CURRICULUM VITAE

1. Name and Address



Dr. Birendra Kumar Assistant Professor

Department of in Chemistry

Govt Rajmata Vijayaraje Sindhiya Girls College Kawardha,

Distt.- Kabirdham 491995, Chhattisgarh

Email- birendrajangde@gmail.com

Phone - 07741232054 (O) Mobile- 9179353741

Website-rvrsgirlscollegekawardha.ac.in

2. Principal Research interests

Kinetics	Micellar Chemistry	Polymer Chemistry
Solvent interaction	Environmental Chemistry	

3. Education qualification

Degree	Subject	University	year
B.Sc.	Chemistry, Zoology, Botany	Pt. Ravishankar Shukla University, Raipur (Chhattisgarh)	2005
M.Sc.	Chemistry	Pt. Ravishankar Shukla University, Raipur (Chhattisgarh)	2007
M.Phil.	Chemistry	Pt. Ravishankar Shukla University, Raipur (Chhattisgarh)	2008
Ph.D.	Chemistry	Pt. Ravishankar Shukla University, Raipur (Chhattisgarh)	2013

M.phil Dissertation Title	Mass and Size Distribution in Particulate Matter in Ambient Layer of Raipur City
Ph.d. Thesis Title	Kinetic Studies nn Micellar Catalysis of Some Organic Reactions

EXAMINATION EXPERIENCE

- 1. Acted as Examiners for Graduation (Internal and External Examiners –Pt. Ravishankar Shukla University Raipur, Hemchand Yadav Durg Vishwavidyalaya, Durg)
- 2. Acted as Superintendent and Assistant Superintendent (University Exam)
- 3. By organized CGVYAPAM, CGPSC competitive examination, I have worked as Assistant superintendent, observer etc.

OTHER RECOGNITIONS:

- 1. Awarded as a ISN Award by Athens, Greece.
- Fellow and Life Member, The Indian Science Congress Association (ISCA)
 Membership No. L20006
- 3. Fellow and Life Member, Indian Society for Surface Science and Technology L/M-T-13
- 4. Fellow and Annual Member, Indian Chemical Society (ICS) Membership No. F/6969
- 5. Acted as a Convenor, National Science Day Celebration 28th Feb 2015, GOVT.RVRS GIRLS College Kawardha, Dist. Kabirdham (C.G.)
- 6. Reviewer: Elsevier J. of Molecular Liquid.
- 7. Acted as a Co-convenor, National Science Day Celebration 28th Feb 2020, APSGMNS Govt. PG College Kawardha, Dist. Kabirdham (C.G.)

PUBLICATIONS:

Birendra Kumar, K.K. Ghosh and P.R. Dafonte, Comparative Study of the Cationic Surfactants and their Influence on the Alkaline Hydrolysis of Acetylsalicylic Acid, *Int. J. Chem. Kinetics*, (2011) Vol. 43, Page No. 1-8.
 Birendra Kumar and K. K. Ghosh, Effects of Anionic Surfactants on the Kinetics of Acidic Hydrolysis of Acetohydroxamic Acid *J. Indian Chem. Soc.*, (2011) Vol.- 88, Page No. 193-197.
 D. Tikariha, Birendra Kumar, N. Singh, Kallol K. Ghosh and P. Quagliotto Micellization Behavior of Cationic Gemini Surfactants in Aqueous-Ethylene Glycol Solution, *J. Surfactant Deterg.*, (2011) Vol. 14 Page No. 555-562.
 Birendra Kumar, Deepti Tikariha and Kallol K. Ghosh

