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WOS (h-index):20, Google (h-index): 23

Professional Experience:

- ❖ September 2016 – Till date: **Associate Professor, Department of Environmental Science and Engineering** Indian Institute of Technology (ISM)Dhanbad, Dhanbad-826004, Jharkhand, INDIA
- ❖ February 2010 –August 2016: **Senior Lecturer, Environmental Engineering Programme, Department of Civil Engineering**, Faculty of Engineering, University of Malaya, Kuala Lumpur-50603, MALAYSIA.
- ❖ February 2011 – August 2016: **Affiliated Member, Nanotechnology & Catalysis Research Center (NANOCAT)**, University of Malaya, Kuala Lumpur-50603, MALAYSIA.
- ❖ September 2009 – December 2009: **Assistant Professor (Tenure Track), Department of Chemical Technology, Chemical Faculty**, Politechnika Gdańska, ul. G. Narutowicza 11/12,80-233 Gdańsk, POLAND
- ❖ November 2008 – August 2009: **Assistant Professor, Department of Chemical Engineering**, National Institute of Technology Tiruchirappalli, Tiruchirappalli- 620 015, INDIA
- ❖ June 2008 – August 2008: **Senior Lecturer, Department of Chemical Engineering & Materials Science**, Amrita University, Coimbatore-641023, INDIA

Educational Qualification:

- ❖ **Ph.D., Chemical Engineering**, September 2008, Indian Institute of Technology Guwahati (IITG), Guwahati, INDIA(<http://gyan.iitg.ernet.in/handle/123456789/164>)Adviser(s): Prof. Dr. P. K. Saha, Prof. Dr .K. Pakshirajan
- ❖ **M.Tech, Environmental Engineering (First Class with Distinction)**, January 2003, Vellore Institute of Technology University, Vellore, INDIA
- ❖ **Post Graduate Diploma in Medical Instrumentation Technology, (First Class)** May 2001, Coimbatore Institute of Technology (Autonomous), Coimbatore, INDIA
- ❖ **B. Tech, Chemical Engineering, (First Class)** May 2000, University of Madras, Chennai, INDIA

Teaching Activities:

- ❖ **IIT(ISM)Dhanbad**, India
 - Handling/Handled **Environmental Nanotechnology, Design of Air Pollution Equipment's, Principles of Air and Noise, Air and Noise Pollution, Application of Environmental Management System, Environmental Economics, Environmental Management System & Audit**, for Environmental Engineering Under & Postgraduates,
 - **Industrial Pollution Control & Management** for Chemical Engineering Baccalaureate
 - **Environmental Science** for Fresh Man Students.
- ❖ **University of Malaya**, Malaysia

- Handled **Environmental Microbiology and Ecology, Air and Noise Pollution, Environmental Management System, Ecology Field Trip, Environmental Health Engineering & Environmental Chemistry** modules with laboratories for Environmental Engineering Undergraduates.
- Handled **Environmental Engineering** module for Civil Engineering Undergraduates
- ❖ **Politechnika Gdańska, Poland**
 - Handled **AUTOCAD & CHEMCAD** to chemical technology, environmental protection & Management undergraduate students
- ❖ **National Institute of Technology Tiruchirappalli, INDIA**
 - Handled **Nanotechnology** course and **guided projects** to chemical engineering undergraduate (B. Tech) students, Taught **Bio Processing Engineering** for post graduate students (M.Tech) and mentored thesis
 - Handled **Energy & Environment** to Fresh Man Students
- ❖ **Amrita University, INDIA**
 - Handled **Material Science**

Affiliations:

- ❖ Member (636438) Royal Society of Chemistry, UK
- ❖ Senior Member (9900121518), American Institute of Chemical Engineers(AIChE), USA
- ❖ Associate Member (LAM 29738), Indian Institute of Chemical Engineers, (IIChe), INDIA
- ❖ Member (M 1633325), Institute of Engineers India, (IEI), INDIA
- ❖ Reviewer: Many leading Journals

