

# CURRICULUM VITAE



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## Dr. Chandra Mohan

I am extensively involved in teaching and research in Chemistry for PhD, MSc and BSc students at K R Mangalam University, Gurugram. My research is focused on the synthesis of heterocyclic transition metal complexes with their biological applications, in electrochemical sensors and in solid acid catalysis. I also involved in social awareness activities as National Service Scheme (NSS) Coordinator of University. My aim is to engage students for the development and social welfare activities, specially in rural areas.

## Educational Qualifications

### **Guru Gobind Singh Indraprastha University, Delhi**

**PhD**, Inorganic Chemistry, *Chemical Sensors*, Feb. 2018

Thesis: "Synthesis and characterization of Schiff based metal complexes and their application as chemical sensors"

Supervisor: Prof. Kusum Sharma, MAIT, Delhi

### **University of Delhi, Delhi**

**MPhil**, Inorganic Chemistry, *HPA modified Clay catalyst*, Sep. 2009

Dissertation: "Synthesis of a new series of acid catalysts: Heteropoly acid intercalated clays"

Advisor: Prof. Monika Datta

**M. Sc** (Applied Chemistry), Maharshi Dayanand Saraswati University, Ajmer, June 2007, 66.4%

Project: "Lab Scale evaluation of acid corrosion inhibitor and water quality" at *Deioners specialty chemicals (P) Ltd., New Delhi*

Advisor: Dr.. Raju Ratnani

**B. Sc** (Physics, Chemistry, Maths), S P C Government College, Ajmer, May 2005, 57.9%

**MBA** (HR + IT), SVSU, Meerut (Pursuing)

**12<sup>th</sup>** (Physics, Chemistry, Maths), DAV School, RBSE Board, Ajmer, April 2002, 61.5%

**10<sup>th</sup>** (E, H, M, SC., SOC. SC., SANSKRIT), DAV School, RBSE Board, Ajmer, June 2000, 73.8%

**Diploma** (Computer Programming), Capital Computers, Ajmer, Feb. 2006, 81.3%

**GATE** (Chemistry), March 2013

## **Research and Professional Experience- 11 Years**

**August 2013 - Present** : Assistant Professor, K. R. Mangalam University, Gurugram (9.1 Yrs.)

**April 2010 - June 2013** : Research Fellow [RGNF-UGC], GGSIP University, Delhi (3.2 Yrs.)

## **Research Guidance**

PhD - **04** (1 awarded, 3 ongoing); MSc students (**02**); BSc students (**15**)

## **Research Interest & Teaching Subjects**

### **Research Areas**

Transition metal chemistry, Chemical and biosensor applications, Solid acid catalysis, Biological active compounds, Polymer nanocomposites

### **Teaching Subjects:**

#### **M.Sc. (Chemistry)**

Co-ordination Chemistry; Chemistry of d and f block elements; Chemistry of boron, silicon and organometallic compounds

#### **B.Sc. (Chemistry)**

Inorganic Chemistry; Physical Chemistry; Noval inorganic Solids

#### **B.Tech.**

Engineering Chemistry; Environmental Studies (EVS); Disaster Mangement (DM)

## **Research Projects & Training**

- 1) **“Summer Faculty Research Fellow- 2022”** for 2 months training programme under Prof. Praveen P. Ingole, IIT Delhi in June-July 2022.
- 2) **MOOC course** proposal submitted on “Achievements of Ancient Indians In Chemistry: A Beginning For Science & Technology” under Self-Paced/ Credit Course scheme of SWAYAM in **May 2022**.
- 3) Research project entitled *“Synthesis of heterocyclic derivatives and binuclear metal complexes for biological applications”* is ongoing under the Research Project scheme of KRMU. (**69,000**)
- 4) Submitted research project entitled *“A Novel Approach towards Synthesis of Multifunctional Additives: Clay Based Nano Pigments and Their Multifunctional Applications”* under the CRG scheme of SERB, Delhi in 2022 as Co-PI. (**25 Lakhs**)
- 5) Research project entitled “Clay as promising material for the recovery of metal ions from Solar PV panel E-Waste” submitted to DST, Haryana in September 2022. (**28 Lakhs**)
- 6) Research project entitled *“Development of e-learning based educational module”* submitted under the Technology Development Proposal scheme of UBA, GOI in 2021. (**1 Lakhs**)
- 7) SWAYAM ARPIT based “Online Refresher Course in Chemistry for Higher Education Faculty” and “Advances in Chemistry and Physics of Materials” from **Aug. 2018 to March 2019**.
- 8) “Jmol Application training” organized at K.R. Mangalam University from January **2020**.

