



ZAKIR HUSAIN DELHI COLLEGE
(University of Delhi)

Faculty Details

(Please Fill the form and Email it to website@zh.du.ac.in)

Doctor	MUKESH	KUMAR	Photograph
Designation	ASSISTANT PROFESSOR		
Address	732, R.K.PURAM SECTOR-6, NEW DELHI-110022		
Phone Number	Office	011-23232218	
	Residence		
	Mobile	8447849284	
Email Id	mknanocomposites@zh.du.ac.in		
Web Page			
Educational Qualification: M.Sc., Ph.D.			
Degree	Institution	Year	
B.Sc.	N. R. E. C. College, Khurja, Bulandshahr C.C.S. UNIVERSITY, MEERUT	2001	
M.Sc.	I. P. (P.G.) College, Bulandshahr C.C.S. UNIVERSITY, MEERUT	2003	
Ph.D.	University of Delhi	2010	
Career Profile			
Areas of Interest / Specialization Synthesis and characterization of Poly(Methyl Methacrylate), Polystyrene, Polyurethane Polymer-Layered Silicates Nanocomposites, Surface Grafting, Controlled Radical Polymerization Methods. Postdoctoral research includes the Synthesis and Characterization of Graphene-Polyaniline Nanocomposites for Supercapacitor Applications, Controlled Polymer Chains Grafting onto the Surface of Graphene and Synthesis and Characterization of Graphene-Polyurethane Nanocomposites, Graphene Composites for Heavy Metals Removals, Graphene Nanohybrids air filtration applications, 2D materials such as MXene and Borophene applications for energy storage.			
Subjects Taught: B. Sc. (Hon.) Chemistry B. Sc. Physical Science, B. Sc. Life Science,			

Publications Profile:

1	Authors	Mukesh Kumar, Kuldeep Singh, Sundeep K. Dhawan, Tharanikkarasu Kannan, Jin Suk Chung, Byung-Seon Kong, Eui Jung Kim, Seung Hyun Hur				
	Title	Synthesis and characterization of covalently-grafted graphene-polyaniline nanocomposites and its use in a supercapacitor DOI: https://doi.org/10.1016/j.cej.2013.07.043				
	Journal	Yr/M	Vol	Issue	Pages	Level
	Journal of Chemical Engineering	Accepted 17 July 2013	231		397-405	International
	ISSN	IF	UGC list no	Publisher	H-index	Country
	1385-8947					
	Scopus Indexed Yes	16.744	3881	Elsevier	172	Netherland
2	Authors	Mukesh Kumar, Jin Suk Chung, Byung-Seon Kong, Eui Jung Kim, Seung Hyun Hur				
	Title	Synthesis of graphene-polyurethane nanocomposites using highly functionalized graphene oxide as pseudo cross-linker https://doi.org/10.1016/j.matlet.2013.05.059				
	Journal	Yr/M	Vol	Issue	Pages	Level
	<i>Materials Letters</i>	1September 2013	106		319-321	International
	ISSN	IF	UGC list no	Publisher	H-index	Country
	0167-577X					
	Scopus Indexed Yes	3.574	3978	Elsevier	124	Netherland
3	Authors	Mukesh Kumar, Govind Gupta, Subramani Sankararajah and Tharanikkarasu Kannan				

Title	Synthesis and characterization of polyurethane-layered silicate nanocomposites using tris(2-hydroxyethyl) ammonium ions attached montmorillonite				
Journal	Yr/M	Vol	Issue	Pages	Level
<i>Applied Polymer Composites</i>	September 2013	1		125-136	International
ISSN	IF	UGC list no	Publisher	H-index	Country
2049-6230					
Scopus Indexed NO	1.60	Not	Smithers Rapra		United Kingdom

4	Authors	Mukesh Kumar and Tharanikkarasu Kannan				
	Title	Dimethylaminoethyl Methacrylate Functionalized Montmorillonite for the Preparation of Polymer-montmorillonite nanocomposites through iniferter-based controlled radical polymerization of methylmethacrylate and styrene https://doi.org/10.1080/03602559.2013.854390				
	Journal	Yr/M	Vol	Issue	Pages	Level
	<i>Polymer-Plastics Technology and Engineering</i>	3 March 2014	53	6	604-612	International
	ISSN	IF	UGC list no	Publisher	H-index	Country
	0360-2559					
	Scopus Indexed Yes	3.267	38107	Marcel Dekker Inc.	46	United States

