



**Assistant Professor**  
**Department of Chemistry**  
**Hansraj College**  
**University of Delhi**  
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## Dr. Manoj Kumar

### Present Status

**Assistant Professor**, Department of Chemistry, Hans Raj College, University of Delhi, Since 28 Dec. 2010. Delhi-110007 (India)

### Educational Profile

**Ph.D. (2007):** (Chemistry),  
Bundelkhand University  
Jhansi – 284001 (U.P.) India

**Topic :** “Non-Equilibrium Thermodynamic Based Transport Studies of Model Membranes”

**M.Sc. (2002)** (Chemistry) Specialization Organic Chemistry, Bipin Bihari P.G. Science College, (Bundelkhand University) Jhansi (U.P.).

**B.Sc. (2000)** (Chemistry, Zoology and Botany) Bipin Bihari P.G. Science College, (Bundelkhand University) Jhansi (U.P.).

### Teaching Experience

years 6 month

**Assistant Professor (Chemistry)**, Department of Biomedical Science, Bundelkhand University, Jhansi, U.P. From 13/08/2008 to 27 Dec.2010.

### Research Experience

4 Years

### Research Publication

- Manoj Kumar**, Amit Kumar Rawat, Anand Sonkar, Amar Kumar, Anusha Azhar, Mallika Kumar, Mohammad Mujahid Ali Khan, Pellet Biochar: An Environmental Remedy Book: Green Chemistry in Environmental Sustainability and Chemical Education, Pages 73-79, Publisher, **Springer, Singapore** (2018)
- Manoj Kumar**, A.K Rawat, Mallika Kumar and Mohammads Mujahid Ali Khan, Utilization of Delhi’s Garden Waste for Environmental Remediation, **Journal of Applied Physics** ,Vol. 9 No.1, pp 49-53, June 2018
- Mohammad Mujahid Ali Khan, **Manoj Kumar**, H.A Keshmery and A. M. Asiri , Electrochemical properties and anti-bacterial activity of polyvinyl chloride supported silver molybdate ion-exchange composite membrane, **Journal of Membrane Science and Research**, Vol. 4, pp 15-19, 2018

4. R.B. Sharma, Sarvesh Kumar, R.S. Kushwaha and **Manoj Kumar**, Model based presentation of thermodynamic irreversibility, **Research Spectrum**, Vol. 1(3), pp 85-91, 2015
5. M. A. Ansari, **Manoj Kumar** and S. Ayub, Ion transport studies through polystyrene based model membrane: Conductance data and absolute reaction rate theory, **J. Advances in Applied Science Research**, Vol. 3(1), pp 251-260, 2012
6. R. S. Kushwaha, M. A. Ansari, N. Singh, **Manoj Kumar**, M. N. Beg, Synthesis of polystyrene based Nickel Phosphate membranes & evaluation of membrane parameters to test the membrane potential theories. **J. Indian Chemical Society**, Vol. 87, pp 471-479, 2010
7. Mohd. Ayub Ansari, R. B. Sharma, A. Kumar, **Manoj Kumar**, Reetu Parashrampur, K. S. Dadoriya, Anju Singh and R.S. Kushwaha, Mechanism of ion transport through parchment supported model membranes. **Progressive Research**, Vol. 2(1/2) : 11-15, 2007
8. R. S. Kushwaha, **Manoj Kumar**, M. A. Ansari, Thermodynamic effect of metal ions on transport across Duck egg cell membrane. **J. flora and fauna**, Vol. 13, No:2, pp 424-426, 2007
9. M. A. Ansari, **Manoj Kumar**, A. Kumar, P. Shrivatava, & R.S. Kushwaha, Studies of Membrane selectivity from electrical potential & conductivity measurement **Journal Indian Council of Chemists** Vol. 22, No. 2, pp.23-31, 2005