## **Institutional Responsibilities/Academic Activities (K R Mangalam University)**

Member, IQAC criterai III team (2020 onwards)

Overall Incharge, NSS (2017 onwards)

Faculty-Incharge, Science Society (2015-2019)

Member, The Institute of Innovation, Invention & Entrepreneurship (TIIE) (2018-19)  
 Placement Coordinator, SBAS-Chemistry  
 Member, SRC (2018 onwards)  
 Incharge, UBA (2019 onwards)  
 Co-convenor, International Conference AASET-2017 (Aug. 17-18, 2017)  
 Member, SC-ST Cell, Staff Grievance Redressal Committee (2021 onwards)  
 Member, Discipline Committee and Anti-Ragging Squad (2015 onwards)  
 Faculty coordinator, KRMU Times newsletter (2018-19)  
 Incharge, Chemistry practicals (2014 onwards)  
 Incharge, Time-Table (2018-19)  
 Incharge, Science Fair, Industrial tour, student internship (2014 onwards)

### List of Publications (*Summary*)

Books	3
Book Chapters	7
Patents:	10
Referred Journals	24
Referred Conferences	8
Others	8
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Total	60

### **Publications (Referred Book/ BookChapters)**

- 1) Authored Book: “**Advances in Heteropoly acid modified Clays as acid catalysts**”, **C. Mohan**, ISBN: 978-620-3-85399-5, *Lambert Academic Publishing (LAP)*, Germany, 2021.
- 2) Book Chapter: “Basics of Clay Minerals and their characteristic properties”, **C. Mohan** and N. Kumari, **Clay and Clay Minerals**, ISBN 978-1-83969-564-3, pp 15-43, *INTECHOPEN*, London, UK, 2021. DOI: 10.5772/intechopen.97672
- 3) Lecture Notes: “Application of Efficient Naturally Occurring Clay Mineral for Fuchsin Basic Dye Removal”, **C. Mohan**, N. Kumari, R. Jindal, R. Gautam, **Advances in Functional and Smart Materials, Lecture Notes in Mechanical Engineering**, pp 1-9, *Springer*, Germany, UK, 2022. DOI: doi.org/10.1007/978-981-19-4147-4\_39
- 4) Book Chapter: “Environmental Impacts of Industrial Waste and Wastewater Treatments”, **C. Mohan** and J. Robinson, **Science of Environment, Vol II**, ISBN 978-81-955557-1-0, pp 111-118, *SCIENG Publications*, Tamilnadu, India, 2022.
- 5) Book Chapter: “Heavy Metal Toxicity and their Effects on Human Health: A Review”, **C. Mohan** and D. Jain, **Environment and Unsustainable Human Life, Vol II**, ISBN 978-93-91308-46-9, pp 136-146, *VL Media Solutions*, New Delhi, India, 2022.
- 6) Book Chapter: “Coronavirus: Prevalence and Vaccination”, **C. Mohan**, N. Kumar, L. Singh, Babita and V. Kumar, **COVID-19 Pandemic: A Flamboyant Spark against Human Health and Life Style**, ISBN: 978-93-92787-00-3, pp 256-264, *Selective & Scientific Book Publisher*, New Delhi, 2022.
- 7) Book Chapter: “Studies on kinetic Parameters of Zinc Accumulation by Yeast”, S. Kumari and **C. Mohan**, **Recent Advances in Multidisciplinary Research**, ISBN 978-93-91777-17-3, pp 118-126, *Raj Publishing House*, Jaipur, India, 2021.
- 8) Book Chapter: “How India Tackles with an Epidemic: COVID-19”, **C. Mohan** and V. Kumar, **Impact of COVID-19 on economy, business, education and social life**, ISBN 978-93-90847-06-8, Vol. 3, pp 137-142, *Kripa Drishti Publications*, India, 2021.
- 9) Book Chapter: “The model used in plant protection and the principles of integrated pest management”, **C. Mohan**, D. Rani, V. Kumar, J. Singh, **Microbial Bio-stimulants: Biorational Pesticides for Management of Plant Pathogens**, Apple Academic Press (CRC Press), (Accepted), 2022.

- 10) Book Chapter: “Green Synthesis Approach for the Synthesis of Sustainable Nanomaterials”, **C. Mohan, J. Robinson, N. Kumari, Sustainable Materials: Modelling, Characterization, and Optimization**, Elsevier Publishing, (Accepted), 2022.
- 11) Edited Book: “**Green Chemistry Approaches to Environmental Sustainability: Status, Challenges, & Prospective**”, C. Mohan, N. Kumari, Sushma, A. Yadav, V. K. Garg, Elsevier Publishing, (In process), 2022.
- 12) Edited Book: “**Clay, A Novel Material: Characterization and Applications**”, C. Mohan, N. Kumari, Cambridge Scholars Publishing, UK (In process), 2022.