	Effects of Electrolytes on Micellar and Surface Properties of
	Alkyldiethylethanol-ammonium Bromide Surfactants J. Dispersion Sci.
	Technol., (2012) Vol. 33 Page No. 265-271
5.	Birendra Kumar, Deepti Tikariha, Kallol K. Ghosh and P. Quagliotto
	Effect of Short Chain Length Alcohols on Micellization Behavior of Cationic
	Gemini and Monomeric Surfactants J. Mol. Liquids, (2012), Vol. 172
	Page No. 81-87.
6.	Birendra Kumar, M. L. Satnami, K. K. Ghosh and K. Kuca, Comparative
	Studies on Reaction of Bis(p-nitrophenyl) Phosphate and α-Nucleophiles in
	Cationic Micellar Media, J. Phys. Org. Chem., (2012), Vol. 25, Page No864-
	871
7.	Birendra Kumar , Deepti Tikariha, Kallol K Ghosh, Nadia Barbero, Pierluigi Quagliotto, Effect of Polymers on Micellization of Some Gemini and Monomeric Surfactants, <i>J. Chem. Thermodyn.</i> 62 (2013) 178-185.
8.	Birendra Kumar , Deepti Tikariha, Kallol K Ghosh, Nadia Barbero, Pierluigi Quagliotto, Kinetic study on effect of novel cationic dimeric surfactants for the cleavage of carboxylate ester <i>J. Phys.Org. Chem.</i> , 26 (2013) 626-631.
9.	D.Tikariha, Birendra Kumar, S. Ghosh, A. K. Tiwari, S. K. Saha, N.Barbero,
	P. Quagliotto, K. K. Ghosh Interaction Between Cationic Gemini and
	Monomeric Surfactants: Micellar and Surface Properties, J. Nanofluids 2,
	(2013) 1-9.
10.	Birendra Kumar, Deepti Tikariha, K. K. Ghosh Reactivity of N-benzoyl-N-phenylhydroxylamine in Cationic Micellar Media for the Cleavage of Carboxylate and Phosphate Esters J. Mol. Liq. 193 (2014) 243-248
11.	B. Kumar, Deepti Tikariha , M. L. Satnami, K. K. Ghosh, N. Barbero and P. Quagliotto Catalytic Hydrolysis of Phosphodiesters by Nucleophilic ions in Gemini Micellar Media , J. Phys. Org. Chem. 27 (2014) 613-621
12.	B Kumar, K Ghosh, D Tikariha, Catalytic Activity Of A-Nucleophiles for Ester Hydrolysis In Cationic Micellar Media: Mo07-13, Journal of Neurochemistry 118 , 2011

PAPER PUBLISHED IN CONFERENCE PROCEEDINGS

1.	H. K. Dewangon, Birendra Kumar, D. Tikariha and K. K. Ghosh, Nucleophilic Attack of Hydroperoxide ion on P=O Center of Phosphate Diester in Micellar Media National Conference on Recent Trends in Chemistry, Sikkim, 23-25 January, 2012, (ISBN: 978-93-80813-16-5) Page; 51-53.	
2.	Deepti Tikariha and Birendra Kumar	
	Effect of Organophosphorus Poising in Health and its Detoxification National	
	conference in psychology, Kawardha, 12-13 Feb. 2018 (ISBN: 978-81-9321-20-4-	
	201) Page; 20-22	

UGC-ACADEMIC STAFF COLLEGE: ORIENTATION PROGRAM

1.	Quality of Higher Education:	Birendra	UGC- Academic Staff College
	Learning Process	Kumar	Orientation Program
			on
			Pt. Ravishankar Shukla University Raipur
			(Participate)
			May 15-11 June, 2013
2.	Recent trends in	Birendra	UGC- Academic Staff College
	Chemistry	Kumar	Refresher Program
			on
			Pt. Ravishankar Shukla University Raipur
			(Participate)
			02-22 July, 2016
3.	Faculty Development	Birendra	University of Petroleum and energy studies
	Program on recent	Kumar	Dehradun, Department of Chemistry, 08
	trends in advanced		June to 13 June 2020.
	chemistry,		
4.	Nanoscience & nano	Birendra	Refresher Program
	technology and its	Kumar	on
	applications (id)		Ugc-human resource development centre
	Promone (14)		guru ghasidas vishwavidyalaya
			(a central university), bilaspur (c.g.) - 495 009
			(15/02/2021 TO 27/02/2021)

UGC SP	ONSOREI	WORK	KSHOP		
1.	How to	Write	Research	Birendra Kumar	UGC-sponsored WorkShop on
	Project				Pt. Ravishankar Shukla University Raipur
					(Attended)
					Jan 12-19, 2012.