Research Dissertation: @University of Malaya

Name of Candidate	Title of thesis	Year Completed	Degree	Current Affiliation
Dr.A. Ashok Kumar Graduate of IITGuwahati, INDIA	Rheology and Particle Image Velocimetry	2013-2015	Post Doc	Assistant Professor, Periyar Maniammai University Thanjavur, India
Dr. Kang Yee Li: (Fast Track): My Brain Recipient (MOE, Malaysia)	Enhancement of Microbial Fuel Cell Anode through Functionalization of Conductive Polymer	2016	Doctoral	Environmental Sustainable Design Engineer G Energy Pvt.,Ltd MALAYSIA
Dr. Leong Kah Hon: Bright Spark Fellow(UM) Recipient	Preparation and characterization of Plasmonic triggered composite nano photocatalysts for visible light driven photocatalysis.	2015	Doctoral	Assistant Professor, Universiti Tunku Abdul Rahman , Kampar, MALAYSIA
Mrs. Anis Nurdhiani Rosdia: My Brain Recipient	Preparation and Characterization of Proton Exchange Membrane (PEM) Using Different Polystyrene	2015	M.Engg.Sci (Research)	Ph.D Scholar, Universiti Putra Malaysia

(MOE, Malaysia)	Precursors Through Varied Methods			
Dr. Sim Lan Ching: My Brain Recipient (MOE, Malaysia)	Synthesis of Solar and Visible-Light-Active Highly Ordered Titania Nanotube Arrays (TNTs) for Photocatalytic Applications	2015	Doctoral	Assistant Professor, Universiti Tunku Abdul Rahman , Kampar, MALAYSIA
Dr. Azrina Abd Aziz: My Brain Recipient (MOE, Malaysia)	Development and application of improved solar driven composite nano photocatalysts with enhanced recovery for the removal of organic pollutants	2013	Doctoral	Senior Lecturer, Universiti Malaysia Pahang , Kunatan MALAYSIA
Miss. Nur Atiqah Binti Surib	Design and Fabrication of Solar Light Responsive New Metal Organic Frameworks for Photocatalysis	2018	M.Engg.Sci (Research)	---

Research Dissertation (Doctoral): @ IIT(ISM)

Name of Candidate	Field of Research	Year of Enrolment
Mr. Ahmad Nawaz	Metal Oxide build Light Driven Nanomaterials	Summer 2016
Mr. Aneek Kuila	Metal Organic Frame Works build Light Driven Nanomaterials	Summer 2016
Mr. Nirmalendu S. Mishra	Metal Oxide and Graphene Build Nano Adsorbent	Summer 2016
Miss. Priya Mukherjee	Microbial Fuel Cell/Light Driven Nanomaterials	Summer 2017
Miss. Ankita Rani	Light Driven Nanomaterials/Z-scheme	Summer 2017
Miss. Utkarshni Sharma	Metal Organic Frame Works for Water Treatment	Winter 2018
Miss. Priyanka Mishra	Reverse Methanogenesis build Microbial Fuel Cell	Winter2018

Master Dissertation: @NITT India: 2, @IIT(ISM) India 8

Undergraduate Thesis Guided: 18

Moderated Thesis as External Examiner: 10

Internship Student @University of Malaya (2010-16):

Year 2011

Mr. Alabhya Kumar Mishra, IITKanpur, INDIA

Year 2012

Mr. Prateek Sachan, IIT Delhi, INDIA

Mr. Himanshu Patel, IIT Delhi, INDIA

Mr. Vijay Singh Kulhar, IIT Bhubaneswar, INDIA

Year 2013

Miss. Laura Digan, ENSIACET, Toulouse, FRANCE

Year 2014

Mr. Pratyush Kumar, IIT Roorkee, INDIA

Year 2015

Mr. Keshav Mehta IIT Roorkee, INDIA

Year 2016

Mr. Varun Punia, IIT Roorkee,INDIA

Internship Student @IITISM (2016-):

