NAME	Dr. Kumud Bala	
DESIGNATION	Professor	<b>a.</b> 9
EMAIL ID	kbala@amity.edu	## A
CONTACT NUMBER	+91-9811292212	
RESEARCH	Cancer Immunology, Pharmaceutical Biotechno	logy, Immunology and
INTERESTS	Immunotechnology, Oral Cancer, Pharmacognosy	

EDUCATIONAL QUALIFICATIONS:

Name of College / University	Degree	Year
Patna University.	Ph.D	2003
Patna University	R.E.T (Research Entrance Test leading to Ph.D Degree)	1999
UGC	B.E.T(Eligibility for lectureship exam)	1996
Patna University	M.Sc	1995
Patna University	B.Sc	1992

**Title of Ph.D. thesis:** Use of Mimosa Pudica and Vinca Rosea extracts for reduction of pesticide induced toxicity in Bone Marrow of Swiss Albino mice

EXPERIENCE (in chronological order): Total 20 Years Research & Teaching							
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Designation	Type of post held	Name of the Institute	Year (From – To)				
	(teaching/ research)						
Professor	Teaching	Amity Institute of Biotechnology	2019- till date				
Associate							
Professor	Teaching	Amity Institute of Biotechnology	2013-2019				
Assistant							
Professor							
(Grade – III)	Teaching	AIB/ Amity University	2009-2013				
Lecturer	Teaching	AIAFSRAT/ Amity University	2007-2009				
Senior		St. Columba's College,					
Lecturer	Teaching	Hazaribag/ Ranchi University	2000-2007				
		St. Columba's College,					
Lecturer	Teaching	Hazaribag/ Ranchi University	1996-2007				
No. of Ph.D.	2 Awarded						
students	6 Ongoing						
supervised	6 Ongoing						
No. of Post-Doc	Nil						
No. of M.Tech.							
Students							
supervised:	More than 100						
No. of B.Tech.							
Students							
supervised:	More than 200						

- **1.** Preclinical Assessment of Stem of Nicotiana tabacum on Excision Wound Model. Bioorganic Chemistry (2021), doi: https://doi.org/10.1016/j.bioorg.2021.104731 (**I.F 5.26**)
- 2. In vitro antioxidant activity of defatted seed extracts of Ocimum sanctum on rat PC-12 cells and its inhibitory efficacy with receptors of oral squamous cell carcinoma. Ind Crops Prod [Internet]. 2020 Oct;154:112668. (I.F 5.6)
- **3.** Role of Toll like receptor in progression and suppression of oral squamous cell carcinoma. Oncol Rev [Internet]. 2020 May 19;14(1). (**I.F 3.75**)
- **4.** Antioxidant and Antimicrobial activity of Protein-AgNPs of Stem of Nicotiana tabacum. Curr Bioact Compd [Internet]. 2021;16(6):1–13. Available from: https://www.eurekaselect.com/184053/article (**I.F 0.69**)
- 5. Investigating Alpha Amylase Enzyme Production By Human Microbiota. Asian J Microbiol Biotechnol Environ Sci [Internet]. 2020;22(1):99–106. (I.F 0.11)
- 6. Isolation And Molecular Characterization Of Heavy Metal Resistant Bacteria From Barrages Of Yamuna River, New Delhi, India. *Plant Cell Biotechnology And Molecular Biology*. 2019; 20(5-6), 212–221.
- 7. Antimicrobial Activity Of Total Intracellular Protein Isolated From Probiotic Intestine Microbiota. Asian Jr. of Microbiol. Biotech. Env. Sc. 2018; 20(4): 1253-1258. (**I.F 1**)
- **8.** Study of Excess Fluoride Ingestion and Thyroid Hormone Derangement in Relation with Different Fluoride Levels in Drinking Water Among Children of Jodhpur District, Rajasthan, India. Asian Jr. of Microbiol. Biotech. Env. Sc. 2018; 20 (1). (**I.F 1**)
- **9.** Study of Excess Fluoride ingestion and effect on liver enzymes in children living in Jodhpur district of Rajasthan. Indian journal of public health research and development. 2018; 9(1). (**I.F 0.5**)
- 10. Neuroprotective ability of TMV coat protein on rat PC-12 cells and it's in silico study with LRRK2 receptor. Neurol Res. 2018;40(12). (**I.F 2.01**)
- **11.** Prevalence of dental fluorosis in relation with different fluoride levels in drinking water among children of jodhpur district, rajasthan, India. Asian Journal of Microbiology, Biotechnology And Environmental Sciences. 2017; 19 (3). (**I.F 0.09**)
- 12. Neuroprotective Ability of Tobacco Stem Silver Nanoparticle on Rat PC-12 Cells. Asian Journal of Pharmaceutics 2017; 11(4). (**I.F 1**)
- 13. Assessment of dental fluorosis in children of Jaipur district, Rajasthan, India. Asian Journal of Pharmaceutical and Clinical Research. 2017; 10(8)161-164.
- 14. Assessment of skeletal fluorosis among children in two blocks of rural area, Jaipur district, Rajasthan, India. Asian Journal of Pharmaceutical and Clinical Research. 2017; 10(9).
- 15. The Emerging Trends of Nanoscience in Cosmetics. IJSRE. 2017; 5(8).