### **Research Publications (Referred Journals)**

**Total Citations: 80, h – Index: 05, i10-index – 02**

#### **WoS/SCI/Scopus/UGC Care listed- 15**

- 1) **Mohan C.**, Yadav S., Kumari N. et al., “Interaction of Indigo Carmine with naturally occurring clay minerals: An approach for the synthesis of Nano pigments” *Material Today: Proceedings*, Vol. 65, Issue 9, **2022**, (In Press). (**Q3-Scopus, Cite Score 2.3**) DOI: 10.1016/j.matpr.2022.08.081
- 2) **Mohan C.**, Kumari N., Robinson J. “Sustainable and environmental friendly energy materials” *Material Today: Proceedings*, 2022. (**Q3-Scopus, Cite Score 2.3**) DOI: doi.org/10.1016/j.matpr.2022.09.187
- 3) Kumar M., **Mohan C.**, Kumar S., Epifantsev K., Singh V. et al., “Coordination behavior of Schiff base copper complexes and structural characterization” *MRS Advances*, Vol. 7, Issue 27, **2022**, pp 348-353, ISSN: 2059-8521. (**Q3-Scopus, ESCI, Cite Score 1.7**) DOI: 10.1557/s43580-022-00348-6
- 4) **Mohan C.**, Chugh V., Pandey G. “Heterocyclic compounds of thiazoles as important material in medicinal chemistry” *Material Today: Proceedings*, 2022. (**Q3-Scopus, Cite Score 2.3**) DOI: doi.org/10.1016/j.matpr.2022.09.150
- 5) **Mohan C.**, Kumari N., “Synthesis of Acid Activated and Silicotungstic Acid (STA) Intercalated Montmorillonite Clay as Green Catalyst” *Materials Today: Proceedings*, Vol. 56, Issue 2, **2022**, pp 971-975, ISSN: 2214-7853. (**Q3-Scopus, SCI, Cite Score 2.3**) DOI: 10.1016/j.matpr.2022.03.093
- 6) **Mohan C.**, Kumar V., “Ion-selective Electrodes Based on PVC Membranes for Potentiometric Sensor Applications: A Review” *International Journal of Membrane Science and Technology*, Vol. 8, Issue 2, **2021**, pp 76-84, ISSN: 2410-1869. (**Q4-Scopus, Cite Score 0.2**) DOI: https://doi.org/10.15379/2410-1869.2021.08.02.06
- 7) **Mohan C.**, Sharma K., Chandra S., “Highly selective thiocyanate PVC membrane electrode based on Ni (II) complex of 2-acetyl thiophene thiosemicarbazone schiff base (NATS) as ionophore” *Eurasian Journal of Analytical Chemistry*, Vol. 13, No. 6, **2018**, pp 44-56, ISSN: 1306-3057. (**Scopus, IF 0.95**)
- 8) **Mohan C.**, Kumar V., Kumari S., “Synthesis, characterization, and antibacterial activity of the schiff bases derived from thiosemicarbazide, 2-acetyl thiophene and thiophene-2 aldehyde” *International Research Journal of Pharmacy*, Vol. 9, No. 7, **2018**, pp 153-158, ISSN: 2230-8407. (**Scopus**) DOI: 10.7897/2230-8407.097141
- 9) **Mohan C.**, Sharma K., Chandra S., “Cd (II) ion-selective electrode based on 2-acetylthiophene Semicarbazone in Polymeric membrane”, *Analytical & Bioanalytical Electrochemistry*, Vol. 9, No. 1, **2017**, pp 35-46, ISSN: 2008-4226. (**Q3- WoS, ESCI, Cite Score 3.2**)
- 10) **Mohan C.**, Sharma K., Chandra S., “A Zinc(II) PVC-Membrane Sensor Based On Synthesized Thiophene-2-Aldehyde Semicarbazone (TAS) As An Ionophore” *Jordan Journal of Chemistry*, Vol. 12, No. 1, **2017**, pp 39-50, ISSN: 1814-9111. (**WoS, ESCI**)
- 11) **Mohan C.**, Sharma K., Chandra S., “Aluminium (III) selective PVC membrane sensor based on zinc complex of thiophenealdehyde thiosemicarbazone as an ionophore (ZTATS)” *Der Pharma Chemica*, Vol. 9, No. 7, **2017**, pp 133-139, ISSN: 0975-413X. (**Scopus, IF 0.32**)
- 12) Kumari S., **Mohan C.**, Kumar V., “Bioaccumulation of cadmium and quantitative characterization of proteins of *Saccharomyces cerevisiae*” *International Journal of Psychosocial Rehabilitation*, Vol. 24, Issue 2, **2020**, pp

