid Mechanics: 610 . pp. 69-97.** (2008)

(iii) Sangeeta, Sudheshna Moka, Maneesha Pande, Monika Rani, Ruchi Gakhar, Madhur Sharma, Jyoti Rani and Ashok N. Bhaskarwar., "Alternative fuels: An overview of current trends and scope for future". **Renewable and Sustainable Energy Reviews**, 2014, vol. 32, issue C, pp.697-712

(iv) Sudheshna Moka and Ashok N Bhaskarwar, "Rheology of Pollution preventing inks based on a combination of microemulsion and resin", *88th Annual Meeting: The Society of Rheology,* 12-16 February, 2017, Tampa, Florida

(v) Sudheshna Moka and Ashok N Bhaskarwar, "Spreading of ink on water surface", *2nd International Conference on Soft Materials*, 12-16 December, 2016, Jaipur, India.

(vi) Ankita Taneja, Sudheshna Moka and Ashok N Bhaskarwar, "Rheology of biliquid foams", CHEMCON, 27-30 December, 2014, Chandigarh, India

(vii) Sudheshna Moka, Prabhu R Nott, "Shear in Granular Flows through Vertical channels", presented at *Indian Chemical Engineering Congress – (*CHEMCON 2004) in Indo-US session during 27th to 30th Dec 2004 at Mumbai.

(viii) Sudheshna Moka, Prabhu R Nott, "Study of experimental phenomena of Granular Flows through vertical channels" published in the proceedings of *22nd International Conference on Statistical Physics (STATPHYS-22*) during July4-9, 2004 at IISc, Bangalore.

(ix) Sudheshna Moka, Prabhu R Nott, "Study of shear in dry granular flows through vertical channels", poster presented at international conference on "*Advances in Fluid Mechanics*" during July 24th – 25th , 2003, JNCASR, IISc, Bangalore.

(x) Sudheshna, M., Ratheesh, S. and Kannan, A., "Revamping of Distillation Columns with Structured Packing", Presented at CHEMCON 2002 (Paper no. 253), 55th Annual session of Indian Institute of Chemical Engineers, Hyderabad (2002).