

Curriculum Vitae

Dr. Samita Maitra, PhD(IISc)

Professor & Dean(Academics)

Department of Chemical Engineering

(Program Accredited by NBA for 5 Years in Tier-1 format)

B M S College of Engineering

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Educational Qualification:

- Ph.D. in Chemical Engineering, Indian Institute of Science, Bangalore (2000), Thesis Title: Modeling of Foam Drainage and Separation of Protein mixtures by Foaming (Advisors: Prof. R. Kumar and Prof. K.S. Gandhi)
- Post-doctoral Research associate at Indian Institute of Science in department of Chemical Engineering 2000-2001
- M.Sc. (Engg.) in Chemical Engineering, Indian Institute of Science, Bangalore (1994) Thesis Title: Prediction Of separation factor in foam separation of Protein (Advisors: Prof. R. Kumar and Prof. K.S. Gandhi)
- B.Tech. in Chemical Engineering, Calcutta University (1991), First Class with Distinction

Sponsored Projects Handled:

- MHRD Sponsored GIAN course coordinator for Study of effect of heavy metals in bore well water on human system, November 14 to 22nd 2016 with Dillard University, New Orleans, USA
- TEQIP-II Funding for Post-Graduation in Biochemical Engineering laboratory establishment of worth 35 L
- AICTE, RPS of Rs. 6.5 Lakh, Topic: Recovery of Glycerol from Biodiesel Plant, Completed in 2013
- AICTE funded MODROBS of Rs. 14.9 Lakh Completed in 2009
- KSCST-4 Projects

Award Received:

- 11th DNA Innovative Education Leadership Awards scheduled on 16th February, 2019
- Guide for SPP First Prize awarded by KSCST in 2016
- National Level Best Teacher in Chemical Engineering award given by *Vijayavani* the leading daily in Karnataka, 2015
- As head of the department in Chemical Engineering received 5 Years Accreditation from National Board of Accreditation in Tier-1 format in 2014
- Started Post Graduation course in Biochemical Engineering at Chemical Engineering, BMSCE on 2013-14.
- National Scholarship for securing first class in Calcutta University
- General Merit Senior Research scholar at Indian Institute of Science, Bangalore from 1004-2000.

Curriculum Vitae

Experience:

- Post-doctoral Research associate at Indian Institute of Science in department of Chemical Engineering 2000-2001
- Senior Research Fellow at Indian Institute of Science, Bangalore from 1996-2000
- Junior Research Fellow at Indian Institute of Science, Bangalore from 1994-1996
- Masters in Engineering Research scholar at Indian Institute of Science, Bangalore from 1992-1994
- Lecturer in department of Chemical Engineering, BMS College of Engineering, Bangalore 2001-2004
- Assistant Professor in department of Chemical Engineering, BMS College of Engineering, Bangalore 2004-2007
- **Professor in department of Chemical Engineering, BMS College of Engineering, Bangalore , 2007**
- Project guide to Mr. Rakshit P [1BM14BCE08] for obtaining Best PG Project Filtration & Purification of Water Contaminants such as Heavy Metals and Dyes using Agriculture based by products for Bio sorption in 2016 under KSCST, Karnataka
- Head of the department in department of Chemical Engineering, BMS College of Engineering, Bangalore from June 2007 to December 2016.
- Women Cell-BMSCE Chairperson
- National Board of Accreditation, India Evaluator
- Board of Governance invited member at BMSCE up to March 2019
- Board of Studies member in VTU, Belgavi for Chemical Engineering
- Conference Chair for IEEE Sponsored International Conference on MOOCs Innovation and Technology in Education[MITE] 2017 at BMSCE Bengaluru
- Part of National Digital Library (NDL) Project of Central Library (ISO-9001:2008 Certified) Indian Institute of Technology, Kharagpur
- **Dean(Academics)** January 2019
- **Reviewer for IEEE Access**

Training program attended last five years:

- Workshop on AICTE Model Curriculum for UG and PG organised by VTU, Belagavi on 12/3/2018. Attended as BOS Member of VTU.
- Workshop on ‘ New Model Curriculum for PG courses (Mtech/MBA/MCA) CBCS Detailed Syllabus (2018019) as per Outcome-Based Education (OBE) format including Course Outcomes (CO) and Bloom’s Taxonomy’ organised by VTU, Belagavi on 0608/2018. Attended as BOS Member of VTU at BNMIT, Bangalore
- Workshop on Taxonomy and Course Outcomes, VTU Regional Center, Bangalore, January 9 & 10, 2017. Resource Person Prof. N J Rao, IISc and Prof. Rajanikanth, MSRIT

Curriculum Vitae

- World Summit on Accreditation, New Delhi by National Board of Accreditation, India, March 18-20, 2016
- National Board of Accreditation training for National Evaluator on 21st May 2016, Anna University Chennai.
- Indian Institute of Management, Lucknow at Noida Campus one week leadership training program, 2-6 October 2015 on Management Capacity Enhancement Program.
- Co-organized and attended at BMSCE, ICTIEE-2015 International Conference of Transformation in Technical Education, January 5-8 2015.
- ICTIEE-2014, Hubbli, January 11-14th 2014
- Outcome based Education by NBA at PES College of Engineering, Bangalore, May9-11th 2013.

PhD Guidance:

Serial No.	Name	Status
1	Usha H S	Received PhD degree on 9 th January 2018
2	Sreelakshmi D	Received PhD Degree on 31 st August 2018
3	Shivakumar R	Completed Comprehensive viva on January 2018

Publications

Sl. No.	Title of the Paper	Author	Name of the Journal/seminar/Conference	Date of Publication
27	Practice of Self-Study for Outcome Based Education: A Case Study	Keertiga Gopalram and Samita Maitra	https://ieeexplore.ieee.org/document/8596681 DOI: 10.1109/MITE.2017.00006 ISBN Information: Electronic ISBN: 978-1-5386-3189-8 Print on Demand(PoD) ISBN: 978-1-5386-3190-4	31/12/2018
26	Collaborative Interdisciplinary Teaching and Learning Across Borders, Using Mobile Technologies and Smart Devices	Julie Basu Ray and Samita Maitra	https://ieeexplore.ieee.org/document/8596695 DOI: 10.1109/MITE.2017.00020 ISBN Information: Electronic ISBN: 978-1-5386-3189-8 Print on Demand(PoD) ISBN: 978-1-5386-3190-4	31/12/2018
25	Utilization of	Shivakumar R,	https://ieeexplore.ieee.org/document/8596700	31/12/2018

Curriculum Vitae

	Unisim Design Tool for Enhanced Learning and Assessment in Engineering Education	Sreelakshmi Diddi and Samita Maitra	DOI: 10.1109/MITE.2017.00025 ISBN Information: Electronic ISBN: 978-1-5386-3189-8 Print on Demand(PoD) ISBN: 978-1-5386-3190-4	
24	Teaching Methodology To Improve The Peer Learning And Team Building;	Shivakumar R, Samita Maitra and K Mallikharjuna Babu	International Conference on Transformations in Engineering Education –Imparting Futuristic Skills	July 15 to 17, 2018
23	Comprehending The Outcomes Of The Post Graduate Engineering Program	KanmaniB and SamitaMaitra	International Conference on Transformations in Engineering Education –Imparting Futuristic Skills	July 15 to 17, 2018
22	Adopting Technology In Engineering Education To Create Enhanced Learning Opportunities To The Students;	KanmaniB, SamitaMaitra and K.MallikharjunaBabu,	International Conference on Transformations in Engineering Education –Imparting Futuristic Skills	July 15 to 17, 2018
21	Studies on the ability of aqueous extract of Sapindus Mukorossi to solubilize polyaromatic hydrocarbons and complex hydrocarbon mixtures	Sreelakshmi Diddi and Samita Maitra,	Int. J. Appl. Environ. Sci., Vol. 12, No. 7, pp. 973–6077, 2017	2017
20	Ethics and soft skill assessment tool for Program	Samita Maitra	Fourth IEEE International Conference on MOOCS, Innovation and Technology in Education (MITE'16)	December 26 th September, 2017