## PUBLICATIONS (mention total no. here)

(I.F 0.11)

- 16. Antioxidant Activity of Isolated Protein Mixtures from Seeds of Azadirachta indica, Ocimum sanctum and Momordica charantia. European J Med Plants [Internet]. 2017 Jan;19(2):1–10.
- 17. Isolation and characterization of lactose and non-lactose fermenting bacteria from tertiary care hospital and their antimicrobial susceptibility test. Asian Journal of Pharmaceutical and Clinical Research. 2017; 10(2).
- 18. Adverse Effect Of Combined Oral Contraceptive Pills. Asian Journal of Pharmaceutical and Clinical Research. 2016; 10(1).
- 19. Prevalence of dental, skeletal and non-skeletal fluorosis in children of Jaipur district of Rajasthan. Indian Journal of Applied Research. 2016; 6(11).
- 20. Association of COL1A2 gene polymorphism with dental fluorosis in children of Jaipur district of Rajasthan, India. Asian Pacific Journal of Health Sciences. 2016; 3 (4).
- 21. Assessment of Non-skeletal fluorosis in children of Jaipur district of Rajasthan, India. International Journal of Scientific Research. 2016; 5(12).
- 22. Comparative Study of Different Parts of Fruits of Musa Sp. on the Basis of their Antioxidant Activity. Der Pharmacia Lettre. 2016; 8(15).
- 23. Radio protective herbal formulation against UV exposure. International Journal of Pharma Sciences and Research (IJPSR). 2016; 7(10).
- 24. Nasal carriage of methicillin resistant staphylococcus aureus (mrsa) in health care workers and healthy individuals in a tertiary care hospital. International Journal of Pharmacy and Pharmacuetical Science. 2015(0975-1491).
- 25. Prevalence of vitamin D/B12 deficiency among urban populations complaining pain of lower limb and generalize weakness. Asian Journal of Pharmacuetical and Clinical Research. 2016; 2455-3891.
- 26. Nosocomial infection by nonfermenting gram –ve baccili in tertiary care hospital: screening and care. IJPPS. 2016; 8(3).
- 27. Comparative Account of Microbial Load Assessment in a University Cafeteria. International Journal of Pharma Research and Health Sciences. 2015; 3(5).
- 28. Identification and antibiotic susceptibility testing of urinary isolates in a tertiary care hospital. Der Pharmacia Lettre. 2015; 7(9). (**I.F 0.11**)
- 29. Endosulfan Induced Male Infertility Study in Swiss Albino Mice: Evaluation of Effect on Testosterone and Sperm Count. THE INTERNATIONAL JOURNAL OF SCIENCE & TECHNOLEDGE. 2015; 3(6).
- 30. Aluminium Phosphide: Toxicity Mechanism And Credible Treatments. World Journal of Pharmacy and Pharmaceutical Sciences. 2015; 4(10).
- 31. Tuberculosis And HIV Double Trouble. World Journal of Pharmacy and

