## NAME: Dr. Anupama C

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#### Education

	Degree	Year	Institute		Specialization	
1	Ph.D	2023	VTU		Biochemistry	
2	M.Phil.	2008	Bharathidasan l	Jniversity	Biotechnology	
3	M.Sc.	2005	Kuvempu	University,	Biochemistry	
			Tholahulse	campus,		
			Davanagere.			
4	B.Sc.	2003	Bangalore	University,	Chemistry,	Zoology,
			Karnataka, India		Microbiology (CZMb)	

# **Professional Experience**

	Date (from-to)	Designation	Organization
1	May 2011 Till date	Assistant Professor	SIT
2	June 2007 to April 2011	Lecturer	SIT

(Please fill in reverse order. Current designation should be at the top)

#### Positions held

(Please give details of any administrative posts, co Ordinator roles/ responsibilities held)

- Institute level Co-ordinator for the course Biology for Engineers
- Co-coordinator of Departmental Academic Affairs Committee (DAAC)
- Co-coordinator of Departmental Project Evaluation Committee (DPEC)
- Co-coordinator of Departmental Seminar Evaluation Committee (DSEC)
- Co-ordinator for Departmental Academic Audit committee (AAA)
- Departmental contineo Co-coordinator
- Co-ordinator for Departmental patent committee
- Departmental level test Co-ordinator
- Departmental level ISO Co-ordinator
- Departmental level LIC Co-ordinator
- Department level placement Co-ordinator

# Affiliations of Professional organizations

- Life member to Indian society for Technical Education(ISTE)
- Life member to Society of Biological Chemist.(SBC)
- Association for Research in Vision & Ophthalmology (ARVO), USA: 2021

#### Awards and Honors

- 1. Awarded ARVO foundation Travel Grant for ARVO 2021 annual meeting.
- 2. Project entitled 'Extending shelf life of citrus fruit juice by using chitosan isolated from mushroom waste' was selected for the participation in state level **Anveshana 2015** Science and Engineering Fair in Bangalore.

#### **Courses Taught**

#### **Undergraduate Courses**

- Biochemistry
- Biochemistry-I
- Biochemistry-II
- Structural Biology
- Plant Biotechnology
- Animal Biotechnology
- Upstream Process Technology
- Biology for Engineers
- Environmental Science
- Food Biotechnology
- Immunology and Immunotechnology

#### Research Guidance

SI.	Name of the Scholar	Title	Year of completion				
no							
NIL							

#### Research Areas

- Nanotechnology
- Ocular Pathophysiology
- Biopolymers

# **Sponsored Projects**

NIL

#### **Journals**

- Nishtha Mahendra Kumar, Niyati Navaneeth, Abhijith Shettar, Anupama Chalimeswamy, Elements of liquid biopsies: isolation, analysis, and clinical applications in cancer diagnosis to prognosis, Expert Review of Molecular Diagnosis, 2024, 24 (12), <a href="https://doi.org/10.1080/14737159.2024.2445111">https://doi.org/10.1080/14737159.2024.2445111</a>, (Impact factor-3.9)
- Palanahalli S Shilpashree, Tapanmitra Ravi, M Y Thanuja, Chalimeswamy Anupama, Sudhir H Ranganath, Kaggere V Suresh, Sangly P Srinivas, Grading the severity of damage to the Perijunctional Actomyosin Ring and Zonula Occludins-1 of the Corneal Endothelium by Ensemble Learning Methods, Journal of Ocular Pharmacology and Therapeutics, 2023, 39 (4), <a href="https://doi.org/10.1089/jop.2022.0154">https://doi.org/10.1089/jop.2022.0154</a>, (Impact factor-2.671)
- C Anupama, Abhijith Shettar, Sudhir H Ranganath, Sangly P Srinivas, Experimental oxidative stress breaks down the barrier function of the corneal endothelium, Journal of Ocular Pharmacology and Therapeutics, 2023, 39 (1), https://doi.org/10.1089/jop.2022.0093. (Impact factor-2.671)
- C. Anupama, M.Y Thanuja, Sudhir H. Ranganath, Kaveet Pandya, Uday Kompella, Sangly P. Srinivas, Oxidative stress induces a breakdown of the cytoskeleton and tight junctions of the corneal endothelial cells, Journal of Ocular Pharmacology and Therapeutics, 2021, 38(1), 74-84, https://doi.org/10.1089/jop.2021.0037 (Impact factor-2.671)
- Thanuja MY, **Anupama C**, and Sudhir H Ranganath. Bioengineered Cellular and Cell Membrane- derived Vehicles for Actively Targeted Drug Delivery: So Near and Yet so Far", Advanced Drug Delivery Reviews, 2018. 132, 57-80. (Impact Factor: 13.66)
- Nagaraju, G., Prashanth, S. A., Shastri, M., Yathish, K. V., Anupama, C., & Rangappa, D. Electrochemical heavy metal detection, Photocatalytic, Photoluminescence, Biodiesel production and Antibacterial activities of Ag-ZnO nanomaterial. Materials Research Bulletin. 2017, 94,54-63. https://doi.org/10.1016/j.materresbull.2017.05.043 (Impact Factor 2.446)
- Nagaraju, G., Nagabhushana, H, Suresh, D, Anupama, C, Raghu, G. K., & Sharma, S. C. Vitis labruska skin extract assisted green synthesis of ZnO super structures for multifunctional applications. Ceramics International.2017, 43, 11656-11667. http://dx.doi.org/10.1016/j.ceramint.2017, (Impact Factor 3.45)
- Chalimeswamy Anupama, Anubhav Kaphle, Udayabhanu & Ganganagappa Nagaraju. Aegle marmelos assisted facile combustion synthesis of multifunctional ZnO nanoparticles: Study of their photoluminescence, photo catalytic and antimicrobial activities. Journal of materials science: materials in