## Academic Activities

### 1. Project Completed

- i. **Principal Investigator** - Dr. Manoj Kumar,  
Project Title "*Development of Zero Discharge, Eco Friendly, Affordable And Carbon Neutral Bio Fuel Using In House Horticulture Waste*",  
**Project Code**- DU Innovation Project 2013-14: HR-210  
**Funding Agency**- University of Delhi  
**Grant**- 600,000, Period- One Year
- ii. **Principal Investigator** - Dr. Manoj Kumar,  
Project Title "*Utilization of Delhi's Garden Waste For Renewable And Sustainable Energy Production*",  
**Project Code**- DU Innovation Project 2015-16: HRC-306  
**Funding Agency**- University of Delhi,  
**Grant**- 500,000, Period- One Year

### 2. Acted as organizing committee member in National/International Conferences

- i. In National Seminar on "Chemistry in Interdisciplinary applications" organized by Department of Chemistry, Hans Raj College, University of Delhi, held on March-19, 2013
- ii. In Indo-Portuguese Workshop Emerging Trends of Nanotechnology in Chemistry and Biology" organized by

Department of Chemistry, Hans Raj College, University of Delhi, held on February 12-13, 2016

- iii. In National Seminar on “Role of Analytical Sciences in Sustainable Development” organized by Department of Chemistry, Hans Raj College, University of Delhi, held on March 4-5, 2016
- iv. In 1<sup>st</sup> International Conference on “ Integrative Chemistry, Biology and Translational Medicine” (ICBTM-2019) organized by the centre for Global Health, Hansraj College, University of Delhi & Loyola University Chicago Stritch School of Medicine, USA held on February 25-26, 2019

### **Administrative Responsibilities**

1. Resource Person in the “*INSPIRE Internship Program- 2012*” organized by Hans Raj College, University of Delhi, held from December 17-21, 2012.
2. Deputy Superintendent in College Theory Examination (Evening Session) from 27 Nov-17 Dec, 2013.
3. Resource Person in the “*INSPIRE Internship Program- 2017*” organized by Hans Raj College, University of Delhi, held from December 12-16, 2017.
4. Two times Convener Chemical Store Session 2017-18, 2018-2019, Department of Chemistry, Hans Raj College.
5. Convener of Library Committee Session 2018-19, Hans Raj College, University of Delhi.

#### **COMMITTEES FOR THE ACADEMIC SESSION 2012-2013**

- Chemical Store (Member)
- Instrumentation Committee (Member)

#### **COMMITTEES FOR THE ACADEMIC SESSION 2013-2014**

- Chemical Store (Member)
- Instrumentation Committee (Member)
- Student Welfare Committee (Member)
- Environment Awareness Committee (Member)

#### **ACADEMIC SESSION 2014-2015**

- Apparatus Store (Member)
- Chemical Society (Member)
- Academic Affairs and Seminar Committee (Member)
- Environment Awareness Committee (Member)

#### **ACADEMIC SESSION 2015-2016**

- Apparatus Store (Convener)
- Chemical Store (Member)
- Spic Macay Committee (Member)

#### **ACADEMIC SESSION 2016-2017**

- Apparatus Store (Convener)
- Chemical Store (Member)
- Grievance Committee (Member)

#### **ACADEMIC SESSION 2017-2018**

- Chemical Store (Convener)
- Sports Committee (Member)
- Canteen Committee (Member)

#### **ACADEMIC SESSION 2018-2019**

- Library Committee (Convener)
- Chemical Store (Convener)
- SC-ST Cell Committee (Convener)
- Special Category Admission Enabling Committee (Member)

#### **ACADEMIC SESSION 2019-2020**

- Sports Committee (Member)
- Garden Committee (Member)

### **Editorials**

1. Edited the proceedings for Indo-Portuguese workshop on Emerging trends of nanotechnology in chemistry and biology, jointly Organized by Department of Chemistry , Hans Raj College and Deshbandhu College, University of Delhi, India held on 12-13 February 2016, published by Journal of Materials Nanoscience, Vol. 3(1), S15, ISSN 2394-0867, 2016
2. Edited the proceedings for 1<sup>st</sup> International Conference on Integrative Chemistry, Biology and Translational Medicine(ICBTM-2019), organized by the centre for Global Health, Hansraj College, University of Delhi & Loyola University Chicago Stritch School of Medicine, USA held on February 25-26, 2019, ISBN 978-93-5351-396-2

