CURRICULUM VITAE

Prof. K. Kantharaju

Professor, School of Basic Sciences: Department of Chemistry
Rani Channamma University, Vidya Sangama, P- B, N H – 4
Belagavi – 591 156. INDIA
Mobile: **9449880063, 6361105227.**
E-mail: **kantha77@gmail.com; kk@rcub.ac.in**

1. Education & reserch experience

NIH-Research Associate-2: Dept. of Biochemistry & Molecular Biology, DUCOM, USA (Prof. I. Chaiken)
DBT-Postdoc-1: Molecular Biophysics Unit, IISc, Bengaluru (Prof. P Balaram)
Ph.D : Bangalore University (Peptide Science, Supervisor : Prof. V.V.Sureshbabu)
M.Sc : Central College Campus, Bangalore University (Organic Chemistry)
B.Sc : Govt. Science College, Tumkur (Physics, Chemistry, Mathematics)

2. Honors and awards

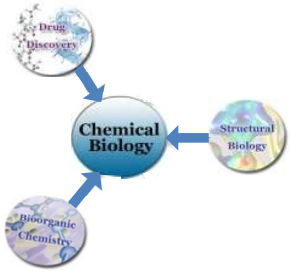
- **Department of Biotechnology** : Postdoctoral Research Fellow-2006-2009.
- **Senior Research Fellowship** : CSIR, Govt. of India, New Delhi-2004-2006.
- **NET-LS** : Chemical Science conducted by CSIR-June 2000.
- **Master's degree** : Fifth Rank to the University (Second to Organic)
- **National merit scholarship** : UGC, Govt. of India-1998.
- **Seed Money for Young Scientist Researcher** : VGST-GoK, 2016
- **RCUB-Vice-Chancellor's Appreciation for Research Project-2015 & 2016**

3. Teaching interest

- Bio-organic chemistry
- Organic reactions & mechanisms
- Analytical chemistry
- Application of spectroscopy in organic chemistry
  (UV-Vis, FT-IR, NMR, Chiroptical and Mass spectrometry)

4. Research areas

- Green chemistry
- Peptides and peptidomimetic chemical synthesis
- Fragment-based drug discovery/SAR studies
- Polymer nanocomposite films
- MCRs
- Heterogenous catalysts (MNPs)



5. Research project completed/ongoing =08

S.No	**Title of Project**	**Funding Agency**	**Duration**	**Amount Sanctioned (Rs.)**
08	Green method synthesis of natural polymer blend nanocomposite films: Investigation of bioremediation and food packaging applications	**KSTePS (GRE-GRD-1192)**	2025-2027 (Ongoing)	40,00,000/-
07	Synthesis and pharmacological evaluation of some novel curcumin derivatives	**SERB**	2023-2026 (Ongoing)	29,98,820/-
06	Mathematical Modelling of the Effect of Functionalized Metal oxide NPs on the Mechanical, Thermal, Optical and Photocatalytic Properties of Polyvinyl alcohol/ Carboxymethyl Cellulose blend Nanocomposite film Studies	RCUB-IDRP	2022-2023 (Completed)	4,00,000/-
05	Structure-activity relationship and peptidomimetic studies of antimicrobial peptide "Indolicidin".	UGC-Major Research Project	2015-18 (Completed)	13,70,000/-
04	Metallopeptidomimetic-Based Coordination Polymers Deposition on Graphite Substrates: Effects of Backbone Chain & Local Surface Structure	VGST-GoK	2016-17 (Completed)	6,00,000/-
03	Design and Synthesis of Novel Derivatives of Curcumin from Curcuma longa Linn: Evaluation of Cyclic Voltammetry and Biological Properties	RCUB	2017-18 (Completed)	1,00,000/-
02	Development and encourage higher education studies for OBCs/M students	OBCs/M-GoK	2016	5,00,000/-
01	Advanced Materials for Clean Energy, Health and Environment	DST-FIST (Exe. Member)	2016-2021	1,25,00,000/-

6. PG Student project awarded =05

S.No.	Title	Funding agency	Team student	Amount sanctioned
05	Synthesis of CuO-GO nps composite using green leaves extract and application in photocatalytic activities	KSTA 48th Series (2024-25)	Sagun B V (48S_MSC_0227)	6,000/-
04	Green synthesis of ZnO-CQDs composite and its application in photocatalytic activity studies	KSTA 48th Series (2024-25)	Shilpa S Kamble (48S_MSC_0247)	6,000/-
03	Design, Synthesis, Characterization and Application of Doped (SCQDs & PCQDs) and Undoped Carbon Quantum Dots (CQDs)	KSTA 47th series (2022-23)	Manjusha B	7,000/-
02	Biogenic synthesis of nitrogen doped carbon quantum dots for the treatment of textile effluents and dye degradation	KSTA 47th series (2022-23)	Sharanabasava M (P15ZZ22S032003)	7,000/-
01	Biogenic synthesis of copper quantum dots for treatment of domestic sewage/ industrial effluents	KSTA 46th series (2021-22)	Mr. Shashikumar Haranal (P15ZZ21S0296)	8,000/-