- electronics, Springer. 2017, 29 (5), 4238-4249. https://doi.org/10.1007/s10854-017-8369-1, (Impact Factor- 2.019)
- Uma, K., Lalithamba, H. S., Raghavendra, M., Vivek Chandramohan, & Anupama C. (2016). Synthesis of Nα-protected aminoacid/peptide Weinreb amides employing N, N'-carbonyldiimidazole as activating agent; studies on docking and antibacterial activities. ARKIVOC,4, 339-351. (Impact Factor 1.65)
- Mamatha Chekuri, Sindhu Gangadharaiah, Latha Bharadwaj Roopavatharam, Anubhav Kaphle and **Anupama Chalimeswamy** (2015). Green synthesis of stable silver nanoparticles using flower extracts of Rosa Damascena: Characterization, Antimicrobial and Antioxidant activity study.4(10), 454-459. (Impact Factor-0.31)

### **Conference Proceedings**

- Kuruvadi S, Thanuja MY, Anupama C, Ranganath SH, Srinivas SP. Corneal cold storage breaks down the actin cytoskeleton and tight junctions of the endothelium via oxidative stress. Association for Research in Vision & Ophthalmology (ARVO) Annual Meeting, USA (May 2022).
- Tapanmitra Ravi, MY Thanuja, Anupama C, PS Shilpashress, Sreesha Srinivasan Kuruvadi, Sudhir H Ranganath, Sangly P Srinivas. Automatic image skeletonization to characterize ZO-1 distribution in the corneal endothelium following hypothermia and oxidative stress. Association for Research in Vision & Ophthalmology (ARVO) Annual Meeting, USA (May 2022).
- Anupama C, M.Y. Thanuja, Sudhir H. Ranganath, Sangly P Srinivas. Impact
  of oxidative stress on the cytoskeleton and barrier integrity of the corneal
  endothelium. Association for Research in Vision & Ophthalmology (ARVO)
  Annual Meeting, USA (May 2021).
- Shivasiddaramaiah A, Mallikarjun U, Praveen N, Prashantha S, Anupama C. Evaluation of Biocompatibility of Cu-Al-Be-Mn quaternary shape memory alloy. Materials Today, Proceedings. 2018, Vol 5, 24799-24808. http://dx.doi.org/10.1016/j.matpr.2018.10.278.
- Ganavi Rajan B R, Manjushree C, Anupama C. 2016. Eco friendly approach to the synthesis of copper nanoparticles, characterization and its application, International Journal Of Innovative Research & Development. 5 (11) A National Conference Proceeding on "Recent Advances in Industrial Engineering and Applied Chemistry" (Under TEQIP-II 1.2) being organized by SSIT, Maraluru, Tumkur-572105 on 21st and 22nd Oct,2016. ISSN No: 2278-0211.
- Hemalatha P., M. K. Veeraiah., K. V. Anasuya., Anupama C. Mousumi Das.2016. Studies on Copoly (N-Vinylpyrrolidone Acrylic acid) as an Antimicrobial. International Journal of Innovative Research & Development. 5 (11). A National Conference Proceeding on "Recent Advances in Industrial"

