Curriculum vitae

Dr. Manish Kumar (Ph.D, CSIR JRF, GATE, SET)

Personal Details

Designation: Assistant Professor

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Citizenship Indian

Educational Qualifications

S.No	Degree	Subject/Title of Thesis	University	Year of Passing
1	Ph.D.	Mass and transport studies of some alkali and alkaline earth metal chlorides in aqueous citric acid solution	Himachal Pradesh University Shimla	2014
2	M.Sc.	Chemistry <u>Dissertation Title:</u> Bifunctional Receptor for Cu ²⁺ and F- lons based on O-Phenylenediamine	Guru Nanak Dev University Amritsar	2008
3	B.Sc.	Chemistry, Maths, Physics	Himachal Pradesh University Shimla	2004

Areas of Specialization

Nanomaterials, Polymers, Solution chemistry, Environmental Chemistry.

Employment History

- 1. Assistant Professor, Department of chemistry and chemical Sciences, CUHP since 16 Jan 2020.
- 2. Assistant Professor, Department of chemistry and Biochemistry, College of Basic Sciences, CSKHPKV, Palampur (28 Jan 2019-15 Jan 2020).
- 3. Assistant Professor, Department of chemistry, Sri Sai University, Palampur. (3 Oct 2016- 28 Jan 2019).

Personal Distinctions

- 1. Qualified CSIR-JRF: June 2010.
- 2. Qualified CSIR-NET: Dec 2009 and Dec 2010.
- 3. Qualified State Eligibility Test (SET): 2008
- 4. Qualified Graduate Aptitude Test in Engineering (GATE)-2010

Publications & Patents

Papers Published in UGC / Peer Reviewed Journals (Last 5 years)

S.No	Title	Name of the authors as per the order in paper	Journal Name	Vol., Issue & Page Nos.	Year	Impact Factor
1	Metal coordinated macrocyclic complexes in different chemical transformations.	Maheshwar S. Thakur, Neha Singh, Arti Sharma, Rohit Rana, A.R. Abdul Syukor, M. Naushad, Sunil Kumar, Manish Kumar , Lakhveer Singh	Coordination Chemistry Reviews.	471 21473 9	2022	24.833
2	A Sustainable Approach to The Degradation of Dyes by Fungal Species Isolated from Industrial Wastewaters: Performance, Parametric Optimization, Kinetics and Degradation Mechanism	Roshan Gul, Priyanka Sharma, Raman Kumar, Ahmad Umar, Ahmed A. Ibrahim Mohsen A. M. Alhamami, Vivek Sheel Jaswal, Manish Kumar , Ashutosh Dixit, Sotirios Baskoutas	Environmental Research	216, 11440 7	2022	8.431
3	Synthesis, Characterizations and antifungal activities of copper oxide and differentially doped copper oxide nanostructures.	Atul Soni, Deepika Kaushal, Manish Kumar , Anjna Sharma, Inderesh Kumar Maurya, Sunil Kumar	Material Today Proceedings.	Accep ted	2022	2.3 (Cite score)
4	Molecular interaction studies on the binding ability of hydrated Zinc sulphate with aqueous solution of Ascorbic acid at different temperatures.	Vikas Bharti, Deepika Kaushal, Sunil Kumar, Abhishek Thakur, Dilbag Singh Ranae, Manish Kumar *, Shashi Kant	Zeitschrift für Physikalische Chemie.	236, 1339– 1356	2022	4.315
5	Limiting apparent molar volumes, limiting apparent molar isentropic compressions, transfer parameters and transition state theory for ternary mixtures of Gly-Gly-Gly in aqueous solutions of ascorbic acid at temperatures between (298.15 and 318.15) K.	Abhishek Thakur, Shashi Kant Sharma, Manish Kumar	Journal of Molecular Liquids	351, 11865 3.	2022	6.633
6	Functional assignment to hypothetical proteins in Orientia tsutsugamushi strain Ikeda.	Dixit Sharma, Sunil Kumar, Ankita Sharma, Rakesh Kumar, Ranjit Kumar, Mahesh Kulharia & Manish Kumar	Bioinformation	18(3): 188- 195.	2022	
7	Molecular interaction investigation of some alkaline earth metal salts in aqueous citric acid at various temperatures by physiochemical studies.	Manish Kumar*, Shashi Kant and Deepika Kaushal	Zeitschrift für Physikalische Chemie	236(3) , 387– 403	2022	4.315
8	Synthesis of ultra small iron oxide and doped iron oxide nanostructures and their antimicrobial activities, Journal of Taibah University for Science.	Atul, Manish Kumar , Anjna Sharma, Indresh Kumar Maurya, Alpana Thakur & Sunil Kumar	Journal of Taibah University for Science	13(1), 280- 285	2019	3.459
9	Synthesis of Quantum Confined Nickel Oxide and Differentially Doped Nickel Oxide Nanostructure and Their Antifungal Activities.	Atul Soni, Sunil Kumar, Deepika kaushal, Nidhi Sharotri, Indresh Kumar Maurya, Jadab Sharma, Anjna Sharma, Manish Kumar *	Advanced Science, Engineering and Medicines	11(6), 465- 470(6)	2019	0.987