Curriculum Vitae

	Outcome attainment : A case study		DOI 10.1109/MITE/2016.069	
19	Effect of throat diameter in two phase flow	Maitra Samita, et al.,	CHEMCON 2016 Chennai Conference	December 26, 2016
18	Collaborative Teaching at Undergraduate Institutions: Across Borders, Across Disciplines	Maitra Samita, et al.,	International Conference on collaborative Learning, Belfast, UK, Springer Journal	September 22-24, 2016
17	Synthesis Characterization and Application of Polyglycerol Esters of Fatty Acids: Biodegradable Surfactants	Usha H S and Samita Maitra	Journal of Dispersion Science and Technology DOI: 10.1080/01932691.2015.1025137 Volume 37, Issue 1, 2016	pages 41-47
16	Importance of course sequencing in overall learning	Maitra Samita, et al.,	MOOC, Innovation and Technology in Education (MITE), 2015 IEEE International conference DOI: 10.1109/MITE.2015.7375315	2015 Pages: 204-207
15	Method for estimation of Attainment of Program outcome through Course outcome for Outcome based Education	Maitra Samita, et al.,	MOOC, Innovation and Technology in Education (MITE), 2014 IEEE International conference DOI: 10.1109/MITE.2014.7020231.	2014 , Page(s): 7- 12
14	Teaching Methodology for attainment of graduate attributes	Maitra Samita, et al.,	MOOC, Innovation and Technology in Education (MITE), 2014 IEEE International conference DOI: <u>10.1109/MITE.2014.7020282.</u>	2014 Page(s): 250 - 255
13	Establishing Program Educational Objectives	Maitra Samita, et al.,	JEET Journal , Volume 29, Number 2, October 2015, ISSN 2349-2473, eISSN 2394-1707	Page 53-58
12	Study of flow behaviour in capillary channel for acetic acid/kerosene	Maitra Samita, et al.,	Journal of Chemical Engineering and research,	2014, pp. 43-49

Curriculum Vitae

	system			
11	Purification of N-propanol mixtures using surfactants	Maitra Samita, et al.,	Journal of Chemical Engineering and research,	2014, pp. 85-90
10	Enhancement in aqueous solubility of anthracene using surfactants	Sreelakshki D, H S Usha , Samita Maitra,	Journal of Chemical Engineering and research,	2014, pp. 241-247
9	Effect of activation parameters on corrosion rate of mild steel plates for different concentration of caffeine as inhibitor	Maitra Samita, et al.,	National symposium on Environemnt, NSE-18.	11-12 th March, 2013
8	Removal Benzene from Contaminated Soil using anionic surfactant	Sreelakshki D, H S Usha , Samita Maitra,	CHEMCON'11, Paper # 839 Page number 315-319, 2011	Dec 27-29, 2011
7	Supercapacitor Using a Liquid Dielectric Material	Maitra Samita, et al.,	International Journal of Scientific and Research Publications ISSN 2250-3153, Volume 4, Issue 11 online publication under ISSN 2250-3153	November 2014,
6	Women and Higher Education- Current perspective	Samita Maitra	(Environmental Advisory for Sustainable Trust), Tirunalveli, Tamilnadu (http://www.wegp.org/).	September, 2013
5	Prediction of separation factor in foam separation of proteins,	Bhattacharjee Samita, Kumar R and Gandhi K S	Chemical Engineering Science, 1997, 52(24)	Pages 4625-4636
4	Modeling of Protein mixture separation in a batch foam column	Bhattacharjee Samita, Kumar R and Gandhi K S	Chemical Engineering Science, 2001, 56	Pages 5499-5510
3	Removal of benzene from Contaminated Soil using an Anionic Surfactant,	Maitra Samita, et al.,	Proceedings in Chemical Engineering Congress, 2011	Page 315-319
2	Modeling of	Samita Maitra and	Proceedings of CHEMCON-2011, Volume I	

Curriculum Vitae

	nutrient transport through 3D scaffold papered by phase separation micro moldings,	N.M.Srivatsa Bettahalli,		
1	Effect of activation parameters on corrosion rate of mild steel plates for different concentration of caffeine as inhibitor	Samita Maitra and Shivakumar R	18 th National Symposium on Environment, BARC & JNTU, Anathpur Jointly organized symposium proceedings, March 2013.	