- 13) Mangla M., Barwal A. and **Mohan C.**, “Recent Advances in Removal of Heavy Metal Ions from Wastewater by Using Natural Adsorbents” *Journal of Chemical Technology and Metallurgy*, **2021**, (Communicated, Article Number: 21-177). (**Scopus, IF 0.81**)
- 14) **Mohan C.**, Kumar V., Rani D., Saha A., Robinson J., “COVID -19: Etiology, Transmission, Epidemiology, Treatment and Clinical trials” *Journal of Pharmaceutical Research International*, Vol. 33, Issue 60B, **2021**, pp 705-714, ISSN: 2456-9119. (**WoS, ESCI, IF 0.84**), DOI: 10.9734/jpri/2021/v33i60B34669
- 15) Kumar V., **Mohan C.**, Rani D., Pandey S., Saini V., “COVID-19: A positive prospect of pandemic situation” *International Journal of Psychosocial Rehabilitation*, Vol. 24, Issue 10, **2020**, pp 7031-7034, ISSN: 1475-7192. (**Scopus, Cite Score 0.2**), DOI: 10.37200/IJPR/V24I2/PR2024397

#### **Other reputed journals- 21**

- 1) **Mohan C.**, Raj M., Garg P., Dagar Y., “Biological active compounds for the development of biosensors and medicinal importance” *EC Pharmacology and Toxicology*, Vol. 10, Issue 3, **2022**, pp 86-87. (**PubMed, Publons**)
- 2) **Mohan C.** and Kumari S., “Heavy Metal Pollution: Chemistry is the Solution?” *Medicinal & Analytical Chemistry International Journal*, Vol. 5, Issue 1, **2021**, 000167, ISSN: 2639-2534. (**Pulons, ICI, Crossref**), DOI: 10.23880/macij-16000168. **Editorial**
- 3) **Mohan C.**, Kumar V., Kumari N., Kumari S., Yadav J., Gandass T., Yadav S., “Synthesis, characterization and antibacterial studies of semicarbazide based Schiff bases and their Pb(II), Zr(IV) and U(VI) complexes” *Advanced Journal of Chemistry -Section B*, Vol. 2, No. 4, **2020**, pp 187-196, ISSN: 2716-9634. (**ICI, Publons**), DOI: 10.33945/SAMI/AJCB.2020.4.3
- 4) Arya H., **Mohan C.**, Pandey P., Verama M., Kumar V., “Phytochemical screening of Basella alba leaves extracts and evaluate its efficacy on sun burn (Sun Protection Factor)” *European Journal of Molecular & Clinical Medicine*, Vol. 8, Issue 1, **2021**, pp 417-423, ISSN: 2515-8260. (**Embase, Publon, IF 0.33**), DOI: 10.31838/ejmcm
- 5) Kumar V., **Mohan C.**, “Determination of Sun Protection Factor in different extracts of *Catharanthus Roseus*” *International Journal of Research in Pharmacy and Pharmaceutical Sciences*, Vol. 5, Issue 1, **2020**, pp 47-49, ISSN: 2455-698X. (Indexed in scirus, NISCAIR)
- 6) **Mohan C.** and Kumar V., “A Comparative Study of SARS, MERS with COVID-19” *Coronaviruses*, Vol. 2, Issue 3, **2021**, pp 379-383, ISSN: 2666-7967. (**Bentham Science**), DOI: 10.2174/2666796701999200905093233
- 7) Kumari S. and **Mohan C.**, “Bioaccumulation of Copper and Characterization of Copper Binding Proteins in Yeast *Saccharomyces Cerevisiae*”, *Journal of Biomedical Science and Research*, Vol. 2, Issue 2, **2020**, pp 123-127, ISSN: 2582-077X. (**SJIF, Pubtexto**)
- 8) **Mohan C.** and Kumar V., “Synthesis and application areas of heteropolyacid intercalated clays as novel acid catalysts” *Medicinal & Analytical Chemistry International Journal*, Vol. 3, No. 3, **2019**, pp 145, ISSN: 2639-2534. (**Pulons, ICI, Crossref**), DOI: 10.23880/macij-16000145
- 9) **Mohan C.**, “Application of Thiosemicarbazide Based Schiff Base Ligands as Ionophore in PVC Metrix for Potentiometric Sensor Development” *Medicinal & Analytical Chemistry International Journal*, Vol. 3, No. 1, **2019**, pp 130, ISSN: 2639-2534. (**Pulons, ICI, Crossref**), DOI: 10.23880/macij-16000130
- 10) **Mohan C.**, Sharma K. and Kumari S., “Synthesis and Structural Studies of Schiff based Metal Complexes of Semicarbazones and Thiosemicarbazones”, *International Journal of Chemical and Natural Science*, Vol. 3, No. 5, **2015**, pp 312-319, ISSN: 2347-6672. (Indexed in ROAD)

