



# Kirori Mal College

(University of Delhi)

University of Delhi, Delhi-110007

(Phone No. - 011-7121 9084 : Email - principal@kmc.du.ac.in)



Print Date : 05-07-2026

## 1. Personal Profile

Title: **Dr.** First Name: **JAI PRAKASH** Last Name: **CHAUDHARY**

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Designation: **ASSISTANT PROFESSOR** Mobile No. -----

Phone No. (Office) ----- Phone No. (Residence): -----

Email: [jpsioasis@kmc.du.ac.in](mailto:jpsioasis@kmc.du.ac.in) Webpage:

<https://sites.google.com/view/drjpchaudharykmc/home>

Facebook: ----- Twitter: -----

LinkedIn: <https://www.linkedin.com/feed/> Instagram: -----

Youtube: ----- Research Gate Link: <https://www.researchgate.net>

Google Scholar Link: <https://rb.gy/dj70xl>

Address: -----

## 2. Educational Qualifications

Degree/ Certification	Institution	Year
B.Sc. (Gen.)	University of Allahabad, Allahabad	2009
MSc	University of Delhi, Delhi	2011

## 3. Career Profile & Administrative Assignments

Category	Role/ Designation	Department/ Committee	Date From - To	Remarks
CAREER PROFILE	ASSISTANT PROFESSOR	CHEMISTRY KIRORI MAL COLLEGE, DELHI	07.Feb.2020 - Till date	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	CHEMISTRY KIRORI MAL COLLEGE, DELHI	01.Jul.2024 - 30.Jun.2025	Admissions In-Charge B.Sc. (H) Chemistry & M.Sc. Chemistry
ADMINISTRATIVE ASSIGNMENTS	MEMBER	CHEMISTRY KIRORI MAL COLLEGE, DELHI	01.Jul.2024 - 30.Jun.2025	Time Table & Workload Committee
ADMINISTRATIVE ASSIGNMENTS	MEMBER	HOSTEL ADMISSION COMMITTEE KIRORI MAL COLLEGE, DELHI	01.Jul.2024 - 30.Jun.2025	

ADMINISTRATIVE ASSIGNMENTS	MEMBER	COORDINATING COMMITTEE FOR INFORMATION AND TECHNOLOGY KIRORI MAL COLLEGE, DELHI	01.Jul.2024 - 30.Jun.2025	
ADMINISTRATIVE ASSIGNMENTS	MEMBER	RESEARCH COUNCIL KIRORI MAL COLLEGE, DELHI	13.Jun.2023 - 30.Jun.2026	
ADMINISTRATIVE ASSIGNMENTS	ASSISTANT PROFESSOR	CHEMISTRY KIRORI MAL COLLEGE, DELHI	01.Jul.2024 - 30.Jun.2025	Convenor, Lab Management Committee
ADMINISTRATIVE ASSIGNMENTS	MEMBER	CHEMISTRY KIRORI MAL COLLEGE, DELHI	01.Jul.2024 - 30.Jun.2025	Member of Purchase Committee
ADMINISTRATIVE ASSIGNMENTS	ASSISTANT PROFESSOR	CHEMISTRY KIRORI MAL COLLEGE, DELHI	06.Mar.2025 - 07.Mar.2025	Member of Organising Team for Two-day Workshop on Design Thinking and Start-up Organised by Career Development Centre, Kirori Mal College, University of Delhi
ADMINISTRATIVE ASSIGNMENTS	CONVENER	CHEMISTRY KIRORI MAL COLLEGE, DELHI	20.Sep.2024 - 08.Oct.2025	Lab Renovation, Development & Maintenance Committee, Department of Chemistry Kirori Mal College, University of Delhi

#### 4. Other Profiles

##### Other Profile Name/ Description

##### PATENTS

Ramavatar Meena, P. K. Ghosh, D. R Chejara, K. Eswaran, A.K. Siddhanta, K. Prasad, **Jai Prakash Chaudhary**. Biodegradable hydrophobic composite materials and process for the preparation thereof. ([US Patent: 9556328; 31/01/2017](#)).

