

Faculty Information

Photo

Brief Profile of Faculty in Less than 500 words

I, Dr. C Sanat Kumar, hail from Mahabubnagar District of Telangana State. I studied Tenth and Intermediate from Chaitanya Central School and graduated from Osmania University. I pursued M.Sc in Zoology from Nizam College (Osmania University). I have done my Ph.D under supervision of Prof. T N Raju in Ocular Biochemistry. Presently I am working as Assistant Professor in Nizam College since 2009 till date. I teach both Under Graduates and Post Graduates. Topics I handle are Biochemistry, Physiological Chemistry, Immunology, Molecular Genetics, Systems Biology. Molecular and Diagnostic Techniques and Instrumentation is my Favourite Paper.

Faculty Information

Detailed CV

Photo

1. Personal Details

Name of the faculty	Dr. Sanat Kumar C
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Gender	Male
Department	Zoology
PAN	AULPC1224B
Designation	Assistant Professor
Qualification	M.Sc, Ph.D
Date of Joining (Submit Appointment Letter)	01-07-2009
Date of Birth	01-04-1976
Category	OC
Mobile Number	7995917998
E-Mail Id	csanat@yahoo.co.in
Address	L Flat, 1-2-90, Joy Appartments, Kakatiya Nagar, Street No.1, Habsiguda, Hyderabad-07

2. Academic details:

Degree	Qualification	Month and Year of Passing	Division	% of Marks	Univ/Board/ Institution with State
PG (M.A./M.Com/ M.Sc/M.Tech/ MBA/ MCA/Any other)	M. Sc (Zoology)	May-2000	Second	56%	Osmania University
CSIR/UGC-NET /SELT/Any other					
Any other					
Research details	Title of Thesis			Month and Year of award	Univ/Board/ Institution with State
M.Phil					
Ph.D	Influence of Curcumin and Vitamin E on Lenticular Glutathian Redox Cycle and lipid peroxidation in galactose induced cataract in vistar rats			2009	Osmania University
Post Doctorial/ D.Sc./D.Litt.					
Any other					
*Please provide the scanned copies of certificates					

3. Teaching Experience: Total: __10__ yrs UG: __10__yrs PG: __10__yrs

4. Academic Promotions:

Designation	Month and Year of Promotion
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Associate Professor	
Professor	
* Please provide order copies	

5. Resource persons:

Guest Lectures/ Extension Lectures	No. of Lectures	Name of Program	Organization / Institution	Date and Year
* Please provide the certificates or letter of invitation				

6. Carrier Development Programs: Orientation Course/ Refresher courses/Short Term Course/Faculty Development Programme

Course attended	Institution /University	Title of the Professional Development Programme	Duration	
			From	To
* Please provide the certificates				

7. Research Details:

Research Experience(No. of years):	18 years		
Area of research :	Physiology		
Supervisor for M.Phil/Ph.D (GuideshipLetter)	Prof. T N Raju		
No of students working/Registered	Ph.D: F: M:		
No. of students with fellowship (JRF)	M:	F:	Total:
No. of students with fellowship (SRF)	M:	F:	Total:
No. of students with fellowship (Project fellow)	M:	F:	Total:
No. of students with any other fellowship	M:	F:	Total:
No of students working for M.Phil.	M:	F:	Total:
No of students working as Post.docs.	M:	F:	Total:
No of students working as RA	M:	F:	Total:
No. of M.Phil/Ph.D. Produced	Ph.D: M: F: Total:		M.Phil: M: F: Total:
Name of Students awarded. M.Phil/Ph.D	Title of Thesis	Month and Year of Registration	Month and Year of Award
1.			
2.			
* Please provide the list of students registered, along with their category and fellowship details			

National: 1

8.1 List of publications(## If possible use MS-Excel file which is attached as separate file)

[illegible]

9. List of Publication in Conference proceedings:

SNo	Title of Paper	Name of Conference	Name of the Publisher	Month and Year of Publication	ISBN No.	State/National /International	Affiliated institute at the time of publication
1							
2							
* please provide the PDF or scanned copy of the articles along with ISBN no. and DOI							

10. List of Books Published:

S.No	Title of Book/Chapter	Edited/ Authored	Name of the Publisher	Month and Year of Publication	ISBN No.	State/National /International	Affiliated institute at the time of publication
1							
2							
* please provide the PDF or scanned copy of the first page along with ISBN no.							