5	Authors	Mukesh Kumar and Tharanikkarasu Kannan			
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Title	A novel tertiary bromine-functionalized thermal iniferter for controlled radical polymerization https://doi.org/10.1038/pj.2010.92				
Journal	Yr/M	Vol	Issue	Pages	Level
<i>Polymer Journal</i>	20 October 2010	42		916– 922	International
ISSN 0032-3896	IF	UGC list No	Publisher	H- index	Country
Scopus Indexed Yes	3.135	38116	Nature Publishing Group	61	United Kingdom

6	Authors	Subash Chandra Mohapatra, Hemandra Kumar Tiwari, Manisha Singla, Brijesh Rathi, Arun Sharma, Kuldeep Mahiya, Mukesh Kumar , Saket Sinha, Shyam Singh Chauhan				
	Title	Antimalarial evaluation of copper(II) nanohybrid solids: inhibition of plasmepsin II, a hemoglobin-degrading malarial aspartic protease from <i>plasmodium falciparum</i> https://doi.org/10.1007/s00775-009-0610-9				
	Journal	Yr/M	Vol	Issue	Pages	Level
	<i>Journal of Biological Inorganic Chemistry</i>	March 2010	15	3	373-385	International
	ISSN 0949-8257	IF	UGC list No	Publisher	H- index	Country
	Scopus Indexed Yes	3.862	21611	Springer	96	Germany

7	Authors	Kuldeep Singh, Anil Ohlan, Viet Hung Pham, Balasubramaniyan R, Swati Vashney, Jinhee Jang, Seung Hyun Hur, Won Mook Choi, Mukesh Kumar , S.K. Dhawan, Byung-Seon Kong and Jin Suk Chung				
	Title	Nanostructured graphene/Fe ₃ O ₄ incorporated polyaniline as a high performance shield against electromagnetic pollution https://doi.org/10.1039/C3NR33962A				
	Journal	Yr/M	Vol	Issue	Pages	Level
	Nanoscale	11 Feb 2013	5		2411-2420	International
	ISSN	IF	UGC list No	Publisher	H-index	Country
	2040-3372					
	Scopus Indexed Yes	6.7	37217	Royal Society of Chemistry	176	UK

8	Authors	Mukesh Kumar Jin Suk Chung and Seung Hyun Hur				
	Title	Controlled atom transfer radical polymerization of MMA onto the surface of high density functionalized graphene oxide 10.1186/1556-276X-9-345				
	Journal	Yr/M	Vol	Issue	Pages	Level
	<i>Nanoscale Research Letters</i>	10 July 2014	9		345	International
	ISSN	IF	UGC list no	Publisher	H-index	Country
	1556-276X					
	Scopus Indexed Yes	6.5	37213	Springer	81	Germany

9	Authors	Mukesh Kumar and K. Tharanikkarasu				
	Title	Polymer-Montmorillonite Nanocomposites Through Controlled Radical Polymerization Using (4-Vinylbenzyl) Triethylammonium Anchored Organo-Montmorillonite https://doi.org/10.1080/10601325.2014.953379				
	Journal	Yr/M	Vol	Issue	Pages	Level
	<i>Journal of Macromolecular Science, Part A, Pure and Applied Chemistry</i>	17 October 2014	51		931-940	International
	ISSN (SCR Journal) 1520-5738	IF	UGC list No	Publisher	City	Country
	Scopus Indexed Yes	2.5	24363	Marcel Dekker Inc.	London	UK

10	Authors	Mukesh Kumar, Jin Suk Chung and Seung Hyun Hur				
	Title	Graphene Composites for Lead Ions Removal from Aqueous Solutions https://doi.org/10.3390/app9142925				
	Journal	Yr/M	Vol	Issue	Pages	Level
	<i>Applied Sciences</i>	15 July 2019	9	14	2925	International
	ISSN 2076-3417	IF	UGC list No	Publisher	H-index	Country
	Scopus Indexed Yes	2.838	8081	Multidisciplinary Digital Publishing Institute (MDPI)		Switzerland

11	Authors	Harish Mudila, Parteek Prasher, Mukesh Kumar, Himanshu Kapoor, Anil Kumar, Mohammad Gulham Haider				
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		Zaidi & Amit Verma			
Title	An insight into cadmium poisoning and its removal from aqueous sources by graphene adsorbents https://doi.org/10.1080/09603123.2018.1506568				
Journal	Yr/M	Vol	Issue	Pages	Level
International Journal of Environmental Health Research	25 July 2018	29		1-21	International
ISSN	IF	UGC list No	Publisher	H-index	Country
0960-3123					
Scopus indexed YES	3.390	2999	Taylor & Francis	41	UK