##### PATENTS

Ramavatar Meena, P. K. Ghosh, D. R Chejara, K. Eswaran, A.K. Siddhanta, K. Prasad, **Jai Prakash Chaudhary**. Biodegradable hydrophobic synthetic materials, and the manufacturing process. ([JP Patent: 6336457 06/06/2018](#))).

##### PATENTS

Ramavatar Meena, **Jai Prakash Chaudhary**, Process for the preparation of graded Agarose from seaweed extract. ([Date of Grant: 07/01/2022, Patent No: 385582](#))

##### PATENTS

Ramavatar Meena, N. Sanandiya, **Jai Prakash Chaudhary**, D. Mondal & S K Nataraj. Seaweed Polysaccharides Based Superhydrophilic Foam Membrane for Energy-Efficient Oil-water Separation. ([US Patent: 10688446; 23/06/2020](#))

##### PATENTS

Chinmay Ghoroi, **Jai Prakash Chaudhary**, Sophia Varghese, Porous Iron-based Magnetic Nano-Biocomposite Carrier for Anti-Cancer Drugs and Process for Preparing The Same. ([Date of Grant: 16/02/2024 Patent No.511700](#))

**AWARDS AND DISTINCTIONS**

Jean & Ashit Ganguly education scholarship by University of Delhi, Delhi.

**AWARDS AND DISTINCTIONS**

Prof. K. N. Johri memorial scholarship by the University of Delhi, Delhi.

**AWARDS AND DISTINCTIONS**

Start-up Grant of 10 lakhs under the Start-up/innovation scheme of GOG.

**AWARDS AND DISTINCTIONS**

D. S. Kothari Post-doctoral fellowship from UGC, India.

**AWARDS AND DISTINCTIONS**

Best Poster Presentation Award in the International Conference on Smart Materials Perspective and Prospectives (SMPP-2023) Organised by the Department of Chemistry, University of Delhi in association with Indian Science Congress Association (ISCA) Delhi Chapter.

**AWARDS AND DISTINCTIONS**

Qualified CSIR-UGC (NET-LS) in Chemical Science

**AWARDS AND DISTINCTIONS**

Qualified GATE in Chemistry

**SUBJECTS TAUGHT**

Atomic Structure & Chemical Bonding, Pesticide Chemistry, Prospecting E-Waste for Sustainability, Science & Society, Separation Methods-I & II, Coordination Chemistry, Bio-Inorganic Chemistry, Novel Inorganic Solids, Green Methods in Chemistry, Elements in Biological Systems

**AREAS OF INTEREST/ SPECIALIZATION**

Extraction & Modification of Polysaccharides, Hydrogels, Bio-based Materials, Nanomaterials/ nano-composites, Energy Materials, Sensors, Membrane Separation and Wastewater Treatment etc.

**WORKSHOP/ SEMINAR/ CONFERENCE/ WEBINAR ORGANIZED**

Member of Organising Team for Two-day Workshop on Design Thinking and Start-up Organised by Career Development Centre, Kirori Mal College, University of Delhi

**WORKSHOP/ SEMINAR/ CONFERENCE/ WEBINAR ORGANIZED**

Member of Organising Team for Two-day Workshop on Design Thinking and Start-up Organised by Career Development Centre, Kirori Mal College, University of Delhi

**WORKSHOP/ SEMINAR/ CONFERENCE/ WEBINAR ORGANIZED**

Certificate of Recognition as Member of Organising Team for a Two-Day Workshop on Design Thinking and Start-up Organised by Career Development Cell, Kirori Mal College, University of Delhi from 06 March - 07 March 2025

## 5. Research Guidance

Year	Guide For	Title of the Dissertation/ Thesis	Scholar Name	Status
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## 6. Research Projects

Year	Title of Project	Sponsorship Agency	Duration	Amount Sanctioned	Date of Sanction
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## 7. Publications