11.

Member on editorial

board or referee for national/international

S.No.	Name of the Journal	Status on the editorial Board	ISSN Number	Periodicity of Publication	Month and Year of Inception of Journal	Impact factor
* Please provide the certificates or e-Copy of letter from editor or editorial board						

12.

No. of Papers Presented in

Conference/workshop/seminars: (Oral/Poster)

SNo	Title of the paper	Name of Conference/ workshop/ Seminars	Oral/Poster	Organized by	Date and year	State/National /International	Oral/ Poster
1							
2							
* Please provide the certificates							

13. Conferences/ workshop/ seminars/Training Program etc organized.

SNo	Name of the Seminar	International/ National/State/University/College level	Date	No. of papers presented	No. of Participants		Source of funding/ Sponsorin g Agency
					Nizam College	Other Institutions	

* Please provide the proof of organization and sanction letter for funding							

14. Conferences/ workshop/ seminars/Training Program etc attended/participated.

S.No	Name of the Seminar attended	National/ International	Duration		Organized by	Funded/Not Funded	Funding agency	Amount
			From	To				
1								
2								
3								
* Please provide the certificates and sanction letter for funding								

15. Patents:

Total No. of Patents: _____ **No. of Patents applied:** _____ **No. of Patents approved:** _____

S.No	Month and Year	National/ International/ Commercialized	Country	Patent Information	Patent Filed/Published/Granted	Patent Application no./Grant No.
1						
2.						
* Please provide the copy of patent publication and Patent grant orders						

16. Research Projects:

Total No. Projects:

Major: -

Minor:

Title/Name of Project	Major /Minor	Funding Agency	Amount Granted (in Rs. Lakhs)	Amount Received (in Rs. Lakhs)	Duration	Date and Year	Status – Completed /Ongoing/ Sanctioned/ Submitted
* Please provide the scanned copy of sanction letter/ grant received orders/project closure orders							

17. Consultancy Projects:

Name of the Consultant	Name of the Consultancy Project	Consulting/Sponsoring Agency with Contact Details	Month and Year	Funds earned/ Revenue generated during last five years (in Rs.)*

* Audited statement of accounts indicating the revenue generated through consultancy

18. Collaboration activities for research:

Title of the collaborative activity	Name of the Collaborating agency with contact details	Source of financial support	Month and Year of collaboration	Duration	Nature of activity
* Audited statement of accounts indicating the revenue generated through consultancy					

19. Students Projects:

Total No.of Student Projects Guided:

S.No	Name of the student	Course	Title of the Project	Duration of the Project	Month& Year of the Award
* please provide copy of certificate page or certificate from Head/Principal					

20. Faculty visit abroad on academic purpose:

Institution Visited & Period of Visit	Country	Sponsoring of agency	Activity undertaken	Month and Year of Visit
* please provide invitations/sanction letters/grant received letter				

21. Awards / distinction received if any

Name of the award Received	International/ National/ State/University/District/College level	Nature of Award	Month& Year of the Award
* please provide copy of certificate			

22. International fellowship for advanced studies/research received if any

Name of the award	Month and Year of Award	Awarding agency
* please provide copy of certificate		

23. Faculty Distinction/Nominations to University/State/National/International bodies.

Membership / Distinction earned	Organization	University/State/ National/International Level	Month and Year