DST SPONSORED INSPIRE CAMPS

1.	INSPIRE Internsh	ip Birendra Kumar	DST-sponsored
	Summer Camp from		Summer Camp
	•		May 29 - June 02, 2012on
			Pt. Ravishankar Shukla University Raipur
			(Active Participation)
2	INSPIRE Internsh	ip Birendra Kumar	DST-sponsored
	Summer Camp from		Summer Camp
	Î		Dec 25 - 29, 2012 on
			Pt. Ravishankar Shukla University Raipur
			(Active Participation)

INTERNATIONAL CONFERENCES

1.	Catalytic Activity of α –	Birendra Kumar, D.	23 rd Biennial International Society for
	nucleophiles For Ester	Tikariha and K.K.	Neurochemistry (ISN) and the European
	Hydrolysis in Cationic	Ghosh	Society for Neuro-chemistry (ESN), 28
	Micellar Media		August – 1 Septermber, 2011, Athens,
			Greece
			(Presented)

NATIONAL CONFERENCES

1.	Effect of cationic surfact-ants on the alkaline hydrolysis of acetylsalicylic acid		
	Birendra Kumar and K. K. Ghosh, National Conference on Modern Trends in		
	Environmental Science & Engineering, July 15-16, 2010 , Bhilai.		
	(Presented)		
2.	Self-Assembled, Surfactant Important on Acidic Hydro- lysis of Acetohydroxamic		
	Acid by Reaction Kinetics		
	Birendra Kumar and K. K. Ghosh		
	National Seminar on Membranes, Microemulsions and Self Assembled Systems		
	(MMSAS) September 28-30, 2010, Sikkim.		
	(Presented)		
3.	Effect of Cationic Surfactants on the Hydrolysis of Bis (4-nitro phenyl) phosphate		
	Using Oxime Reactivator		
	Birendra Kumar		
	47 th Annual Convention of Chemists, International Conference of Recent Advances in		
	Chemical, Sciences Raipur, Dec. 23-27, 2010		
	(Presented)		

4.	Comparative Studies on Hydrolysis of bis(p-nitrophenyl) Phosphate Catalyzed by α-
	nucleophiles in Cationic Micellar Media
	Birendra Kumar 9th Chhattisgarh Young Scientiest Congress, Jagdalpur, Baster
	(C.G.), 2011
	(Presented)
5.	Hydrolysis of Phosphate Diester by Hydroxamate ions in Cationic Micellar Media
	Birendra Kumar, H. K.Dewangan and K. K. Ghosh
	National Seminar on Emerging Trends in Chemical Sciences, Kalyan Collage Bhilai-
	Nagar, 18-19 Nov. 2011
	(Presented)
6.	Kinetic Studies of Various Organic Reactions in Self-Organizing Systems
	Birendra Kumar
	48 th Annual Convention of Chemists-2011 & International Conference On Recent
	Advances In Chemical Sciences
	Allahabad, Dec. 03-07, 2011
	(Presented)
7.	Surface and Physico-chemical Properties of Gemini Surfactants and their role in
	Kinetics, Deepti Tikariha, Namrata Singh, Birendra Kumar , Kallol K. Ghosh [*]
	99 th Indian Science Congress, 3-7 January, 2012 , Bhubaneshwar.
	(Presented)
8.	Effect of Added Alcohols on Micellar Properties of Cationic Monomeric and Gemini
	Surfactants in Non-aqueous Solutions. Birendra Kumar , Deepti Tikariha, Kallol K.
	Ghosh 99 th Indian Science Congress, 3-7 January, 2012 , Bhubaneshwar
	(Presented)
9.	National Centre for Natural Resources
	Birendra Kumar
	NCNR, Conference
1.0	2012, Pt. Ravishankar Shukla University, Raipur (C.G.)
10.	Cleavage of ester
	Birendra Kumar, Kallol Ghosh K
	5th Asian Conference on Colloid and Interface Science, 20 – 23 Nov., 2013
	Darjeeling, India (Presented)
11.	102 nd Indian Science Congress, University of Mumbai, 3-7 Jan. 2015, Mumbai
	Birendra Kumar, Participated
12.	National Conference on Recent Trends in Chemical Sciences, Jan. 23-25, 2014
	School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur (C.G.)-
	492010 Kinetic hydrolysis of ester
i .	· · · · · · · · · · · · · · · · · · ·