Category	Publication Name	Title	Name of Author	Reference Link/ DOI Link	Publ (Mon Year
JOURNAL PAPER (National)	One-pot synthesis of biodiesel from high fatty acid <i>Jatropha curcas</i> oil using the bio-based basic ionic liquid as a catalyst	Current Science	E. R. Reddy, M. Sharma, Jai Prakash Chaudhary, H. Bosamiya, R. Meena (Joint Author)	<a href="https://www.jstor.org/stable/24102486">https://www.jstor.org/stable/24102486</a>	May 2014
JOURNAL PAPER (International)	Surfactant-induced coagulation of agarose from aqueous extract of <i>Gracilaria dura</i> seaweed as an energy-efficient alternative to the conventional freeze-thaw process	RSC Advances	Ramavatar Meena, Jai Prakash Chaudhary, Shruti chaterji, Pradeep Agrawal, Hiren D Raval, Pratiyous Maiti, Kamalesh Prasad, Arup Kumar Siddhanta (Joint Author)	<a href="https://doi.org/10.1039/C4RA04476B">https://doi.org/10.1039/C4RA04476B</a>	June 2014
JOURNAL PAPER (International)	Simultaneous dehydration of biomass derived sugars to 5-hydroxymethyl furfural (HMF) and reduction of graphene oxide in ethyl lactate: One pot dual chemistry	RSC Advances	D. Mondal, Jai Prakash Chaudhary, M. Sharma, K. Prasad (Joint Author)	<a href="https://doi.org/10.1039/C4RA05049E">https://doi.org/10.1039/C4RA05049E</a>	June 2014
JOURNAL PAPER (International)	Preparation and functional evaluation of agarose derivatives	Journal of Applied Polymer Science	Jai Prakash Chaudhary, Stalin Kondavetti, Vishal Gupta, Kamalesh Prasad & Ramavatar Meena (First Author)	<a href="https://doi.org/10.1002/app.40630">https://doi.org/10.1002/app.40630</a>	March 2014

JOURNAL PAPER (International)	Bio-based Super Hydrophilic Foam Membranes for Oil-Water Separation	Green Chemistry	Jai Prakash Chaudhary, Sanna Kotrappanavar Nataraj, Azaz Gogda, Ramavatar Meena (First Author)	<a href="https://doi.org/10.1039/C4GC01070A">https://doi.org/10.1039/C4GC01070A</a>	July 2014
JOURNAL PAPER (International)	Newly developed nano-biocomposite embedded hydrogel to enhance drug loading and modulated release of anti-inflammatory drug	Pharmaceutical Development and Technology	S Varghese, J P Chaudhary, P Thareja, C Ghoroi (Joint Author)	<a href="https://doi.org/10.1080/10837450.2023.2193254">https://doi.org/10.1080/10837450.2023.2193254</a>	March 2023
JOURNAL PAPER (International)	Regulation of nanostructured polyaniline synthesis and its properties through organic solvent in interfacial polymerization	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Rajeev Gupta, Monika Singhal, Jai Prakash Chaudhary (Joint Author)	<a href="https://doi.org/10.1016/j.colsurfa.2021.127806">https://doi.org/10.1016/j.colsurfa.2021.127806</a>	October 2021
JOURNAL PAPER (International)	Gas assisted in situ biomimetic mineralization of bacterial cellulose/calcium carbonate bio composites by bacteria	International Journal of Biological Macromolecules	Bianjing Sun, Jianbin Lin, Tao Wang, Mengdi Liu, Lei Yang, Bo Ma, Jai Prakash Chaudhary, Chuntao Chen, Dongping Sun (Joint Author)	<a href="https://doi.org/10.1016/j.ijbiomac.2021.05.171">https://doi.org/10.1016/j.ijbiomac.2021.05.171</a>	May 2021
JOURNAL PAPER (International)	Defect enrich ultrathin TiO <sub>2</sub> nanosheets for rapid adsorption and visible light mediated PPCPs degradation	Chemosphere	Xiao Qu, Jianbin Lin, Jai Prakash Chaudhary, Bianjing Sun, Feng Wei, Mengmeng Fan, Dongping Sun (Joint Author)	<a href="https://doi.org/10.1016/j.chemosphere.2020.128782">https://doi.org/10.1016/j.chemosphere.2020.128782</a>	October 2020
JOURNAL PAPER (International)	Construction of silver nanoparticles anchored in carbonized bacterial cellulose with enhanced antibacterial properties	Colloids and Surfaces A: Physicochemical and Engineering Aspects	Bo Ma, Jai Prakash Chaudhary, J Zhu, B Sun, C Chen, D Sun (Joint Author)	<a href="https://doi.org/10.1016/j.colsurfa.2020.125845">https://doi.org/10.1016/j.colsurfa.2020.125845</a>	November 2020
JOURNAL PAPER (International)	One Step Dry Synthesis of Iron based Nano Bio-composite for Control Release of Drug	RSC Advances	Sophia Varghese, Jai Prakash Chaudhary, Chinmay Ghoroi (Joint Author)	<a href="https://doi.org/10.1039/D0RA01133A">https://doi.org/10.1039/D0RA01133A</a>	March 2020