### **Literary, Cultural or Other Activites**

1. Led and Supervised a team of 25 college students for the University of Delhi educational trip Gyanodaya-2012 (29<sup>th</sup> September – 5<sup>th</sup> October)
2. Led and Supervised a team of 10 college students for the University of Delhi educational trip Gyanodaya-2013 (2<sup>nd</sup> September – 8<sup>th</sup> September)
3. Led and Supervised a team of 10 college students for the University of Delhi educational trip Gyanodaya-2014 (11<sup>th</sup> March – 19<sup>th</sup> March)

### **Faculty Development Programme (FDP)**

1. Orientation Programme organized by *Centre for Professional Development in Higher Education (CPDHE)*, University of Delhi, held on 25 June,2012 to 21 July,2012.
2. Refresher Course organized by *Centre for Professional Development in Higher Education (CPDHE)*, University of Delhi, held on 26 June,2015 to 16 July,2015
3. Faculty Development Programme on *“From Chemistry of Life to Chemistry of Diseases: Understanding Clinical Biochemistry”*

organized by Department of Chemistry, Daulat Ram College, University of Delhi, held on 15-22 June 2017.

4. Faculty Development Programme on ***“Digital Literacy an Introduction to ICT Skills”*** organized by Department of Electronics, Hans Raj College, University of Delhi, held on 15-17 Sept 2017.
5. Refresher Course on ***“Swayam Arpit Online Course Certification”***, held on 30 March 2019.
6. Faculty Development Programme on ***“ICT in Education and Cyber-Security”*** organized by Department of Mahatma Hansraj Faculty Development Center, Hans Raj College, University of Delhi, held on 10-16 July 2019.
7. Refresher Course on ***“Swayam Arpit Online Course Certification”***, held on 16 February 2020.
8. Faculty Development Programme on ***“Managing Online Classes and Co-Creating MOOCS:2.0”*** organized by Teaching Learning Centre, Ramanujan College, University of Delhi, held on 18 May- 03 June 2020.
9. Faculty Development Programme on ***“Open Source Tools for Research”*** organized by Teaching Learning Centre, Ramanujan College, University of Delhi, held on 08 June-14 June 2020.

#### Academic Awards and Distinctions

1. Best Teaching Excellence Award of Delhi University on May 1, 2015
2. Best Innovative Idea Award of Delhi University on February 22, 2015
3. Best Poster Award on ***“Utilization of Delhi’s Garden and Horticultural Waste for Environmental Remediation and Energy Production”*** in International conference, held on November 17-18, 2016

#### Membership/Fellowship of Academic Bodies/ Societies

1. Indian Society of Analytical Scientists (ISAS, LM-58/2013)
2. Indian Science Congress Association, (Life Time Membership) (L-23652)
3. Life Time Membership of Indian Chemical Society
4. Life Member of ***“Advancing Green Chemistry”*** Green Chemistry Network Centre (GCNC), 0636/17/270, University of Delhi, India.
5. Life Time Membership of Indian Council of Chemists.
6. Membership (2018) of International Union of Pure and Applied Chemistry (IUPAC).
7. Society for Technologically Advanced Materials , India (S.T.A.M.I), Life Time Membership Index (LM-CS-0718)

#### Presentation/Participation in Conferences & Seminar

- Poster presented and abstract published**
1. Paper Presented in International Year of Chemistry-2011 (IYC-2011) ***“National Conference on Emerging Trend in Chemistry-Biology Interface ETCBI-2011”*** Organized by Department of Chemistry, D.S.B. Campus, Kumaun University, Nainital from 3 November 2011 to 5 November 2011.
  2. Oral Presented in International Conference on: ***“Interface between Chemistry and Environment (ICICE)”*** at Department of chemistry,

Ramjas College, University of Delhi, Delhi, held on December 13<sup>th</sup>-14<sup>th</sup>, 2012.