## Papers Communicated (Referred Journals)-15

1. Vodwal L., Chopra H., Gandhi P.B., **Mohan C.**, Dixit S., Jain A., "A regioselective synthesis of 3-hydroxyindoles via an intermolecular C (sp<sup>2</sup>)-C (sp<sup>2</sup>) bond formation" *Advances in Materials and Processing Technologies*, 2022 (Communicated, M. No.: 225776655) (**Q2- Scopus, SCIE, IF-2.3**)
2. **Mohan C.**, Kumari N., Varma R., "Clay surface modification with cationic surfactant and their thermal, morphological and crystal structure analysis" *Clay and Clay Minerals*, 2022, (Communicated, Manuscript Number: CLAY-D-22-00119). (**Q2- Scopus, SCIE, IF-2.4**)
3. Kumar S., Sucheta, Garg A., **Mohan C.**, "Synthesis, Physicochemical and Spectral Characterization of Novel Cannabidiol derivatives as anti-epileptic agents" *Journal of Biological Inorganic Chemistry*, 2022, (Accepted, Manuscript Number: JBIC-22-08-00145). (**Q2- Scopus, SCIE, IF-3.35**)
4. **Mohan C.**, Kumari N., Jeandet P., "Synthesis of nano pigments using naturally-occurring Clay minerals with enhanced thermal stability and their application as colorants in polymer matrixes" *Australian Journal of Environmental Education*, 2022, (Communicated, Manuscript Number: AEE-EJA-2022-0072). (**Q2- Scopus, SCIE, IF-2.2**)
5. **Mohan C.**, Kumari N., "Novel Approach for the Synthesis of Hybrid-Clay based Nano Pigments and their Application as Coloring Agents" *Clean Technology & Environmental Policy*, 2022, (Communicated, Manuscript Number: 222327300). (**Q1- SCIE, IF-4.7**)
6. **Mohan C.**, Neeraj, Kumari N., "Recent advancement in synthesis, properties and applications of Clay polymer nanocomposites" *Journal of Biological Inorganic Chemistry*, 2022, (Accepted, Manuscript Number: JBIC-22-07-00130). (**Q2- Scopus, SCIE, IF-3.35**)
7. Kumar K., Dutt R., Gupta R., Minakshi, **Mohan C.**, "Do Sero-Negative Patients Behave Differently Than Sero-Positive Patients In Rheumatoid Arthritis" *Journal of Positive School Psychology*, 2022, (Accepted). (**Q1- Scopus, Cite Score-3.6**)
8. Kumari M., Dixit S., **Mohan C.**, Chalana A., Singh R., "Design of novel 2-Acetyl thiophene thiosemicarbazone ligand based metal complexes and their structural characterization" *MRS Advances*, 2022, (Accepted, Manuscript Number: MRSA-D-22-00150). (**Q3-Scopus, ESCI, Cite Score 1.7**)
9. **Mohan C.**, Kumari N., "Effect of various types of naturally occurring clay minerals on mechanical and thermal properties of PMMA polymer composite films" *MRS Advances*, 2022, (In Press, Manuscript Number: MRSA-D-22-00132). (**Q3-Scopus, ESCI, Cite Score 1.7**)
10. **Mohan C.**, Sharma K., Chandra S., "Lead (II)-Selective Potentiometric Sensor Based On Thiophene-2-Aldehyde Thiosemicarbazone (TATS) Schiff Base In Polymer Matrix" *Analytical & Bioanalytical Electrochemistry*, 2022, (Communicated, Manuscript Id: ABEC-2205-1244). (**Q3-Scopus, WoS, ESCI, Cite Score 3.2**)
11. **Mohan C.**, Kumari N., Robinson J., Malini G., "Green synthesis approach for the synthesis of Sustainable Nanomaterials" *RSC Sustainability*, 2022, (Communicated, Manuscript Number: SU-CRV-08-2022-000008).
12. Robinson J., Kumari S., Gautam B., **Mohan C.**, "The Medicinal Functionality of Quinazolines" *Journal of Pharmaceutical Negative Results*, 2022, (Accepted). (**Q3-Scopus, Cite Score 1.0**)
13. **Mohan C.**, Kumar V., Sheng Chen Z., and Rani D., "Antimicrobial activity and phytochemical evaluation of extracts of *Grewia Multiflora* Juss" *Material Today Chemistry*, 2022, (Communicated, Manuscript Number: 812233). (**WoS, SCI, IF 5.52**)
14. Mangla M., Barwal A. and **Mohan C.**, "Recent Advances in Removal of Heavy Metal Ions from Wastewater by Using Natural Adsorbents" *Journal of Chemical Technology and Metallurgy*, 2021, (Communicated, Article Number: 21-177). (**Scopus, IF 0.81**)