JOURNAL PAPER (International)	Ni nanoparticle carbonized bacterial cellulose composites for the catalytic reduction of highly toxic aqueous Cr (VI)	Journal of Materials Science- Materials in Electronics	Bo Ma, Jai Prakash Chaudhary, J Zhu, B Sun, Y Huang, D Sun (Joint Author)	<a href="https://doi.org/10.1007/s10854-020-03270-5">https://doi.org/10.1007/s10854-020-03270-5</a>	March 2020
JOURNAL PAPER (International)	Carboxymethylagarose based Multifunctional Hydrogel with super stretchable, self-healable having film and fiber forming ability	Arabian Journal of Chemistry	Jai Prakash Chaudhary, F. Kholiya, N. Vadodariya, A. Gogda, V. M. Budheliya, R. Meena (First Author)	<a href="https://doi.org/10.1016/j.arabjc.2017.12.034">https://doi.org/10.1016/j.arabjc.2017.12.034</a>	January 2020
JOURNAL PAPER (International)	Anionic carboxymethylagarose-based pH-responsive smart superabsorbent hydrogels for controlled release of anticancer drug	International Journal of Biological Molecules	Huma Khan, Jai Prakash Chaudhary, R. Meena (Joint Author)	<a href="https://doi.org/10.1016/j.ijbiomac.2018.12.045">https://doi.org/10.1016/j.ijbiomac.2018.12.045</a>	March 2019
JOURNAL PAPER (International)	Self-doped interwoven carbon network derived from <i>Ulva fasciata</i> for all solid supercapacitor devices: Solvent-less approach to a scalable synthetic route	ACS Sustainable Chemistry & Engineering	Jai Prakash Chaudhary, Rajeev Gupta, Ashesh Mahto, Nilesh Vadodariya, Sanna Kotrappanavar, Nataraj, Ramavatar Meena (First Author)	<a href="https://doi.org/10.1021/acssuschemeng.8b02831">https://doi.org/10.1021/acssuschemeng.8b02831</a>	June 2019
JOURNAL PAPER (International)	Graded agaroses directly from seaweed biomass: a sustainable tool for developing clean chemical process	Journal of Process Biochemistry	Nilesh Vadodariya, Jai Prakash Chaudhary, Hiren D. Raval, Ramavatar Meena (Joint Author)	<a href="https://doi.org/10.1016/j.procbio.2018.01.005">https://doi.org/10.1016/j.procbio.2018.01.005</a>	March 2018