Year 2017-18

Miss.Triya Mukherjee, BHU, Varasani

Mr. Amit Bundela, BHU, Varasani

Research Endowment as Principal Investigator @ University of Malaya

No	Project No	Title	Duration	Allocation (MYR)	Funding Agency	Status
1	Strait Trading (E-00000-19103)	Establishing New Analytical Facility for Environmental Engineering.	2011-13	2500,000	Vice-Chancellor Special Grant	Completed
2	RG091-10SUS	Preparation of high surface area magnetically separable titanium dioxide with visible light property for environmental applications	2010-12	99,000	UMRG	Completed
3	RG167-12SUS	Development of modified TiO ₂ - photocatalyst for improved conversion of hydrocarbon fuel from Greenhouse gas (CO ₂)	2012-14	116,600	UMRG	Completed
4	UM.C/625/1 /HIR/053/2	Sustainable Energy Production from Palm Oil Industry Wastewater using Microbial Fuel Cell.	2011-13	189,000	High Impact Research(HIR), University of Malaya	Completed
5	PV092-2011A	Preparation of high surface area magnetically separable titanium dioxide with visible light property for environmental applications	2011-14	60,000	UMRG	Completed
6	PV106-2012A	Development of nano photocatalyst for the direct conversion of CO ₂ to hydrocarbon fuel	2012-15	26,800	UMRG	Completed

7	PG022-2013A	Preparation and Characterization of Proton Exchange Membrane From Sulfonated Polystyrene And Zeolite For Microbial Fuel Cell Application.	2013-16	16,000	UMRG	Completed
8	RP019B-13AET	Preparation and photoactivity of nanostructured composite strontium titanate (SrTiO ₃) for sustainable treatment of persistent organic pollutants (POPs)	2013 -16	163,000	UMRG Programme	Completed
9	FP051-2013B	Fundamental Exploration of Surface Plasmon Resonance Mechanism on Visible Light Absorption in Titania based Photocatalysts	2013 -17	122,000	Ministry of Education, Malaysia	Completed

Research Endowment as Principal Investigator @ IIT(ISM)

No	Project No	Title	Duration	Allocation (INR)	Funding Agency	Status
1	FRS(109/2016-17/ESE)	Facile synthesis of Light Driven Nanostructures Hybrid Pervoskite for Sustainable Treatment of POPs	2016-19	1000,000	IIT(ISM) Dhanbad	Completed
2.	ECR/2016/001400	Design and Development of Full Solar Spectrum Enriched Photocatalyst for Sustainable Water Treatment	2017-2020	1540,000	Science and Engineering Research Board(SERB), Early Career Award DST	Completed
3.	_IMP/2019/000286	Solar Driven Community Potable Water Purification System	2019-2022	7209,400	IMPRINT II-C SERB	Ongoing

Key Administrative Responsibilities Held at University of Malaya (2010-16):

- ❖ **Cluster Head**, Water Resources & Environmental Engineering, Department of Civil Engineering (2012-2016)
- ❖ **Member**, Curriculum Revision Committee: (2012-2016)
- ❖ **Member**, Accreditation Committee(EAC) (2012-2015)
- ❖ **Coordinator**, Under Graduate Thesis (Civil &Environmental Under Graduates):(2014-2016)
- ❖ **Faculty Coordinator**, Student Exchange for Indian Institute of Technology(IITs) India: (2012-2016)
- ❖ **Joint Secretary**, 11th International Conference on Concrete Engineering & Technology 2012 (CONCET 2012)
- ❖ **Member**, Master of Engineering Committee (Environmental Engineering):(2012-2016)

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- ❖ **Chairman**, Civil and Environmental Engineering Postgraduate Association (CEEPA) of the Malaya University
 - ❖ **Acting Head of Department** for many occasions
 - ❖ **Resource person** as **Technical member** for various purchase across the faculty and university

Key Administrative Responsibilities Held at IIT(ISM) (2016- till date):

- ❖ **Post Graduate Committee** (Dept. Level): Member (2018 to till date)

Major Accomplishments at University of Malaya

- ❖ Organized **11th International Conference on Concrete Engineering & Technology 2012 (CONCET 2012) -Joint Secretary**
- ❖ Established **New Analytical Facility for Environmental Engineering Research worth RM 2.5 million (~1 million US\$)**- Coordinator
- ❖ Received total **Research Endowment of RM 800K(~US\$200K)**

Invited/Keynote Lectures:

- ❖ Delivered Lecture on **“Light Driven Nanomaterials: A Leap from Laboratory to Real Life Application”** at 2nd International Conference on Bioprocess for Sustainable Environment and Energy (ICBSEE-India-2020) NIT Rourkela, INDIA, 05 -07 March 2020.
- ❖ Delivered Lecture on **“Light Driven Nanomaterials: A Leap from Laboratory to Real Life Application”** at National Conference on Water, Energy and Environment (WEECON'19), Hindustan Institute of Technology and Science Chennai, INDIA 21 March 2019.
- ❖ Delivered Lecture on **“Hidden Secrets Behind Nano-materials Analysis for Clinching Quality Publication”** at Centre for Nanotechnology/Department of Biotechnology, IIT Roorkee, Roorkee – 247667, INDIA 05 December 2018.
- ❖ Delivered Lecture on **“A Journey with Light Driven Nanomaterials”** at Centre for Nanotechnology/Department of Biotechnology, IIT Roorkee, Roorkee – 247667, INDIA 17 August 2017.
- ❖ Delivered Invited Lecture at **2nd International Workshop on Graphene and C₃N₄-based Photocatalysts (IWGCP2)** Organized by: State Key Laboratory of Advanced Technology for Materials Synthesis and Processing, Wuhan University of Technology, Wuhan, CHINA, March 24 - 27, 2017.
- ❖ Speaker, **International Winter School and Hands-on Training Programme on Nano-biotechniques (I WiSH NanoBio: 2016)** Organized by: Department of Biotechnology and Centre for Nanotechnology, IIT Roorkee, Roorkee – 247667, INDIA February 9 - 14, 2016.
- ❖ Delivered invited lecture at **Workshop on Nanotechnology** organized by Department of Physics Fatima College (Autonomous), Madurai, INDIA, 18 Dec 2015.
- ❖ Delivered key note lecture at **International Conference on Recent Advances Materials Research and its Applications (ICRAMRIA15)**, Department of Chemistry, St. Xaviers College (Autonomous), Tirunelveli, Tamilnadu, INDIA, 16 Dec 2015.
- ❖ Delivered invited lecture at **International Conference on Nanomaterials For Energy, Environment, Catalysis And Sensors – 2015 (ICNEECS-15)** Department of Physical Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai 11 -12 Dec 2015,
- ❖ Delivered invited Lecture at **International conference on Recent Advances in Materials and Chemical Sciences (ICRAMCS-2015)**, Department of Chemistry, Gandhigram Rural Institute, INDIA, 14 -15 Dec 2015.
- ❖ Delivered invited lecture on **Development of Modified Nanophotocatalysts for Enhanced Visible, Solar light driven Environment and Energy Applications**, National Centre for Nanosciences and Nanotechnology, University of Madras, India, August 3, 2015.
- ❖ Delivered talk on **Development of Modified Nanophotocatalysts for Enhanced Visible, Solar light driven Environment and Energy Applications**, Department of Biotechnology, Kumaraguru College of Engineering (Autonomous), Coimbatore, India August 27, 2015.
- ❖ Delivered talk invited on **Photocatalysis for Sustainable Environmental Remediation** Department of Chemical Engineering, Adhiyammaan College of Engineering (Autonomous), Hosur, India August 3, 2011.

News, Mass media & Award:

- ❖ Conferred as **Chartered Engineer (CEng)** Institute of Engineers(IE) India, December 2018
- ❖ Conferred as **Chartered Chemist (CChem)** Royal Society of Chemistry, UK in June 2018

- ❖ **Innovation Competition Champion** organised in conjunction with Universiti Teknologi PETRONAS, (UTP) 20th Anniversary Celebration, 2017 under leadership of Prof. Dr. Ramesh T Subramaniam, Faculty of Science, University of Malaya, 50603 Kuala Lumpur, Malaysia.
- ❖ **Awarded Gold** in the International Eureka Innovation Exhibition 2017 organised by Universiti Kuala Lumpur Malaysian Spanish Institute (UniKL MSI) Kulim Malaysian under leadership of Prof. Dr. Ramesh T Subramaniam, Faculty of Science, University of Malaya, 50603 Kuala Lumpur, Malaysia.
- ❖ **Early Career Award Recipient 2016:** Awarded by Department of Science and Technology, Ministry of Science and Technology, Government of India
- ❖ **Received International Accreditation (2015)** for the work Degrading BPA with Visible Light and a New Hybrid Photocatalyst with a special coverage by various scientific news platforms and technical journals including [American Institute of Physics, July 21, 2015](#); [Photonics Spectra\(Science and technology magazines\) United States in September 2015](#), [Asian Scientist Singapore](#) August 4, 2015.

References:

Prof. Dr. Min Jang

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Department of Biotechnology
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Prof. Dr. Detlef W. Bahnemann

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