- Engineering and Applied Chemistry" (Under TEQIP-II 1.2) being organized by SSIT, Maraluru, Tumkur-572105 on 21st and 22nd Oct, 2016.ISSN No: 2278-0211.
- Veeraiah, P. Hemalatha, K. V. Anasuya, C. Anupama, Mousumi Das.2016. A Comparative Study on the Antimicrobial Property of Quaternised Copolymers N-vinylpyrrolidone Dimethyl Amino Ethyl Methacrylate and N-vinylpyrrolidone Vinyl Benzyl Chloride. Indian Journal of Advances in Chemical Science. S1: 17-21. ISSN No.: 2320-0898. (An International Peer Reviewed Chemistry Journal). GIF:0.453; SJIF :2.63; An International Conference Proceeding "ICMAT" 2016,28th-29th May-2016.
- Udayabhanu, C Anupama, D Suresh, H Nagabhushana, S C Sharma, G Nagaraju. 2015.Grape juice supported synthesis of ZnO nanoparticles: Photo catalytic and antimicrobial activities.81-83. ISBN No: 978-93-83-826394-23-6. National conference on Applications of Nanotechnology in Environmental Remediation sponsored by Science and Engg board, Tumkur University on 7 Oct 2015.
- Raghavendra M, Uma K, Vivek Chandramohan, Anupama C, Lalithamba H S.2015.One pot synthesis, molecular docking and biological evaluation of potent Nα-ureido peptides". presented in 5th Indian Peptide Symposium: on 24-25 Sep 2015 in JNCASR.
- Presented an oral presentation in national conference; Symbiot 14', National technical symposium of I.E Biotechnology, conducted in association with DRDO and Dept of Biotechnology MIT, Manipal University on 11, 12 April 2014.

#### **Book Chapters**

Ranganath S.H., Thanuja M. Y., Anupama C., Manjunatha T. D. Systemic Drug Delivery to the posterior Segment of the Eye: Overcoming Blood-Retinal Barrier Through Smart Drug Design and Nanotechnology. In Immobilization strategies: Biomedical, Bioengineering and Environmental Applications, A. Tripathi and J.S. Melo, Editors. Springer, Singapore. (2021) https://doi.org/10.1007/978-981-15-7998-1\_6.

#### Editor/ Reviewer of Journal

Reviewer for the

- Journal of polymer research
- Results in Chemistry

#### Patents

**NIL** 

# Invited Lectures, talks and workshops

- Delivered a guest lecture titled 'Scope of Biotechnology' at various PU colleges
- Given Hands-on training for Biocon Academy students for 6 batches for a period of 3 years (2013-2016).
- Participated in short term course on 'Protein structure and Design' under quality improvement programme of All India Council for Technical Education, New Delhi, conducted during 10-14 July,2017 at Centre for Continuing Education, Indian Institute of Science, Bengaluru-560 012.
- Participated in short term course on 'Genetic Engineering-Principles and Applications' under quality improvement programme of All India Council for Technical Education, New Delhi, conducted during 24-28 April,2017 at Centre for Continuing Education, Indian Institute of Science, Bengaluru-560 012.
- Participated in TEQIP Workshop on 'Tissue culture: Biomaterials and stem cells for manufacturing of biological tissue' organized by IIT Hyderabad during 20-25 March 2017.
- Participated in FDP programme on 'Design and Optimization of Experiments' under TEQIP held during 4-7 August 2014 organized by MSRIT, Bangalore.
- Participated in Workshop on 'Fundamentals of Animal cell culture and functional applications' held on June 2014 at Institute of Bioinformatics, Bangalore.
- Participated in workshop on 'Gene Cloning' organized by the Department of Biotechnology, R.V.College of Engg, Bangalore, during 20-24 January 2014.

#### Consultancy

Biochemical analysis (Carbohydrates and Proteins test) carried out for KGY Agroproducts Pvt. Ltd. Tumakuru.