*please provide copy of offer letters/appointment orders			

24. Collaborative programs if any other University / Organization/ Industries

Name of Program	Nature of Collaboration	Collaborating organization and Country	Objectives of MOU	Month and Year
* please provide copy of MoU letter				

25. Innovation adopted in Teaching (If any, provide details.):

26. Participation in Curriculum design/BOS etc.(copy of minutes of meeting)

27. List of ICT modules prepared (Please provide soft copies of modules, url link/videos):

28. Social outreach programs conducted(If any, proof as photographs, videos, certificate of appreciation, etc):

29. Life Members of any bodies(provide membership details):

30. Extension activities and institutional social responsibility(If any, provide proof)

31. Contribution to environmental awareness and protection(If any, provide proof)

32. Please provide the details if any MoUs/Linkages(If any, provide MoU letter):

33. Any another relevant information:

SIGNATURE

Cumulative antioxidant defense against oxidative challenge in galactose-induced cataractogenesis in Wistar rats.

[Raju TN¹](#), [Kumar CS](#), [Kanth VR](#), [Ramana BV](#), [Reddy PU](#), [Suryanarayana P](#), [Reddy GB](#).

Author information

Abstract

Natural dietary ingredients are known for their antioxidant activity. Of such, curcumin, the active principle of turmeric, at 0.01% in the diet proved as pro-oxidative in galactose-induced cataract in vivo. The purpose of this study was to investigate the effect of vitamin E (VE), a well-known antioxidant, in combination with curcumin on the onset and maturation of galactose induced cataract. Periodic slit-lamp microscope examination indicated that in combination with vitamin-E, 0.01% curcumin (G-IV) delayed the onset and maturation of galactose-induced cataract. Biochemical analyses revealed that combined treatment of 0.01% curcumin and vitamin-E diet exhibited an efficient antioxidant effect, as it inhibited lipid peroxidation and contributed to a distinct rise in reduced glutathione content. The results indicate that natural dietary ingredients are effective in combination rather than the individual administration as they are complementing each other in reducing the risk of galactose induced cataract.

Evaluation of Next Generation β -lactam Inhibitors against penicillinase Producing Methicillin-Resistant *Staphylococcus aureus*

Aravind Setti¹, Sanat Kumar C², Naresh B³, Someswar Rao S¹, and Smita C. Pawar^{1*}

¹Department of Genetics, Osmania University, India

²Department of Zoology, Osmania University, India

³Department of Botany, Osmania University, India

Abstract

Antibiotics are indispensable drugs in curing pathogenic bacteria that cause deadly diseases and infections. A plethora of antibiotics are available in different classes, however, β -lactam inhibitors are one of the oldest class of inhibitors against many gram-positive as well as gram-negative bacteria. Pathogens are becoming more powerful, gradually developing resistance against successful β -lactam antibiotics. Therefore, synthesis of novel β -lactam inhibitors is a fundamental process in drug discovery. This study focused on the Methicillin-Resistant *Staphylococcus aureus* (MRSA) that produces penicillinase: PBP3. We identified 14 popular β -lactam inhibitors: Ceftobiprole, Clavulanate, Sulbactam, Tazobactam, Biapenem, Razupenem, LK-157, Ceftolozane, Ampicillin, Amoxicillin, Ticarcillin, Piperacillin, Penicillin G, and Cefotaxime. Among them, Clavulanate, Sulbactam, and Tazobactam are next generation β -lactam antibiotics. Molecular docking was carried out between MRSA-PBP3 and β -lactam inhibitors in order to report the potential ligand. Interestingly, we found Clavulanate – a next generation antibiotic along with the leading molecule in a row (Sulbactam, and Tazobactam) – has shown least binding affinity when compared with reference molecule Penicillin-G. Despite Clavulanate effectively acting against MRSA, its binding stability is less in MRSA-PBP3 complex. Therefore this study suggests improved analogs are required to strengthen binding interaction alongside active against resistant bacteria.