Curriculum Vitae

Project Batches guided

Sl.	Project Title	Project Batch	US Number
1.	Extraction of Caffeine from Tea and Coffee	Aditishankar Rao	1BM00CH002
		Anisha Krishnan	1BM00CH004
		Shilpa Y Halliyal	1BM00CH029
		Shobha T N	1BM00CH002
2.	Analysis of Proteins Using Gel Electrophoresis	Ranvir Ranjit Chager	1BM01CH008
		Deepak Shenoy M	1BM01CH009
		Sameer Rohit Patil	1BM01CH021
		Rohit Kumar	1BM01CH027
3.	Effect of Tip Seed on Productivity of Lovastation	Sudhir MVN	1BM03CH033
		Aditya Krishnan	1BM03CH001
		Maneka	1BM03CH018
4.	Biodiesel from Cottonseed Oil	Andhuth S Bharadwaj	1BM04CH004
		Charan K Mohan	1BM04CH007
		Roopa V Sajekan	1BM04CH029
		Shamitha K	1BM04CH032
5.	Biodiesel from spent Coffee Grounds	Alok Kumar	1BM05CH001
		Jay Poorna Reddy	1BM05CH008
		Samarth Neerav	1BM05CH026
6.	Corrosion Inhibition by Caffeine – Manganese System	Smitha Rao	1BM05CH017
		Sheha Tayur	1BM05CH031
		Tapesh Bardia	1BM05CH038
7.	Improving the Thermal and Mechanical Properties of Industrial Polyester Laminates	Rita Mendoza	1BM06CH032
		Goutham Ganeshan	1BM06CH011
		Santhosh Karanth	1BM06CH038
8.	Production of Lipase from Aspergillus Nigar	Ambika K	1BM07CH
		Chinnamma M	1BM07CH
		Rahul Unni Chakkungal	1BM07CH
		Shami Mohan	1BM07CH
9.	Degradation of Dyes	Kavitha Rani P	1BM07CH025
		Roopa V	1BM07CH040
		Navya S N	1BM07CH042
		Suman B R	1BM07CH051
10.	Dye Sensitized Solar Cells	Natasha Patrao	1BM08CH007
		Nikita Deora	1BM08CH028
		Nisha Kumari	1BM08CH029
		Varsha Prabhu	1BM08CH056
11.	Separation of Liquids Based on Density	Poorna Shrinith	1BM08CH035
		Vinutha N	1BM08CH059
		Navya S N	1BM08CH045
12.	Design & Fabrication of Trans-Esterification Unit to Produce and	Arunkumar H S	1BM09CH005
		Ganesh M Borkar	1BM09CH010

Curriculum Vitae

	Filter Bio-Diesel using Vegetable Oil	Lavanya R	1BM09CH017
		Rajkumar	1BM09CH036
13.	Ultra Capacitor Using Liquid Composite Dielectrical Material	Anup L	1BM10CH012
		Sandeep S	1BM10CH047
		Subramaniam T G	1BM10CH056
		Syed Faraaz Hussain	1BM10CH058
14.	Modification of Pour Point Characteristics of Bio-Diesel using Bio-Degradable Depressants	Chaitra Balur	1BM11CH010
		Nabin Agarwal	1BM11CH020
		RishiBagaria	1BM11CH033
		Vaishnavi Komaravolu	1BM11CH055

M.Tech Projects guided

Year	Title of the Project	Name	USN
2014	Quantification & Purification of Dairy Whey by Electrophoretic & Chromatographic Techniques	Divya C N	1BM13BCE03
2015	Media Optimization for Probiotics	Sona K	1BM14BCE13
2015	Evaluation of Cytotoxicity & Anti-inflammatory (Cox Inhibition) activity of Ethanolic Flower Extract of Calotropis Gigantea by flow Cytometry	Jyothi C H	1BM14BCE05
2015	Filtration & Purification of Water Contaminants such as Heavy Metals and Dyes using Agriculture based by products for Biosorption	Rakshit P	1BM14BCE08
2016	Synthesis and Characterization of Ceri Based Catalysts for Conversion of Crude Glycerol to fuel additive	Shreedevi S Talikoti	IBM15CE10
2016	Production and Study of Performance and emission characteristics of Diesel Engine with Blended Used-Vegetable oil Biodiesel	Deepthi G M	1BM15BCE03
2017	Utilization of Organic waste for production and enrichment of bio-gas	Namaskruta B S	1BM16BCE01