JOURNAL PAPER (International)	Solvent-free production of nano-FeS anchored Graphene from <i>Ulva fasciata</i> : A Scalable synthesis of super-adsorbent for lead, chromium and dyes	Journal of Hazardous Materials	Ashesh Mahto, Anshu Kumar, Jai Prakash Chaudhary, Madhuri Bhatt, Atul Kumar Sharma, Parimal Paul, Sanna Kotrappanavar Nataraj, Ramavatar Meena (Joint Author)	<a href="https://doi.org/10.1016/j.jhazmat.2018.03.054">https://doi.org/10.1016/j.jhazmat.2018.03.054</a>	July 2018
JOURNAL PAPER (International)	Functionalized seaweed-derived graphene/polyaniline nanocomposite as efficient energy storage electrode	Journal of Applied Electrochemistry	R. Gupta, N. Vadodariya, Jai Prakash Chaudhary, D. Parmar, D. N. Srivastava, S. K. Nataraj, R. Meena (Joint Author)	<a href="https://doi.org/10.1007/s10800-017-1120-z">https://doi.org/10.1007/s10800-017-1120-z</a>	Nov 2017
JOURNAL PAPER (National)	Experimental cultivation of <i>Gelidium pusillum</i> in open sea along the south east Indian coast	Indian Journal of Geo Marine Sciences	V. Veeragurunathan, N. Vadodariya, Jai Prakash Chaudhary, A. gogda, K. R. Saminathan, R. Meena (Joint Author)	IJMS 47(2) 336-345.pdf	Febru 2018
JOURNAL PAPER (National)	Graphene oxide Reduction activity of Seaweed polymer derivatives: Efficient Bio-based alternatives	Current Science	N. Vadodariya, Jai Prakash Chaudhary, F. Kholiyaa, M. Sharma, R. Meena (Joint Author)	<a href="https://www.jstor.org/stable/26493040">https://www.jstor.org/stable/26493040</a>	Octob 2017
JOURNAL PAPER (International)	Synthesis of bio-based aldehyde from seaweed polysaccharide and its interaction with bovine serum albumin	Carbohydrate Polymers	F. kholiya, Jai Prakash Chaudhary, N. Vadodariya, R. Meena (Joint Author)	<a href="https://doi.org/10.1016/j.carbpol.2016.05.022">https://doi.org/10.1016/j.carbpol.2016.05.022</a>	Octob 2016

JOURNAL PAPER (International)	Chitosan-Based Aerogel Membrane for Robust Oil-in-Water Emulsion Separation	ACS Applied Materials & Interfaces	Jai Prakash Chaudhary, Nilesh Vadodariya, Sanna Kotrappanavar Nataraj, Ramavatar Meena (First Author)	<a href="https://doi.org/10.1021/acsami.5b08705">https://doi.org/10.1021/acsami.5b08705</a>	October 2015
JOURNAL PAPER (International)	Fabrication of carbon and sulphur-doped nanocomposites with seaweed polymer carrageenan as efficient catalyst for rapid degradation of dye pollutants using solar concentrator	RSC Advances	Jai Prakash Chaudhary, Ashesh Mahto, Nilesh Vadodariya, Faisal Kholiya, Subarna Maiti, Sanna Kotrappanavar Nataraj, Ramavatar Meena (First Author)	<a href="https://doi.org/10.1039/C6RA10317K">https://doi.org/10.1039/C6RA10317K</a>	June 2016
JOURNAL PAPER (National)	Functional modification of agarose: Synthesis of nanosize half-esters of succinic, phthalic and maleic acids	Indian Journal of Chemistry	S. Kondaveeti, N. A. Chudasama, Jai Prakash Chaudhary, R Meena & A K Siddhanta (Joint Author)	IJCA 54A(6) 734-743.pdf	June 2015
JOURNAL PAPER (International)	Carboxymethylagarose-AuNPs generated through green route for selective detection of Hg <sup>2+</sup> in aqueous medium with a blue shift	Carbohydrate Polymers	Jai Prakash Chaudhary, Anshu kumar, Parimal paul, Ramavatar Meena (First Author)	<a href="https://doi.org/10.1016/j.carbpol.2014.10.016">https://doi.org/10.1016/j.carbpol.2014.10.016</a>	March 2015
JOURNAL PAPER (National)	Seaweed-derived polymeric materials for multiapplications including marine algal cultivation	RSC Advances	Jai Prakash Chaudhary, Dharmesh R Chejara, K. Eswaran, Ramavtar Meena, Pushpito K Ghosh (First Author)	<a href="https://doi.org/10.1039/C5RA00929D">https://doi.org/10.1039/C5RA00929D</a>	February 2015