- Pharmaceutical Sciences. 2015; 4(5).
- 32. Herbal contraceptive: an overview. World Journal of Pharmacy and Pharmaceutical Sciences. 2014; 3(8).
- 33. Current status and future potential of herbal radioprotectants. World Journal of Pharmacy and Pharmaceutical Sciences. 2014; 3.
- 34. MicroRNA's: Role in Diabetes. World Journal of Publisher. 2014. (M/201/WJP)
- 35. Estrogen: The most probable cause of gender biasness in Leber Hereditary Optic Neuropathy. International Journal of Pharmacy and Pharmacuetical Sciences. 2014; 2(2).
- 36. Biodegradable Capsules: A Review. World Journal Of Pharmacy And Pharmaceutical Sciences. 2013; 2(6).
- 37. Bioavailability Enhancement of Curcuminoids using Natural Polymer. Der Pharmacia Lettre. 2012; 4 (6):1698-1711.
- 38. RNA based Therapeutics. International Journal of Pharmacy and Pharmaceutical Sciences. 2012; 4:, 1-11.
- 39. Biodegradable Polymers, Role in Enhancing Bioavailability of Drug.

  Asian Journal of Biomedical and Pharmaceutical Sciences. 2011; 1 (5): 01-11.
- 40. Dealing Wildlife Offences in India: Role of the Hair as Physical Evidence. Int J Trichology. 2009; Jan-Jun; 1(1): 18–26.
- 41. Effect of Vitamin c on Testicular Structure in Malathion Treated Swiss Albino Mice. Trend in Life Sciences. 2009; 24(2): 45-51

**Patent** 

	S. No	Title	Name of Inventor	Application No.
PATENTS (total no.)	1.	Novel Formulation for Quercetin for the treatment of Alzhemier's Disease	D.P. Katare, <b>Kumud Bala</b> H Kharakwal	3154/DEL/2011
	2.	Novel Formulation for treating NASH	D.P. Katare, <b>Kumud Bala</b> H Kharakwal	102/DEL/2012
	3.	Novel formulation of Standardized Extract of Psoralea corylifolia for the	D.P. Katare <b>Kumud Bala</b> ,  N Mathur,  H Kharkwal	2103/DEL/2012

	treatment of Liver Cirrhosis	Vidhu Aeri	
4.	Synthesis of a Novel analogue of Sorafenib for the treatment of hepatocellular Carcinoma	D.P. Katare, H Kharakwal, <b>Kumud Bala</b>	1661/DEL/2012 ( <b>Granted</b> )
5.	Novel Synergestic Drug for HCC	D.P. Katare J Moses (Nottingha m Univ) SK Jain H Kharakwal P Sharma Kumud Bala DD Joshi.	1374/DEL/2012
6.	Targeted Drug Delivery For Liver Carcinoma Using Silymarin-Drug Conjugates	D.P. Katare J Moses SK Jain P Sharma, Kumud Bala, H. Kharkwal DD Joshi	1239/DEL/2012
7.	Dietary Supplement for Treating Malathion induced Toxicity in Rats	Kumud Bala H Kharakwal D.P. Katare	354/DEL/2012 (Granted)
8.	Profound effect of Curcumin along with Vitamin-C on malathion induced toxicity reduction	Kumud Bala H Kharakwal D.P. Katare	1321/DEL/2012 (Granted)
9.	Novel Prebiotic Product for treating Hemorrhoids	H Kharakwal D.D.Joshi D.P. Katare, <b>Kumud Bala</b>	171/DEL/2012
10.	Herbal Colors for Food and Cosmetic Industry	H Kharakwal D.D.Joshi D.P. Katare, <b>Kumud Bala</b> Navin Nainwal	40/DEL/2012 (Granted)
11.	Shampoo for dry and greasy hair	H Kharakwal D.P. Katare <b>Kumud Bala</b> Navin Nainwal	467/DEL/2012 ( <b>Granted</b> )
12.	Polymer based Gelatin free Capsules	H Kharakwal Kumud Bala D.P. Katare D.D. Joshi Amit C	1031/DEL/2012