10	Volumetric, viscosity and conductance studies of solute–solute and solute–solvent interactions of some alkali metal chlorides in aqueous citric acid at different temperatures.	Manish Kumar*, Shashi Kant, Deepika kaushal	Zeitschrift für Physikalische Chemie	233(2) , 255- 272	2019	4.315
11	Furosemide— Cetyltrimethylammonium Bromide Interactions in Aqueous Dimethyl sulfoxide Solutions: Physico— Chemical Studies.	Deepika Kaushal, Dilbag S. Rana, Manish Kumar , Kailash Singh, Kuldeep Singh, Suvarcha Chauhan and Ahmad Umar	Zeitschrift für Physikalische Chemie	233(3) , 413- 430	2019	4.315
12	Dip Coated ZnO Films for Transparent Window Applications.	Meenakshi, Sanjay Kumar, Sudhir Saralch, Naresh Dhiman, Manish Kumar , Dinesh Pathak	JOURNAL OF NANO- AND ELECTRONIC PHYSICS	10(5), 05038	2018	0.676
13	Water Treatment using Photocatalytic and antimicrobial activities of tin oxide nanoparticles.	Sunil Kumar, Manish Kumar , Alpana Thakur, Sushma Patial,	Indian Journal of Chemical Technology	24,43 5-440	2017	0.76

Books & Book Chapters

Chapters in Books

- 1. Samjeet Singh Thakur, Alpana, **Manish Kumar**, Pankaj Thakur, Sunil Kumar, Carbon nanotubes: a tool for sustainable environment, LAP LAMBERT Academic Publishing (2019). ISBN: 978-620-0-45627-4.
- Atul Soni, Manish Kumar, Sunil Kumar, Nidhi Sharotri, Deepika Kaushal, Co- Precipitation Method: An Approach Used for the Synthesis and Characterization of Iron Oxide Nanoparticle, National Conference on Emerging Scenario in Basic and Applied Sciences for Sustainable Development, at DAV College Bhatinda, 05 April 2018. Conf. Proc. ISBN number 978-93-87276-93-2.
- Neha Rana, Atul Soni, Deepika Kaushal, Nidhi Sharotri, Manish Kumar, Sunil Kumar, Preparation of NiO nanoparticles: Synthesis and Characterization, AIP Conf. Proc 2019,978-93-87276-93-2. National Conference on Emerging Scenario in Basic and Applied Sciences for Sustainable Development, at DAV College Bhatinda, 05 April 2018, Conf. Proc, ISBN number 978-93-87276-93-2.
- 4. **Manish Kumar,** Deepika Kaushal, Nidhi Sharotri, Studies of calcination temperature and doping concentration on phase transformation of synthesized cation doped TiO₂, National Conference on Emerging Scenario in Basic and Applied Sciences for Sustainable Development, at DAV College Bhatinda, 05 April 2018, Conf. Proceeding, ISBN number 978-93-87276-93-2.
- Sunil Kumar, Neha Rana, Manish Kumar, Ashvinder Rana and Samjeet Singh Thakur. Book Chapter, Biopolymer modifications using ionic liquids for industrial and environmental applications, Modified Biopolymers Challenges and Opportunities. Polymer Science and Technology, Nova Science Publishers, New York. ISBN: 978-1-53612-137-7.
- 6. Alpana Thakur, Samjeet Singh Thakur, **Manish Kumar**, Atul Kumar Kushwaha, and Sunil Kumar. "Advanced nanomaterials for water treatment". Advanced Environmental Materials. (Accepted)

Research Guidance

Ph.D. Supervision

Ph.D Supervised: 01 Ph.D Supervising: 04

M.Sc Dissertations

S. No.	Year	Degree	Dissertation Awarded	Department/Centre	
1	2023	M.Sc. Chemistry	4 (On-Going)	Department of Chemistry & Chemical Science CUHP	
2	2022	M.Sc. Chemistry	5	Department of Chemistry & Chemical Science CUHP	
3	2021	M.Sc. Chemistry	5	Department of Chemistry & Chemic Science CUHP	
4	2020	M.Sc. Chemistry	6	Department of Chemistry & Chemic Science CUHP	
5	2018	M.Sc. Chemistry	4	Department of Chemistry, Sri Sai University Palampur	
6	2017	M.Sc. Chemistry	2	Department of Chemistry, Sri Sai University Palampur	