	Birendra Kumar, and Kallol K Ghosh (Presented)
13.	101st Indian Science Congress, University of Jammu, 3-7 Jan. 2014, Jammu
	Physicochemical properties of surfactants Birendra Kumar, Deepti Tikariha and
	Kallol K Ghosh (Presented)
14.	National Conference, Govt Digvijay P.G. College Rajnandgaon 17-18 January 2017 Soil Quality and public health, Birendra Kumar Surfactants Mediated Reactions of Acetylsalicylic Acid
	Birendra Kumar, Deepti Tikariha and Kallol K. Ghosh*
	International Conferences on Advances Chemical Engineering (ICACE, April 05-06,
	2013) (Participate)
16.	Effect of surfactant decontamination organophosphate compound
	Birendra Kumar, Deepti Tikariha and Kallol K. Ghosh*
	National Conference in PG College Kawardha, 16-17 Jan. 2015 (Participated)
17.	Micellar Surfactant, Birendra Kumar, NATCOSEB, Pt. Ravishankar Shukla
	University, Raipur
	Hydrolysis of ester, Birendra Kumar, UGC TCL, Govt. College Janjgeer Champa
18.	
19.	Carrier Guidance workshop in College, Birendra Kumar , RUSA, 04/01/2016
20.	Unnat Bharat Abhiyan, Birendra Kumar , RUSA, 25/10/2016
21.	Child with special need
	Birendra Kumar
	RUSA, 10/02/2017, Singhanpuri Kabirdham
22.	Physicochemical Properties of Surfactants , Birendra Kumar, 22 nd CRSI National
	Symposium, Pt. R.S.U., Raipur
23.	Yuva Jagran, Birendra Kumar , District Youth Parliament 2018
24.	Youth Spark, Birendra Kumar , Chhattisgarh Rajya Yuva Aayog, 2018
25.	NSS, Birendra Kumar Govt. College Sahaspur Lohara, 2018

26.	Physicochemical properties of dimeric surfactant, Birendra Kumar		
	International conference, recent trends on chemical 14-16 November 2020		
27.	Environmental, Birendra Kumar, Science Traverse the timeline		
	20 November, 2020		

Invited Lecture

1.	Birendra Kumar, Effect of pesticide on environment and living organism, National
	seminar organized by govt naveen college nawagarh, 29-30 march 2015
2.	Birendra Kumar, Biochemistry Carbohydrates, Govt. PG. College Kawardha, 2017
3.	Birendra Kumar Physicochemical Properties of Surfactants22 nd CRSI National
	Symposium, Pt. R.S.U., Raipur
4.	Birendra Kumar Chemical Kinetics Govt.Pg. College Kawardha, 2017.
5.	Birendra Kumar, NSS, Govt.RVRS Girls College Kawardha, 2017.
6.	Birendra Kumar Stereochemistry and its application Govt.Pg. College Kawardha,
	2018
7.	Birendra Kumar Women in Science National Science Day, Govt. P.G. College
	Kawardha 2020
8.	Boudhik Paricharch, shiksha and swasthaya NSS, Dhongitola, Govt. RVRS Girls
	College Kawardha 2020
9.	Birendra Kumar, Electronic Spectroscopy, Govt. P.G. College Kawardha, Kabirdham
	(C.G.) 2020
10.	Birendra Kumar Chemistry in daily life Govt. P.G. College Kawardha, Kabirdham
	(C.G.) 2020

Organized of Programs

1.	Seminar on National Science Day	Convenor	National Science Day, Govt. RVRS
			Girls College Kawardha, 2015
2.	Seminar on National Science Day	Convenor	National Science Day, Govt. RVRS
			Girls College Kawardha, 2016
3.	Seminar on National Science Day	Convenor	National Science Day, Govt. RVRS
			Girls College Kawardha, 2017
4.	Seminar on National Science Day	Convenor	National Science Day, Govt. RVRS
			Girls College Kawardha, 2019
5.	Seminar on National Science Day	Convenor	National Science Day, Govt. RVRS
			Girls College Kawardha, 2020
6.	Chemistry in Daily life	Jointly	E -PG Program, June 2020
		organized	