12	Authors	Harish Mudila, Parteek Prasher, Mukesh Kumar , Anil Kumar. M. G. H. Zaidi and Amit Kumar			
	Title	Critical analysis of polyindole and its composites in supercapacitor application https://doi.org/10.1007/s40243-019-0149-9			
	Journal	Yr/M	Vol	Issue	Pages
	<i>Materials for Renewable and Sustainable Energy</i>	2 July 2019	8	9	1-19
	ISSN	IF	UGC list No	Publisher	H-index
	2194-1459				
	Scopus indexed	1.467	3975	Springer International Publishing AG	12
					Switzerland

YES					
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13	Authors	Mukesh Kumar, Manish Kumar Gautam, Kuldeep Singh, Seung Hyun Hur				
	Title	A comprehensive review of the MXene-PANI nanohybrids: Preparation, characterization, and electrochemical performances for supercapacitor applications https://doi.org/10.1016/j.jiec.2024.08.016				
	Journal	Yr/M	Vol	Issue	Pages	Level
	Journal of Industrial and Engineering Chemistry	13 Aug 2024	142		141-156	International
	ISSN	IF	UGC list No	Publisher	H-index	Country
	1226-086X / 1876-794X					
	Scopus indexed	5.9	63975	Korean Society of Industrial and Engineering Chemistry	126	South Korea
	Yes					

Book: (Authored)

Mukesh Kumar, entitled “**Polymer-MMT Nanocomposites through Controlled Radical Polymerization**” with **Lambert Academic Publishing** is an imprint of Omni Scriptum AraPers GmbH Bahnhofstraße 28, D-66111 Saarbrücken, Germany, ISBN: 978-3-330-31754-3, Publication Date June 2017.

Book Chapter: (Authored)

- **Mukesh Kumar**, entitled “Polymer/ ceramic/metal composites for automobiles” in the Advanced organic-inorganic composites: materials, devices and allied applications. Editor: Inamuddin Siddiqui, *Nova Science Publishers*, New York, Inc. ISBN-13: 9781613242643, pp. 243-256. July 2011
- **Mukesh Kumar**, Prashant Singh, & Manish Kumar Gautam, entitled Removal of Heavy Metals using Graphene Composites in Inorganic Pollutants in Wastewater. Editor: Inamuddin Siddiqui, *Material Research Forum*, 105 Springdale Ln, Millersville, PA 17551, United States USA, ISBN: 978-1-945291-34-0,

Conference Organization/ Presentations (in the last five years)

Poster Presented in Conferences:

1. **Mukesh Kumar**, K. Tharanikkarasu; Poster Presentation entitled polymer-montmorillonite nanocomposites: A review in the National Seminar on Polymer Science & Technology-Vision & Scenario (Polymer - 08), at Jamia Millia Islamia, Dec. 03, 2008, New Delhi, India.
2. **Mukesh Kumar**, K. Tharanikkarasu; Presented Poster in 11th CRSI National Symposium in Chemistry at National Chemical Laboratory, Pune, India, Feb. 6-8, 2009.
3. **Mukesh Kumar**, K. Tharanikkarasu; Poster Presentation entitled synthesis and characterization of polystyrene-montmorillonite nanocomposites in Indo-Japanese international Seminar on "Polymeric Advanced Materials" Department of Chemistry, University of Delhi, Delhi, India, Feb. 26, 2009.
4. **Mukesh Kumar**, K. Tharanikkarasu; Poster presented entitled synthesis and characterization of MMA-montmorillonite nanocomposites in the National Symposium on Recent Advances in Analytical Sciences and Applications, organized by Indian Society of Analytical Scientists Delhi Chapter (ISAS-DC) & Department of Chemistry, Himachal Pradesh University, at Himachal Pradesh University, Summer Hills, Shimla, India, April 12-14, 2010.
5. **Mukesh Kumar**, and Manish Kumar Gautam, Poster Presented entitled synthesis and characterization of Polyurethane-montmorillonite nanocomposites in National Symposium on Nanobiotechnology, BIOTIKOS-2016, organized by TERI University Biotechnology Society at TERI University, New Delhi, held on 31th March & 1st April 2016.
6. **Mukesh Kumar** and Seung Hyun Hur, presented paper entitled Synthesis and characterization of graphene-polyaniline nanocomposites for supercapacitor applications in two days National Seminar on Emerging Economics and Challenges to Sustainability towards Developing Nation organized by ICSSR at Sri Aurobindo College, University of Delhi, India on 29-30th March 2016.
7. **Mukesh Kumar** and Manish Kumar Gautam, synthesis and characterization of polymer-clay nanocomposites, Poster Presented in National Conference in Chemistry: Environment & Harmonious Development (NCC 2016) organized by the Department of Chemistry, Shyam Lal College, University of Delhi on 7th-8th April 2016.
8. **Mukesh Kumar** and Manish Kumar Gautam Presented Paper entitled graphene-polyaniline nanocomposites for supercapacitor applications, in two days National Seminar on Clean & Green Energy: The Chemical & Environmental Aspects organized by Department of Chemistry, Bhaskaracharya College of Applied Science on 16-17 February 2017.
9. **Mukesh Kumar** and Rohit Mondol poster presented on Green Composites for waste water treatment: A review, in ICSSR sponsored national seminar on technology for environment sustainability, socio economics responsibilities and associated entrepreneurial opportunities of 21st century, held on March 8-9th 2019 at Sri Aurobindo College, University of Delhi.
10. **Mukesh Kumar**, Poster presented on Graphene composites for wastewater treatment: A review in Tech4Seva a national workshop organized by Unnat Bharat Abhiyan