3. Poster Presented in International Conference on Chemistry: “Frontiers and challenges [Under SAP (DRS-1)]” at Department of chemistry, Aligarh Muslim University, Aligarh, India, held on March 2<sup>th</sup>-3<sup>th</sup>, 2013.
4. Poster Presented in International Workshop on Chemistry: “RSC Workshop on Green Chemistry and Water Treatment”, University Of Delhi, India, held on October 17<sup>th</sup>, 2016.
5. Poster Presented in International Conference on : “Green chemistry in Environmental Sustainability & Chemical Education (ICGC-2016)”, organized by Department of Chemistry, Daulat Ram College, University Of Delhi, India, held on November 17<sup>th</sup>-18<sup>th</sup>, 2016.
6. Poster Presented in International Conference on : “Material Research and Technology (ICMRT-2017)”, organized by Faculty of Science, Aggarwal College Ballabgarh, Faridabad (Haryana), India, held on July 10<sup>th</sup>-11<sup>th</sup>, 2017.
7. Poster Presented in International Workshop on Green Chemistry: “Indo-UK Scoping Workshop On Development of Rural Biorefineries in India From Waste to Wealth”, University Of Delhi, India, held on February 20<sup>th</sup>, 2017.
8. Oral Presented in International Conference on “Advances in Analytical Sciences (ICAAS-2018)”, organized by Indian Society of Analytical Scientists, Delhi Chapter & CSIR-Indian Institute of Petroleum, Dehradun held on 15-17 March, 2018.
9. Poster Presented in Regional Workshop on Research based Pedagogical Tools held in Kumaun University, Nainital, Uttarakhand, 263001 from 31<sup>st</sup> July to 2<sup>nd</sup> August, 2018.
10. Poster Presented in I<sup>st</sup> International Conference on “ Integrative Chemistry, Biology and Translational Medicine” (ICBTM-2019) organized by the centre for Global Health, Hansraj College, University of Delhi & Loyola University Chicago Stritch School of Medicine, USA held on 25-26 February, 2019.
11. Invited Lecture in National Conference on “Science & Technology in Environmental Management” (STEM-2020) organized by Society for Green World & Sustainable Development, Bipin Bihari College, Jhansi held on 22-23 February, 2020.

**Conference/  
Seminar Attended**

1. Attended International Conference on chemistry: Frontiers and challenges [Under SAP (DRS-1)] at Department of chemistry, Aligarh Muslim University, Aligarh, India, held on March 5<sup>th</sup>-6<sup>th</sup>, 2011.
2. Attended participated in the National Workshop on “Basics and Applications of Spectroscopic Techniques”, held on 5-6 October, 2012 at Kirori Mal College, DU, Delhi, organized by Indian Society of Analytical Scientist- Delhi Chapter, Department of Chemistry, Kirori Mal College, DU and Petrotech Society.
3. Attended Northern regional Science Congress organized by Indian Science congress association (Delhi Chapter) in association with DST,

- held on November 26<sup>th</sup>-27<sup>th</sup>, 2012.
4. Attended Seminar on surface analytical techniques organized by ISAS, Delhi Chapter, held on August 24<sup>th</sup>, 2013.
  5. Attended Seminar on Microscopic techniques organized by ISAS, Delhi Chapter, held on June 26<sup>th</sup>, 2014.
  6. Attended International Seminar on "Effects of Pollution on Human Health" organized by Department of Chemistry, University of Delhi and Indian Academy of Biomedical Sciences (IABS), held on December 1<sup>st</sup>, 2017.
  7. Organizing committee member at the National Seminar on "Environment and Sustainability in The Third World" organized by Department of Chemistry & IQAC, Hansraj College, University of Delhi. held on Feb 28<sup>th</sup> 2020

## Personal Profile

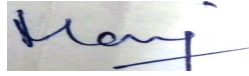
Date of Birth	: 20 <sup>th</sup> Nov. 1979
Father's Name	: Late Shri. Lakhpat Singh
Nationality	: Indian
Languages Known	: English and Hindi
Marital Status	: Married

## References

1. **Dr. R.S Kushwaha**, Associate Professor  
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Bipin Bihari P.G. Science College,  
(Bundelkhand University) Jhansi (U.P.).  
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Date:

Signature:

A handwritten signature in blue ink, appearing to be 'Henry', written on a light-colored surface. The signature is cursive and includes a horizontal line at the end.