List of Seminar Conference/Seminar/Webinar 2020-21

S.No.	Name of seminar 2020-21
1.	11 th National Webinar on Post Covid Scenario and Atmanirbhar Bharat , J.H. Shah Arts
	and H.P. Desai Commerce College Amroli in Collaboration with IQAC 03/06/2020
2.	Effectiveness of Herbal Drug on Covid 19, Mats University, Raipur 28 July 2020
3.	12 th National Webinar on fastest Promotion highest increment , J.H. Shah Arts and H.P.
	Desai Commerce College Amroli in Collaboration with IQAC 07/06/2020
4.	13 th National Webinar on Youth and nation , J.H. Shah Arts and H.P. Desai Commerce
	College Amroli in Collaboration with IQAC 09/06/2020
5.	National Webinar on Post Covid 19 World environment prospects and challenges for
	sustainable development 5-7 June , Govt. V.Y.T. P.G. Autonomous College Durg
6.	National Webinar on Advance in chemical Science and Engineering, Govt. Bilasa Girls
	P.G. Autonomous College Bilaspur, Chhattisgarh 18 July 2020
7.	National webinar on Research Ethics and academic integrity, Govt. P.G. College
	Jagdalpur, 09 June 2020
8.	International webinar on recent trends in medicinal chemistry, Pt. R.S.U. Raipur 27-28
	July 2020

9.	International Webinar on role of functional nanomaterials in conbating covid 19			
	pandemic, Govt. VYT Autonomous P.G. college 29-30 th October 2020			
10.	Faculty Development Program on recent trends in advanced chemistry, University of			
	Petroleum and energy studies Dehradun, Department of Chemistry, 08 June to 13 June			
	2020.			
11.	National Webinar on Impact of Covid 19 on employment in organized and unorganized			
	sector of Chhattisgarh, Vivekand Mahavidyalaya, Raipur, 04 June 2020			
12.	Webinar on World environment day, Govt. Mahamaya College, Ratanpur, Bilaspur,			
	(C.G.) 05 June 2020			
13.	National Webinar on Revised NAAC Assessment and Accreditation Process, Sant Gadge			
	Amravati University, Amravati (MS), 04 July, 2020			
14.	International Webinar on Emerging Challenges and opportunities on Higher education			
	due to covid 19 pandemic 13June 2020, Govt. Digvijay Autonomous P.G. College			
	Rajnandgaon C.G.			
15.	International Webinar on Youth attitude defines Your attitude, Indira Gandhi Govt. Arts.			
	And Commerce P.G. College Vaishali Nagar Bhilai 23 July 2020			
16.	International Webinar Pendemics crisis confronting human survival, Govt. Kamla Devi			
	Rathi P.G. Girls College Rajnadgaon (C.G.) 06/08/2020			
17.	National Webinar on Medicinal and geomatic plants for boosting immunity in the era of			
	Covid 19, May 29, 2020, DDU Gorakhpur University, Gorakhpur			
18.	International Webinar on recent trends in chemistry, Govt. Shivnath Science College			
	Rajnadgaon, 27June 2020			
19.	National Webinar on Pandemic Covid 19 and Environment an analysis, Indira Gandhi,			
	Govt. arts and Commerce P.G. College Vaishali Nagar Bhilai 30 June 2020			
	1			

Participate in Quiz Competitions

1.	E-Quiz Aqua trivia, Govt. Dr. WW. Patankar Girls P.G. College Durg (C.G.) 11 to 15 June 2020
2.	E-Quiz Awareness of online study/e-learner platforms as an outbreak of the pandemic covid 19 28
	May to 09 June, 2020
3.	E-Quiz on Covid 19 Pandemic Awareness Govt. Digvijay Autonomous P.G. College, Rajnadgaon,
	02 June 2020.