JOURNAL PAPER (International)	A green and sustainable approach to utilize bio-ionic liquids for the selective precipitation of high purity agarose from an agarophyte extract	Green Chemistry	M. Sharma, Jai Prakash Chaudhary, D. Mondal, K. Prasad, R. Meena (Joint Author)	<a href="https://doi.org/10.1039/C4GC02498B">https://doi.org/10.1039/C4GC02498B</a>	February 2015
JOURNAL PAPER (International)	Agarose based multifunctional materials: Evaluation of thixotropy, self-healability and stretchability	Carbohydrate polymer	Jai Prakash Chaudhary, Dharmesh R Chejara, Dipak Makwana, Kamalesh Prasad, Ramavatar Meena (First Author)	<a href="https://doi.org/10.1016/j.carbpol.2014.08.024">https://doi.org/10.1016/j.carbpol.2014.08.024</a>	December 2014
JOURNAL PAPER (International)	Elimination of gibberellin from <i>Kappaphycus alvarezii</i> seaweed sap foliar spray enhances corn stover production without compromising the grain yield advantage	Plant Growth Regulation	D. Mondal, A. Ghosh, K. Prasad, S. Singh, N. Bhatt, S. T. Zodape, Jai Prakash Chaudhary, J. Chaudhari, P. B. Chatterjee, A. Seth, P. K. Ghosh (Joint Author)	<a href="https://doi.org/10.1007/s10725-014-9967-z">https://doi.org/10.1007/s10725-014-9967-z</a>	August 2014
CHAPTER (International)	Seaweed Polysaccharides Based New Hydrogel Materials: A Green Approach	Apple Academic Press	Jai Prakash Chaudhary & Ramavatar Meena (First Author)		August 2015
CHAPTER (International)	Synthesis of functional derivatives of cellulose for wider applications	Nova Science Publishers	Nilesh Vadodariya, Jai Prakash Chaudhary (Joint Author)		August 2015
CHAPTER (International)	Low Carbon Materials: Unlocking Economic and Environmental Benefits	Royal Society of Chemistry	Jai Prakash Chaudhary, Mukesh Chandra Joshi, Kamla Rawat (Corresponding Author)	<a href="https://doi.org/10.1039/9781837676064">https://doi.org/10.1039/9781837676064</a>	December 2015

CHAPTER (National)	Seaweed Polysaccharide-based Fluorogenic and Thixotropic Ionogel: Synthesis and Characterisation	Studera Press, New Delhi	Jai Prakash Chaudhary, Ramavatar Meena, Nilesh Vadodariy, Faisal Kholiy, Stalin Kondaveeti (First Author)	<a href="https://studerapress.com/books/seaweed-based-valuable-products-production-functionalization-and-applications/">https://studerapress.com/books/seaweed-based-valuable-products-production-functionalization-and-applications/</a>	Janua 2026
CHAPTER (National)	Green Synthesis of Silver Nanoparticle: Using Seaweed Aqueous Extract Containing Seaweed Polysaccharide	Studera Press, New Delhi	Ramavatar Meena, Faisal Kholiya, Nilesh Vadodariya, Jai Prakash Chaudhary (Joint Author)	<a href="https://studerapress.com/books/seaweed-based-valuable-products-production-functionalization-and-applications/">https://studerapress.com/books/seaweed-based-valuable-products-production-functionalization-and-applications/</a>	Janua 2026
CHAPTER (National)	Seaweed Polysaccharides-Based Porous Membranes for Separations Under Gravity Driven Force	Studera Press, New Delhi	Ramavatar Meena, Jai Prakash Chaudhary, A. Singh, A. Meena (Joint Author)	<a href="https://studerapress.com/books/seaweed-based-valuable-products-production-functionalization-and-applications/">https://studerapress.com/books/seaweed-based-valuable-products-production-functionalization-and-applications/</a>	Janua 2026
CHAPTER (National)	Functional Modification of Seaweed-based Polysaccharide	Studera Press, New Delhi	Ramavatar Meena, Jai Prakash Chaudhary (Joint Author)	<a href="https://studerapress.com/books/seaweed-based-valuable-products-production-functionalization-and-applications/">https://studerapress.com/books/seaweed-based-valuable-products-production-functionalization-and-applications/</a>	Janua 2026

## 8. Books

Category	Book Name	Title	Name of Author	ISSN/ ISBN Number
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## 9. Faculty Achievements

Year	Category of Achievement	Role	National/ International etc.	Name	Date From- To
2024	REFRESHER COURSE ATTENDED	ASSISTANT PROFESSOR	National	2 weeks online Refresher Course in Environmental Studies and Eco-centric Development (IDC)	27.Aug.2024 - 09.Sep.2024

**Dr. JAI PRAKASH CHAUDHARY**