7. Research scholar working: 03

S.No	Student name	Title of the Thesis	Registration Number
9	Anusha K	Biodegradable Polymer Nanocomposite Films: Preparation, Physiochemical properties and their Application in Food Packaging	09/09/2024 PCHE202303
8	Subhash R	Synthesis, biological activities, molecular docking and dynamic simulation of curcumin analogues"	09/09/2024 PCHE202302
7	Aravind Kamath	The design, synthesis, characterization and diversified applications of polymer blended nanocomposites	02/11/2021 PCHE202001

8 Ph.D Awarded: 05 + 01 (submitted)

S.No	Student name	Title of the Thesis	Registration Number
6	Radhika Mane	Amino acid catalysed heterocyclic derivative synthesis, characterisation, Electrochemical behaviour and pharmacological Evaluation.	02/11/2021 PCHE202008
5	Raju. S. Shekhanavar	Surface functionalized magnetic nanoparticles and their applications in organic synthesis and environmental	Reg.No.Chem/ 18-19/14
4	Krishnappa Badiger	Synthesis, characterization, electrochemical behaviour and pharmacological studies of some designed heterocyclic derivative	Reg.No.Chem/ 18-19/01
3	Yamanappagouda Amaregouda	Design, synthesis and characterization of biodegradable blended membranes and their application studies.	Reg.No.Chem/ 18-19/02
2	Prashant B Hiremath	Development of green protocols for the synthesis of heterocycles and their biological applications	Reg.No.Chem/ 14-15/12) (June, 2021)
1	Santosh Y Khatavi	Novel agro-waste derived catalysts: application in the synthesis of heterocyclic molecules, peptides and their biological activities	Reg.No.Chem/14-15/14) (Nov,2020)

9. M.Sc Students project dissertation guided: 58

10. Number of research publications/patent/conference/invited talk

- ✓ **Published papers** : 112 (National &Int. Journals)
- ✓ **Patent** : 01 (USA) +1 German +02 Indian
- ✓ **Book chapter** : 11
- ✓ **Poster presentation/participation** : 115
- ✓ **Invited talk** : 40

11. Academic & administrative activities

S.No	Position	Details
1	Chairman	Dept. of Chemistry, RCUB (18/09/2017 to 18/09/2019 & 18/09/2021 to 18/09/2023)
2	Chairman	Board of Examiners, PG Dept. of Chemistry, RCUB (2015–2016 & 2018-2019) B.Sc (Sugar Science & Tech), M.Sc (Alcohol technology, 2023-24)
3	Chairman	Doctoral Committee, Dept. of Chemistry @ RCUB (2021-23)
4	Chairman	Board of studies, Dept. of Chemistry@ RCUB (2021-23)
5	Member	Board of Examiners in the Dept. of Chemistry @ RCUB, RIE, Mysore, Karnatak Uni, Dharwad, Kuvempu University
6	Member	Board of Studies @ Dept. of Chemistry and B.Sc (Sugar Sci. & Tech), RCUB
7	Member	AAA committee (2014-15), RUSA and NAAC documents preparation
8	Coordinator	OBCs /M, RCUB (2015 -2018 & 2021-present)
9	President	PG-Gymkhana, RCUB (2017-2019)
10	Member	PG-Gymkhana Guidelines preparation -2019
11	Coordinator	Department of Botany & Zoology, RCUB -2019 to 2021
12	Member-Exe	PG-Teachers Association, RCUB-March 2019 to 2021
13	Chairman & Member	Department Council Meeting-2017-2019 (Chairman) & Member in other periods.
14	Deputy Registrar	Registrar office, GAD, 2022-23
15	Co-ordinator	Dept. of Biochemistry, Dept. of Microbiology, Alcohol Technology & Environmental Science
16	AC Member	Academic Council (2023-2025)