Name	Project Title	Funded	Co	mpletion/Ongoing	PI
19.	A method for preparing the	Dee Kat d (AI Kha dpk	epshikha Pan are, kumud l B), Harsha arkwal (AIH atare@amity	RS), v.edu	
18.	Antiovulatory Lepidin Based Novel Formulat	Ku	P. Katare, <b>mud Bala</b> Kharkwal	2986/Del/20	013
17.	of Alzheimer's Disease	ent PS RJ <b>Ku</b>	P. Katare, harma, akhmola, <b>mud Bala</b>	2897/Del/20 (Granted	
16.	A novel synergi formulation for inhibition of tun growth and metl of preparation thereof	nor Ku	<sup>P</sup> . Katare, <b>mud Bala</b> , Iishra	2372/Del/20	013
15.	A novel Synerge Dicyopentyl Compound and method of preparation there	its D.F L C <b>Ku</b>	P. Katare, Thawla, <b>mud Bala</b>	2124/Del/20	013
14.	Rivastigmine an Quercetin Conjugate form the treatment of Alzhiemers	for Ku	P. Katare, mud Bala, akhmola, akkar	2414/Del/20	013
13.	Carbohydrate B Biodegradable a Hydrobiodegrad Plastics	ased D.I and D.F lable Am Nav	Kharakwal D. Joshi P. Katare it C Kharkw Vin Nainwal mud Bala	al 2140/DEL/20	012
		Kha	arkwal		

RESEARCH
<b>PROJECTS</b>
Completed: (total
no. 2)
Ongoing: (total
no.3)

Name	Project Title	Funded		Completion/Ongoing	PI
Of			Grant		
Scholars			Year		
Yash	Anticancer	ICMR-	2021	Ongoing	Dr.
Sharma	Activity Of	SRF			Kumud
	Seed Cake				Bala
	Extract Of O.				
	Sanctum				
	Against Oscc				
	Cell Line				
	And Its				
	Tumor				
	Suppressor				
	Gene				

		Analysis					
	Mohini Agarwal	Role Of Toll Like Receptor: Tlr3 And	ICMR- SRF	2019	Ongoing		Dr. Kumud Bala
		Tlr9 In Progression Of Cervical Cancer.					
	Manish Kumar	Nano- Formulation Of Antimicrobial Agent From	ICMR- SRF	2019	Ongoing		Dr. Kumud Bala
		Bioactive Compound Of Valeriana Wallichii Root Against Mdr Strain Of Acinetobacter					
	Yash Sharma	Baumannii. Formulation of Tobacco Stem Bioactive Compound Loaded Nanoparticle for Wound Healing	DST SERB	2017	Completed		Dr. Kumud Bala
	Vivek Sehajpal	Diagnosis of Death: Diatom Test	ICMR	2012	Completed		Dr. Kumud Bala
	Name of t			Year	Sponsoring	Respo	nsibility
	Enhancem	o/Seminar/sympo ent of Fish Bree f Vitamin C form	ding with	14-16 Feb 2000	Agency DST	Organ Secret	_
	Internation Science	nal symposium o	on Forensic	1-4 Aug 2007	DST	Organ Secret	_
Workshop Conducted	Crime Sce	ene Investigation	l	25 Oct 2010	DST	Organ Secret	_
	Forensic A	Anthropology		25th Oct 2010	DST	Organ Secret	_
	Problem E	Based learning		25th Oct 2010	DST	Organ Secret	

	Workshop for Doctors.	25th Oct 2010	DST	Organizing Secretary		
AWARDS & HONOURS/ DISTINCTIONS	<ol> <li>SAS Best Academician Award 2021</li> <li>SAS Best Teacher Award 2020</li> <li>Award of Excellence, AIIMS for Organizing 10 th INPALMS 2010</li> <li>Teacher Fellowship, UGC 2003</li> <li>Special State Merit Scholarship 1992</li> </ol>					
MEMBERSHIP with Professional/ Academic bodies	1. Technical Chair - Bioscience and Bio 2. Member of Institutional Biosafty Cor 3. Member of Institutional Ethics Comm 4. Life time Member of ISCA 5. Coordinator, Amity University PACI 6. Member of the Board of Studies of Science Research and Training, and h Diploma Course in Forensic Science. 7. Member of Board of Studies at Amity 8. Convener Patent Commercialization of 9. Core member of Institutional Animal CPCSEA, GOI, Ref no-AUUP/AIP/66/ 10. Core Member of Focus group Development, Information Technolog PHDCCI Health Expert Committees-20 11. Core Member FSMS(Food Safe University, Sector-125, Noida.	mmittee nitte FIC FOF f Amity ave deve y Institut Committ tl Ethics 10/05-02 "Health gy and F 111-2012	RUM. Institute of A eloped the syllare of Biotechnol ee, at Amity Un Committee (IA). Infrastructure Health Insurance.	ogy niversity, Noida EC) approved by Including Skill e" nominated by		