15. **Mohan C.**, Yadav N., Kumari N., “Synthesis, properties, and applications of Clay- Nanocomposites as multifunctional material” *Advances in Functional and Smart Materials, Lecture Notes*, Springer **2022**, (In Press). (**WoS, SCI, IF 1.24**)

### **Patent(s)**

- 1) **C. Mohan**, A. Singh, Reena, S. Singh, M. Singh et al.,: "System for nitrogen fixation enhancement in pulses under moisture-stress condition by foliar application of  $\text{KNO}_3$ " **German Patent**, 28<sup>th</sup> August 2022. (Reference no. 2022082610545800DE).
- 2) **C. Mohan**, R. Saini, R. K. Trivedi, V. Negi et al.,: "A novel IoT-based sustainable medical waste treatment system" **German Patent Granted**, 19<sup>th</sup> August 2022. (Grant no. 202022104468).
- 3) **C. Mohan**, P. Dhadeech, A. Yadav, S. Tandon et al.,: "A Novel system for Wind-powered IOT based sustainable organic compost machine" **South African Patent**, 15<sup>th</sup> July 2022. (Reference no. 2022/07879).
- 4) **C. Mohan**, M. Chahar: "Remotely Piloted UVL Robotics Assisted Drone for Monitoring & Inspection Areas" **Indian Design Patent**, 22<sup>nd</sup> August 2022. (Reference no. 369508-001).
- 5) **C. Mohan**, A. Kumar, A. Dahiya, A. Singh et al.,: "Nano Fabrication of Nanoparticles to Solar Cells for maximum absorption of Solar Energy" **Indian Patent**, 22<sup>nd</sup> July 2022. (Reference no. 202211040752 A).
- 6) **C. Mohan**, S. Kumar, M. Kumar, N. Kumar et al.,: "Machine Learning-based automatic waste management for E-environment" **Indian Patent**, 2<sup>nd</sup> September 2022. (Reference no. 202211047396).
- 7) **C. Mohan**, A. Shrivastava, B. Kumar, P. Nigam et al.,: "Renewable Green Energy for Sustainable Development" **Indian Patent**, 1<sup>st</sup> July 2022. (Reference no. 202221033886 A).
- 8) **C. Mohan**, S. Sharma, V. Kumar, A. Kumar et al.,: "Extraction of bioactive compounds from plant material" **Indian Patent**, 18<sup>th</sup> Feb. 2022. (Reference no. 202241007317).
- 9) **C. Mohan**, A. Saha, V. Kumar, S. Kumar et al.,: "Evaluation of Sulfonamides as promising anti-virul lead molecules docking against anti-COVID-19" **Canada Copyright**, 13<sup>th</sup> Dec. 2021, (Reference no. 1187097).
- 10) **C. Mohan**, V. Kumar, S. Kumari, N. Kumari: "Zirconium and Uranium metal complexes of Semicarbazide derivatives with antibacterial activity", **Indian Patent**, 11<sup>th</sup> June 2021, (Reference no. 202111023457).

### **Referred Conferences/ Invite speaker/ Keynote speaker (27)**

- 1) A green approach of catalysis: Silicomolybdc Acid modified Montmorillonite Clay for Organic Synthesis, 4<sup>th</sup> Edition of World Nanotechnology Conference, April 25-27, **2022**, Magnum group, USA (**Invited Speaker**).
- 2) Synthesis of Acid Activated and Silicotungstic Acid (STA) Intercalated Montmorillonite Clay as Green Catalyst, International Conference on Materials, Mechanics & Modelling ICMMM 2021, March 4-6, **2022**, NIT, Jamshedpur, India (**Oral Presentation**). ISSN: 2214-7853
- 3) Bioplastic formulation from starch for sustainable development, 7<sup>th</sup> International Mardin Artuklu Scientific Researches Conference, December 10-12, **2021**, Mardin, Turkey (**Oral Presentation**). ISBN: 978-625-8423-04-4, Farabi Publishing House.
- 4) Acid-activated montmorillonite clay as ionophore in PVC membrane for the fabrication of Ion-selective electrode (ISE), International Conference on Technologies for Smart Green Connected Societies ICTSGS-2021, November 29-30, **2021**, Yamagata University, Japan (**Oral Presentation**).
- 5) Clay Based Ionophore in PVC Membrane for their Application in Ion-Selective Electrodes, Electrochemical Society Meeting **2021** (**Oral Presentation**). DOI: 10.1149/MA2021-02551617mtgabs
- 6) Heterocyclic metal complexes of thiophene based compound as electroactive material in membrane sensor development (Published in Journal of Physical Chemistry & Biophysics, vol 11), 8<sup>th</sup> International Conference on Physical and Theoretical Chemistry, Sept. 13-14, **2021**, Rome, Italy (**Invited Speaker**).
- 7) Synthesis and characterization of semicarbazide based U(VI) complexes and their application in electrochemical sensors, 2nd Edition of World Nanotechnology Conference, April 19-20, **2021**, Magnum group, USA (**Invited Speaker**).
- 8) Clay modified heteropoly acids as environmental friendly catalyst, Catalysis Virtual 2020 (CAT) Conference, July 17, **2020**, Magnum group, USA (**Invited Speaker**).