12. Patents

1. I. Chaiken, E.S. Papazoglou, A.R. Bastian, Kantharaju. Novel compositions for inhibiting virus entry and promoting virolysis and methods thereof.
   U.S. Patent #: PCT/US11/54969 (Issue Date: 10/05/2011), **Granted on 25/08/2015 Publication of US9114107B2.**
2. K. Kantharaju, P. B. Hiremath, H. P. Shivarudrappa. Synthesis of 4-benzylidene-2-(2-fluorophenyl)oxazol-5(4h)-one derivatives catalysed by biowaste.
   Indian Patent Granted #: 05/02/2021, 202041037327 A.
3. Kantharaju K, Yamanappagouda A. Fabrication of Chitosan/Polyvinyl alcohol-based multifunctional food packaging films integrated with l-methionine surface modified CuO-ZnO bi-metal oxide nanoparticles. **German Patent**. **2022** Nov 11.
4. Kantharaju K, Yamanappagouda A. Smart biodegradable films based on chitosan/polyvinyl alcohol containing *Murraya koenigii* anthocyanin for monitoring the freshness of fish meat. **Indian patent**. **2022** Nov 25.

13. Book Chapters published =11

1. Hiremath PB, Kantharaju K, Pattanashetty SH. Microwave-assisted Synthesis of 4-Benzylidene-2-(2-fluorophenyl) Oxazol-5 (4H)-one Derivatives Catalysed by Egg Shell Powder and Evaluation of Their Anti-microbial Activity. In Conference on Drug Design and Discovery Technologies, Royal Society of Chemistry **2019** (355)125. **ISBN 1788018621.**
2. K Kamanna. Chapter name: Synthesis and pharmacological profile of benzimidazoles. Book name: Chemistry and applications of benzimidazole and its derivatives. London, UK: IntechOpen (**2019**) 51-69. **ISBN: 978-1-78984-553-2.**
3. Kantharaju K. Book Chapter 4: Organocatalysts based on Natural and modified amino acids for asymmetric reactions. Book name: Organocatalysis: A Green Tool for Sustainable Developments. Publishers: Walter de Gruyter GmbH. (**2022**) 89-118. **ISBN:978-3-11-073753-0.**
4. Kantharaju K and Yamanappagouda A. Book Chapter 8: Synthesis of bioactive scaffolds catalyzed by agro-waste-based solvent medium. *Book name: Green-bond forming reactions synthesis of bioactive scaffolds.* Publisher: Walter de Gruyter GmbH. (**2022**) 287-322. **ISBN:978-3-11-079707-7.**

5. Kantharaju K and Yamanappagouda A. Book Chapter 4: Applications of Cyrene and Ethyl lactate Bio-based Solvents for Organic Transformations. Book name: Non-Conventional solvents Organic synthesis, Natural products isolation, Drug design, Industry & the environment. Publisher: Walter de Gruyter GmbH:(**2023)** 87-133. **ISBN:978-3-11-124374-0.**
6. Kantharaju K and Yamanappagouda A. Book Chapter 8: Role of Erbium-based Compounds in Organic Transformations. Book Name: Rare earth elements Processing, catalytic applications and environmental impact. Publisher: Walter de Gruyter GmbH. (**2023)** 141-174. **ISBN:978-3-11-078794-8.**
7. Kantharaju K and Kamath A D. Book chapter5: Prenylation of natural products: An overview. Book Name: Modifications of biomolecules. Publishers: IntechOpen, London, UK. (**2024**), 91-107. **ISBN:978-1-80355-996-4.**
8. Kamath A D and Kantharaju K. Book chapter3: Prenylated Proteins: Structural Diversity and Functions. Modifications of biomolecules. Publishers: IntechOpen, London, UK. (**2024**), 51-65. **ISBN:978-1-80355-996-4.**
9. Kantharaju K, Yamanappagouda A and Kamath A D. Book Chapter 4: Multicomponent Synthesis of biologically prominent tetrahydrobenzoxanthenone derivatives. *Book Name: Multicomponent Synthesis Bioactive heterocycles.* Publisher: Walter de Gruyter GmbH. (**2024**) 157-179. **ISBN: 978-3-11-099733-0.**
10. Kantharaju K, Radika M, Yamanappagouda A and Kamath A D. Book Chapter 6: Multicomponent Synthesis of biologically active quinazolinone derivatives. Book Name: Multicomponent Synthesis Bioactive heterocycles. Publisher: Walter de Gruyter GmbH. (**2024**) 221-252. **ISBN: 978-3-11-099733-0.**
11. Kantharaju K and Yamanappagouda A. Book Chapter 9: L-Proline and its derivatives catalyzed one-pot multicomponent synthesis of biologically promising N- and O-heterocycles. Book Name: Multicomponent Synthesis Bioactive heterocycles. Publisher: Walter de Gruyter GmbH. (**2024**) 337-372. **ISBN: 978-3-11-099733-0.**

14. Research publications list can found in–Google scholar link below

https://scholar.google.com/citations?user=Ygano-8AAAAJ&hl=en