

Kumaun University, Nainital

Curriculum Vitae

Name : Mahesh Chandra Arya
Designation : Assistant Professor
Department : Chemistry, D.S.B. Campus, Nainital

Contact Information

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Scopus ID : 57208452116

Vidwan ID : nil

Educational Qualification

Degree	University	Subjects	Year
B.Sc.	Kumaun University, Nainital	Botany, Chemistry, Zoology	1996
M.Sc.	Kumaun University, Nainital	Chemistry	1998
B.Ed.	Kumaun University, Nainital	Science	1999
Ph.D.	Kumaun University, Nainital	Chemistry	2020

Work Experience (add row if required)

Position	Department	University/Organization	Year
Manager Grade - II	ESIC	Employees State Insurance Corporation	2000-2004
PGT Chemistry	Navodaya Vidyalaya Samiti	Navodaya Vidyalaya Samiti	2004-2010
Assistant Professor	Department of Chemistry	Kumaun University	2010-till present

Administrative Responsibilities (add row if required)

Position	Nature of responsibility	University/Organization	Year
Manager Grade -II	In-charge of a Local Office of ESIC	Employees State Insurance Corporation	2000-2004
Assistant Director, Research	To conduct entrance and counselling of Ph.D. entrance exams.	Kumaun University, Nainital	2017-2020 2021- till present
Assistant Superintendent	To conduct semester/ year end exams of the University	Kumaun University, Nainital	2011-2020

Research Interests

Removal of pollutants from Water by adsorption and photocatalysis. Plastics degradation study.

Publications (start from recent publications)

a) Research Papers (add row if required)

S.No.	Authors name	Title of the paper	Vol, page no	Year	IF
1.	Pathak, M., Bhatt, D., Bhatt, R. C., Bohra, B. S., Tatrari, G., Rana, S., Arya, M. C. , & Sahoo, N. G.	High Energy Density Supercapacitors: An Overview of Efficient Electrode Materials, Electrolytes, Design, and Fabrication.	<i>The Chemical Record</i> , 24, 24, e202300236.	2024	6.4
2.	Nitish Semwal, Divya Mahar, Manjunath Chatti, Anirban Dandapat, Mahesh Chandra Arya	Adsorptive removal of Congo Red dye from its aqueous solution by Ag–Cu–CeO ₂ nanocomposites: Adsorption kinetics, isotherms, and thermodynamics.	<i>Heliyon</i> , 9, 1-18.	2023	4.0
3.	Rana, A., Matiyani, M., Tewari, C., Negi, P. B., Arya, M. C. , Das, V., Pal, M., & Sahoo, N. G.	Functionalized graphene oxide-based nanocarrier for enhanced cytotoxicity of Juniperus squamata root essential oil against breast cancer cells.	<i>Journal of Drug Delivery Science and Technology</i> , 72, 103370.	2022	5.06
4.	Ali, S. R., Arya, M. C. , Kalam, A., Al-Sehemi, A. G., Khan, Z., Ansari, S., & Kumar, R.	Adsorption potential of zirconium-ferrite nanoparticles for phenol, 2-chlorophenol and 2-nitrophenol: thermodynamic and kinetic studies.	<i>Desalination and Water Treatment</i> , 179, 183–196.	2020	1.23
5.	Arya, M. C. , Bafila, P. S., Mishra, D. K., Negi, K., Kumar, R., & Bughani, A.	Adsorptive removal of Remazol Brilliant Blue R dye from its aqueous solution by activated charcoal of Thuja orientalis leaves: an eco-friendly approach.	<i>SN Applied Sciences</i> , 2(2).	2020	2.6
6.	Ali, S. R., Kumar, R., Kalam, A., Al-Sehemi, A. G., & Arya, M. C.	Effect of Strontium Doping on the Band Gap of CeO ₂ Nanoparticles Synthesized Using Facile Co-precipitation.	<i>Arabian Journal for Science and Engineering</i> , 44(7), 6295–6302	2019	2.074
7.	Ali, S. R., Kumar, R., Kadabinakatti, S. K., & Arya, M. C.	Enhanced UV and visible light—driven photocatalytic degradation of tartrazine by nickel-doped cerium oxide nanoparticles.	<i>Materials Research Express</i> , 6(2), 025513.	2019	2.3
8.	Ali, S. R., Kumar, R. D., & Arya, M. C.	Enhanced Photocatalytic Activity of Manganese-Doped Cerium Oxide Nanoparticles under Visible and UV Irradiation.	<i>Asian Journal of Chemistry</i> , 30(11), 2544–2550.	2018	0.158

9.	Arya M C, Kadabinakatti S K, Kumar R and Joshi P	Adsorption Capacity of Charcoals of Hardwood and Softwood: A Comparative Study	<i>International Journal of Innovative Research and Studies 2015; 14 (10); 80-90</i>	2015	NIL
10.	Mahesh C.Arya, Sharanappa K.Kadabinakatti and Rajesh Kumar	Study of Efficacy of Clerodendron inerme Gaertn. Leaf extract against Pieris brassicata (Linnaeus)	<i>Nature and Science, 2014; 12(9):22- 24</i>	2014	NIL

b) Patents (start from recent publications) **(add row if required)**

Authors name	Title of the patent	Patent no (Granted or filed)	Year
NIL	NIL	NIL	NIL