Conferences/Workshop/Trainings

Faculty Development Programs / Training Attended / Workshop Attended

S. No	Name of the Trainings	Organizer	Duration	Nature of participation
1	One week FDP on Advanced Characterization Techniques (ACT-2022)	Chandigarh University, Mohali, Punjab.	25 July 22 to 30 July 22	Attended
2	One weeks FDP on "How to create your own MOOCS".	Ramanujan College, University of Delhi	28 May to 3 June 2022	Attended
3	Online two - week interdisciplinary refresher Course/faculty development programme on "Advanced Research Methodology"	Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching	20 August – 03 September, 2021	Attended
4	4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education"	Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching	10 th December 2020 – 08 th January 2021	Attended

Seminar /Conference/Symposium Attended

- Green synthesis of Silver Oxide Nanoparticles by Using Butea Monosperma Plant Extract. International e-Conference on Progress of Science and Technology During Pandemic (PSTDP-2021) September 11 - 12, 2021 organised by Him Science Congress Association. (Oral presentation)
- An Overview on Pesticides use in Agriculture and Potential Hazards on Interface between Basic sciences Research, Modern Technology and Environmental Sustainability" held at Sri Sai University Palampur on 3rd May 2019.
- 3. Effect of Calcination temperature and molar ratio on phase transformation of synthesized cation doped TiO₂ on NCRTETP (2017) held at Sri Sai University Palampur (23-24 Nov 2017). (Abstract + Poster)
- 4. Synthesis and characterization of Bare –NiO and doped NiO nanoparticles on NCRTETP (2017) held at Sri Sai University Palampur (23-24 Nov 2017). (Abstract + Poster).
- 5. Comparative study of Bare –CuO and doped CuO nanoparticles in Multidisciplinary National Conference on "Innovative Trends in Science, Technology and Management-IV 2017 held at Sri Sai University Palampur (24 Aug 2017).(Abstract + Poster)
- 6. Free Energy and Acoustic Studies of Transition Metal Sulphates in Aqueous Ascorbic Acid. Multidisciplinary National Conference on Innovative Trends in Science, Technology and Management-II (MNCITSTM- II) 2015 held at Sri Sai University, Palampur. (19 June, 2015).(Abstract + Paper)
- 7. Acoustical studies of some transition metal sulphates in 10% Dextrose in 0.1 M aqueous NaCl at different temperatures. National Seminar on "Advances in Environmental Sciences, NSAES-2012" held at Shoolini University, Solan (H.P.) (Aug. 24, 2012) (Abstract + Poster)
- 8. Interactions of transition metal ions in multi component system: an ultrasonic approach. National seminar on "Frontiers in Polymer Science" held at Himachal Pradesh University, Shimla (H.P.) (Nov.18–19, 2011). (Paper)
- 9. Viscosity and conductance of some metal chlorides in modified aqueous solvents. National symposium on "Chemistry innovations for human wellbeing (CIHW-2011)" held at Himachal Pradesh University, Shimla (H.P.) (Oct.21–22, 2011). (Paper)

Invited Talks

S.No.	Title		Seminar/Conference/Workshop	Organised by	Duration
1	Synthesis, characterization techniques applications of r materials	and nano-	National training and webinar on Application of nanotechnology in crop pest management	'Centre for Advanced Agricultural Science and Technology (CAAST) on Protected Agriculture and Natural Farming (PANF)' funded to CSKHPKV by ICAR, New Delhi	(14-15 October

Affiliations in Academic Bodies/ Societies

Membership of Scientific/Academic Societies

S.No.	Name of the Body/Society	Nature of Affiliation	Year
1	"The Indian Thermodynamics Society".	Life member	2011
2.	Him Science Congress Association"	Life member	2012
3	Himalayan Life Science Society, Central University of Himachal Pradesh, Dharamshala	Life Member	2021

ORGANIZATION OF SEMINAR/CONFERENCE/SYMPOSIA etc:

- 1. Organizing Secretary in "Multidisciplinary National Conference on "Innovative Trends in Science, Technology and Management-IV 2017 held at Sri Sai University Palampur (24 Aug 2017).
- 2.Organizing committee member in a "National Conference on Frontiers in Chemical Sciences (NCFCS- 2022)" organized by CUHP in collaboration with Indian Society of Analytical Scientists- Delhi Chapter with w.e.f. 04-05 Nov, 2022 at CUHP, Shahpur (HP).