Indian Institute of Technology Delhi in IITD held on 10-12th August 2019.

11. **Mukesh Kumar**, Manish Kumar Gautam and Akash Gupta presented poster entitled Graphene-polymer composites for wastewater treatment: A review in the national conference on clean and green energy: A chemical & environmental aspects, NCGE-2019, organized by the Department of Chemistry, Bhaskaracharya College of Applied Sciences, University of Delhi, September 26-27 2019.
12. **Mukesh Kumar** presented poster in the National Conference on Relationship between Chemical Science and Society (RCSS-20) organized by Department of Chemistry, Shivaji College University of Delhi on 16th -17th January 2020.

Participated in Conferences:

1. **Mukesh Kumar**, Jury Member in Young Scientist Enclave Organized as the part of India International Science Festival organized by VIBHA, Government of India, Vigyan Prasar etc at National Physical laboratory on 7-11th Dec 2016.
2. **Mukesh Kumar**, K. Tharanikkarasu; Participated in International Conference on Nanoscience and Nanotechnology (ICNN-2013), Department of Applied Physics, School for Physical Sciences, Babasaheb Bhimrao Ambedkar University, Lucknow, India, 18-20 November 2013.
3. **Mukesh Kumar**, Participated in National Seminar on Role of Analytical Science in Sustainable Development organized by Indian Society of Analytical Scientists Delhi Chapter (ISAS-DC) and Petrotech Society of India on 4-5th March, 2016, at Hansraj College, University of Delhi, Delhi, India.
4. **Mukesh kumar**, participated in two days National Seminar Emerging Issues on Climate Change: Sustainability and Economical Implications Organized by ICSSR at Sri Aurobindo College, University of Delhi, India on 21-22nd October 2016.
5. **Mukesh Kumar** Participated in two days seminar on Recent Trends in Technical Terminology in Science organized by Commission for Scientific and Technical Terminology (CSTT) at Sri Aurobindo College, University of Delhi, India on 16-17th February 2016.
6. **Mukesh Kumar** Participated in First Indo-Italian Workshop on frontiers on Fundamentals & Industrial Electrochemistry: A Challenge for Better World organized by University of Delhi and Embassy of Italy at Department of Chemistry, University of Delhi, Delhi, India on 30-31st August 2010.
7. **Mukesh Kumar**, K. Tharanikkarasu; Participated in “Symposium on the Applications of Nuclear Magnetic Resonance to Material and Medicine, Department of Chemistry, IIT, Delhi, India, November. 21, 2006.
8. **Mukesh Kumar**, K. Tharanikkarasu; Participated in 9th CRSI National Symposium in Chemistry (NSC-9), Department of Chemistry, University of Delhi, Delhi, India, Feb. 1-4th, 2007.
9. **Mukesh Kumar**, K. Tharanikkarasu; Participated in “Role of Analytical Techniques in Industry” Indian Society of Analytical Scientists Delhi Chapter (ISAS-DC), Kirori Mal College, University of Delhi, Delhi, India, Jan. 21-22, 2010.
10. **Mukesh Kumar**, participated in the workshop on Information Literacy and Competency organized by Delhi University Library System, at University of Delhi, North Campus, Delhi, India on 23rd February 2010.
11. **Mukesh Kumar**, K. Tharanikkarasu; Participated in 3rd Indo-Italian Seminar on “Green Chemistry” Department of Chemistry, University of Delhi, Delhi, India, Dec. 9 2009.
12. **Mukesh Kumar**, participated in India International Science Festival – 2019 held at Biswa Bangla Convention Center/ Science City/ Bose Institute/ CSIR-Indian Institute of Chemical Biology/ Satyajit Ray Film and Television Institute Kolkata during November 5-8, 2019.
13. **Mukesh Kumar**, participated in Enviro-Health Conference-2017 (Air Pollution &

Future strategies with a Focus on the NCT Delhi) organised by Vijnana Bharati (VIBHA) on November 2, 2017.