- 9) Implication of thiosemicarbazide based Schiff base in Sensor development, 2<sup>nd</sup> International European conference, July 4-5, **2020**, Ankara, Turkey (**Oral Presentation**).
- 10) Emerging Strategies for Water Purification Using Naturally Occuring Materials, Science Journal of Chemistry, **2019 (Lead Guest Editor)**.
- 11) 3<sup>th</sup> World Congress on Applied Science, Engineering and Technology, Oct. 7-9, **2019**, Dubai, UAE (**Keynote Speaker**).
- 12) Heteropolyacid intercalated Clay: A Novel acid Catalysts, *International (Indo-Italian) Conference on Green Chemistry & Natural Products*, Dec. 5-7, **2008**, University of Delhi, Delhi (**Poster**).

### **Editorial Board Member/ Guest Editor**

- 1) *Canadian Center of Science and Education, Canada*
- 2) *Journal of Innovative Research, Science Veir, Canada*
- 3) *World Journal of Pharmaceutical Research, Bulgaria*
- 4) *Medicinal and Analytical Chemistry International Journal, USA*
- 5) *Eminent Association of Researchers in Biological & Medical Sciences (EARBM), Thailand*
- 6) *Edwin Group of Journals, USA*
- 7) *Analytical Letters*
- 8) *Journal of Research in Applied Chemistry (ManTech Publications)*

### **Scientific Society Memberships (11)**

- 1) American Chemical Society (ACS), USA- **Community Member** (32338042)
- 2) Royal Society of Chemistry (RSC) - **Affiliate Membership** (722035)
- 3) Chinese Chemical Society (CCS), China- **International Member** (210510662)
- 4) South African Chemical Institute, South Africa (SACI) – **Member** (60203)
- 5) The Electrochemical Society (ECS), USA - **Member** (369701)
- 6) Institut de diplomatie publique, London – **Doctoral Member**
- 7) Asia-Pacific Chem., Biol. & Env. Eng. Society (APCBEEES), Hong Kong - **Member** (201775)
- 8) International Society of Electrochemistry (ISE), Switzerland - **Member** (20448)
- 9) The Indian Science Congress Association IISCA), India- **Life Member** (A7)
- 10) Indian Council of Chemists (ICC), India – **Life Member** (AF-8037)
- 11) Indian National Young Academy of Sciences (INYAS)- **Member**
- 12) DYAU Science Communication, India – **District Coordinator**

### **Awards & Professional Recognition**

- 1) **Best paper Award - International Conference (DAM2IC) 4-6 June, 2022**
- 2) **Certificate of excellence in reviewing** 2021- Asian Journal of Chemical Sciences, UK.
- 3) **Legal Awareness Award** 2022, 2021 & 2020 – IGNSA & Bhagidari Jan Sahyog Samiti, Delhi
- 4) **Certificate of excellence in reviewing** 2021- Journal of Pharmaceutical Research International, UK
- 5) **Award for outstanding contribution in Social Services** 2020 – DLSA & Bhagidari Jan Sahyog Samiti, Delhi
- 6) **Appreciation Certificate for organizing DYP** 2019 – Ministry of Youth Affairs and Sports, Delhi
- 7) **Awarded Rakshin title** 2019 – Sakshi NGO, Ministry of Youth Affairs and Sports, Delhi
- 8) **Young Faculty Award** 2018, 2016 - *Venus International Foundation*, Chennai, India
- 9) **Campus Ambassador** of Chemistry 2016 - Science Vier, Canada
- 10) First Prize in Chart Competition in 2003 – Chemistry Deptt., SPC Govt. College, Ajmer
- 11) NSS Group leader 2002-05, SPC Govt. College, Ajmer
- 12) Awarded Prizes in Quiz Competition, Chart Competition & Poster Making 1999-2002: DAV School, Ajmer