c) Books (start from recent publications) **(add row if required)**

Authors name	Title of the book	Publisher	ISBN	Year
Mahesh Chandra Arya Sanjay Ghildiyal Nitish Semwal Divya Mahar	TRENDS IN DOCTORAL DISSERTATIONS IN CHEMISTRY IN KUMAUN UNIVERSITY 1973-2022	Pahar Foundation, New Delhi	9788196598976	2023

d) Book chapters (start from recent publications) **(add row if required)**

Authors name	Title of the book	Publisher	ISBN	Year
Ed.Dr. Manoj Kumar Arya	Biodiversity, Environment, and Ecosystem Services(pp.106-126).	Discovery Publishing House, New Delhi.	978-81- 959169- 3-1	2023
Ed. Gerritzen, J.	Cerium Oxide: Structure, Occurrence and Applications	Nova Scientific Publishers, USA	978-1- 68507- 938-3	2022
Ed. N.G. Sahoo	Waste Management: strategies, challenges and Future Directions	Nova Scientific Publishers, USA	ISBN: 978-1- 68507- 394-7	2022
Ed. Prem Prakash	Ecological Ignorance in Development Raising Disastrous Possibilities	Anamika Publishers and Distributors (P) Ltd. New Delhi, India:	ISBN: 978-81- 7975- 894-6x	2017

e) Conference Publications/Proceedings (start from recent publications) **(add row if required)**

Authors name	Title of the paper	Conference Name	Year
NIL	NIL	NIL	NIL

Projects (add row if required)

Title of the project	Funding Agency	Amount (Rs)	Year
Exploration of the mixed metal oxide nanocomposites of 3d-transition metals for their enhanced photocatalytic potential toward the degradation of different classes of waste plastics	CMHERES, Uttarakhand	Rs.10,58,000.00	2024
Purification and Valorization through Indigenous Tailoring of Raw Polymeric waste into Advanced Multidimensional Carbon Nano Materials (PAVITRAM) for Large Scale Energy Storage applications including Supercapacitors and Batteries	NMHS	Rs. 1,90,59,320.00	2023

Teaching details (add row if required)

Name of the course/paper	Department	University	Year
BSc I Sem Paper III Physical Chemistry	Department of Chemistry	Kumaun University	2011 onwards
BSc II Sem Paper III Physical Chemistry	Department of Chemistry	Kumaun University	
BSc V Sem Paper II Physical Chemistry	Department of Chemistry	Kumaun University	2011 onwards
BSc VI Sem Paper II Physical Chemistry	Department of Chemistry	Kumaun University	2011 onwards
MSc I Sem Paper III Physical Chemistry(Electrochemistry)	Department of Chemistry	Kumaun University	2011 onwards
MSc II Sem Paper III Physical Chemistry(Electrochemistry)	Department of Chemistry	Kumaun University	2011 onwards
MSc III Sem Paper III Physical Chemistry(Biophysical chemistry)	Department of Chemistry	Kumaun University	2011 onwards
MSc IV Sem Paper I Physical Organic and Quantum Chemistry(Kinetic Isotope Effect, Quantum Chemistry)	Department of Chemistry	Kumaun University	2019 onwards

Professional Memberships (add row if required)

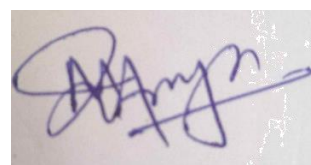
Organisation	Position	Year
Association of Chemistry Teachers (ACT), Pune	Life Membership	2012
B SN V Vigyan Parishad, Lucknow	Life Membership	2012
Indian Science Congress Association, Kolkata	Life Membership	2012

Honours and Awards (add row if required)

Award	Awarding Organization	Year
Prof. D.N. Agarwal Research Award 2023	Kumaun University	2023

Conference Presentations (add row if required)

Title of presentation	Conference name	Name of the institution	Year
Cerium oxide-based nanomaterials: Efficient materials for water treatment	International Conference on Advances in Nanomaterials and Devices for Energy and Environment CANDEE 2023 IITM GWALIOR	Indian Institute of Information Technology and Management, Gwalior, India	19-20 December 2023
A Journey Towards Hydrogen Economy through Plastic Waste Management	Two-day Hands-on Training Workshop on Upcycling of Solid waste into carbon nanomaterials and their characterisation for various Applications	WORKSHOP By Chemistry Department, Kumaun University, Nainital	6-7 October 2023
Targeted Drug delivery and nanotechnology	National Conference on Current status and opportunities in medicinal plant and natural products research,	SRICC Kumaun University, Nainital	06-07 March, 2021
Diminished photocatalytic activity of strontium doped CeO ₂ nanoparticles: Evidence of widening of band gap on strontium doping	International Conference on Energy, Functional Materials & Sustainable Environmental Management ICEFN& SEM-2019	Chemistry Department, Kumaun University, Nainital	24-26 May, 2019
Raman spectroscopic analysis of Sr- doped CeO ₂ nanoparticles- Evidence to support EDX results	Symposium on Advances in Physics from Small to Large Scales,	Physics Department, Kumaun University, Nainital	14-16 March, 2019
Tuning the band gap of strontium doped cerium oxide nanoparticles synthesised by the aqueous coprecipitation method	8th Conference of The Indian Science Congress Association (HARIDWAR CHAPTER)	The Indian Science Congress Association	14-15 October, 2017
Adsorptive removal of Zinc (II) by Activated bark of <i>Pinus roxburghii</i> : An Ecofriendly approach	National Seminar on Plants and Environment	Botany Department, Kumaun University, Nainital	27-28 March, 2017

**Signature of the faculty member**