Organising Committee:

1. **Dr. Mukesh Kumar**, participated as an **organizing committee member** in UGC sponsored National Seminar on Recent Innovations in Chemical Science and Environment Technology organized by Sri Aurobindo College, University of Delhi on March 3-4, 2017.
2. **Dr. Mukesh Kumar**, participated as an **organizing committee member** in ICSSR sponsored National Seminar on Technology for Environment Sustainability, Socio-Economic Responsibilities and associated Entrepreneurial Opportunities of 21st Century organized by Sri Aurobindo College, University of Delhi on March 8-9, 2019.
3. **Dr. Mukesh Kumar**, participated as an **organizing committee member** for two days International Conference organized by University of Delhi in association with Vijnana Bharati and Ministry of Culture on the **Contribution of Acharya Prafulla Chandra Ray as a Chemist and Freedom Fighter** held on 2-3 August 2022 at Delhi University Conference Center.
4. **Dr. Mukesh Kumar**, participated as an **organizing committee member** for International Conference organized by GIST and Indraprastha Vigyan Bharati on 31st May to 2nd June 2023.
5. **Dr. Mukesh Kumar**, participated as an **organizing committee member** for International e-Conference organized by IITyam India Academy Delhi in collaboration with department of chemistry, HNB Gov. PG College, Khatima Uttarakhand held on 12 Aug 2023.

Details of Professional training

- Mukesh Kumar, Participated in the two-week Faculty Development Programme (FDP) (TEQIP-II) on '*Frontiers in Chemical and Polymer Sciences*' organized by the Department of Applied Chemistry & Polymer Technology, *Delhi Technological University*, held on 15-26 December, 2014.
- Mukesh Kumar, participated in an online ten days faculty development programme entitled 'Teachers Training on Online Teaching Tools (Apps & Software)' organized by Wellness Gurukul Academy Pvt. Ltd. Katweriya Sarai, New Delhi, India held on 10-19 July 2020.
- Mukesh Kumar, participated in an online five days faculty development programme entitled "Recent Advances, Trends, and Challenges in the field of Nanotechnology" organized by Amity Centre of Nanotechnology in association with academic Staff College Amity University Haryana on 12-16th July 2021.
- Mukesh Kumar, participated in an online five days faculty development programme entitled "Research Methodology: Tools and Techniques" organized by Atma Ram Santan Dharma College University of Delhi in association with Rmanujan College university of Delhi o from 5-11th June 2020.
- Mukesh Kumar, participated in an online one week faculty development programme entitled "E-learning and ICT tools for Effective Teaching-Learning" organized by Aravali College of Advanced Studies in Education, Pali Faridabad from 8-13th June 2020.
- Mukesh Kumar, participated in an online one week faculty development programme entitled "Empowering Teaching-Learning Process using Google Classrooms and other ICT tools: A comprehensive Practical Approach" organized by Sri Aurobindo College University of Delhi from 16-18th July 2020.
- Mukesh Kumar, participated in an online one week faculty development programme

entitled “Environmental health and Public Health” organized by Kirori Mal College, University of Delhi from Feb 1st to 5th 2022.

- Mukesh Kumar, participated in one month Faculty Induction/Orientation Programme from 23 May 2023 to 21 June 2023 organised by Teaching Learning Centre, Ramanujan College (University of Delhi).
- Mukesh Kumar, participated 15 days FDP on Inter-disciplinary Refresher course “Managing Online Classes & Co- creating MOOCS 26.0” from 8 May 2023 to 22 May 2023 organised by Teaching Learning Centre, Ramanujan College (University of Delhi).
- Mukesh Kumar participated two week NEP-2020 Orientation and Sensitization program under Malviya Mission Teacher Training Program (MM-TTP) of University Grant Commission (UGC) Organised by UGC MMTTC (GAD-MMTC), Sri Guru Teg Bahadur Khalsa College, University of Delhi from 19th to 29th November 2024.