### **Social welfare activities/work done in NSS**

- 1) Handling NSS Unit from 2018 to present as University Coordinator



- 2) Actively involved in Unnat Bharat Abhiyan (UBA) Scheme of Govt. of India
- 3) Working in Swachh Bharat Scheme (SBSI) of Govt. of India
- 4) Attended National youth festival in 2018
- 5) Organized District Youth Parliament (DYP) for students of Gurugram district in Jan. 2019
- 6) Organized workshop on Legal Awareness with sponsorship of NCW Delhi in 2021
- 7) Organized adventure camps, special camps, blood donation camps, plantation drive in KRMU
- 8) Organized 8 online webinars and events on COVID-19 in 2020-21

### **Workshops /Symposium/Seminars/Training/FDP attended**

- 1) Virtual International Conference on Multifunctional Advanced Materials (VICMAM-2021)' JVM's Degree College, Association of Chemistry Teachers (ACT), 9-10 August, **2021**.
- 2) INDO-US Webinar & Lecture Series , Jamia Millia Islamia, New Delhi with Texas A&M University, USA, June 1-9, **2021**.
- 3) Workshop on "Handling Sophisticated Instruments and Data Interpretation", Chandigarh University, **2021**.
- 4) National conference on "New frontiers in biosensing", Hansraj College, Delhi, 3 April **2021**.
- 5) SERB supported Workshop on "Innovation in Material science for biomedical applications", CSIR-AMPRI, 24-25 Feb. **2021**.
- 6) AICTE sponsored One week Short Term course on "Spectroscopy and characterization of new generation materials", *IIT Roorkee*, Dec. 14-18, **2020**.
- 7) Short Term course on "Chemistry of advanced function materials", *NIT Srinagar*, Sept. 21-25, **2020**.
- 8) Two weeks Online Capacity Building Programme, *Alagappa University, Tamil Nadu*, June 12-23, **2020**.
- 9) Online FDP on "Spectroscopy and analytical techniques", *JC Bose University, Faridabad*, May 25-29, **2020**.
- 10) Online FDP webinar on "E- content development methodology and copyright issues", *GAD-TLC, MHRD*, May 15, **2020**.
- 11) QIP based One week Short Term course on "Waste to Valuables: Different Biological and Thermal/Hydrothermal Approach", *IIT Roorkee*, July 15-19, **2019**.
- 12) Short Term course on "Solar Wind & Non- Conventional Sources of Energy through ICT", *NITTTR, Chandigarh*, Bharati vidyapeeth college of Egg. New Delhi, March 11-15, **2019**.
- 13) QIP based Short Term course on "Nanotechnology: Basics and Biochemical Applications", *IIT Roorkee*, May 21-25, **2018**.
- 14) Faculty development programme on "Energy, Environment and Sustainable Development", *NITTTR, Chandigarh*, Bharati vidyapeeth college of Egg. New Delhi, July 24-28, **2017**.

### **References**

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| <p>1. Prof. (Dr.) N. K. Kaushik<br/>Former-Head, Dept of Chemistry<br/>University of Delhi, Delhi- 110007<br/>India.<br/>Email: <a href="mailto:narenderkumar_kaushik@yahoo.co.in">narenderkumar_kaushik@yahoo.co.in</a><br/>Phone: +91-9818167997</p>   | <p>2. Prof. (Dr.) Kusum Sharma (PhD Supervisor)<br/>Professor and Head, Department of Applied Science<br/>Maharaja Agrasen Institute of Technology<br/>Rohini, Sector 22, Delhi<br/>New Delhi- 110086, India.<br/>Email: <a href="mailto:ksharma1959@yahoo.co.in">ksharma1959@yahoo.co.in</a><br/>Phone: +91-9810746089</p> |
| <p>3. Dr. Shahid Rasul<br/>Lecturer<br/>Faculty of Engineering and Environment<br/>Whyne Jones Building, Northumbria University<br/>Newcastle upon Tyne, NE1 8ST, United Kingdom.<br/>Email: <a href="mailto:shahid.rasul@northumbria.ac.uk">shahid.rasul@northumbria.ac.uk</a><br/>Phone: +44 (0)191 227 7233</p> | <p>4. Dr. Nahar Singh<br/>Principal Scientist, Analytical Chemistry Division<br/>National Physical Laboratory (CSIR),<br/>New Delhi 110012<br/>Email: <a href="mailto:naharsingh@nplindia.org">naharsingh@nplindia.org</a><br/>Phone: +91-9968246475</p>  |

### **Declaration**

I declare that the information given above is true to the best of my knowledge and belief and nothing has been hidden.

CHANDRA MOHAN

Place: Gurugram, Haryana

Date: 12-9-2022