

# *Curriculum vitae*



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# *Curriculum vitae*

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## **04. Academic Qualifications**

Dr. C. S. Karigar, is an Ajeet Alumni of Sainik School Bijapur. Here he was a student from 1976- 81.

<b>Degree/Exam</b>	<b>Subject</b>	<b>University/ Institute</b>	<b>Year</b>
B.Sc.	Chemistry (Major) Botany & Zoology (Minors)	Karnatak Science College, Dharwad	1983-86
M.Sc.	Biochemistry	Karnatak University, Dharwad	1986-88
UGC-CSIR NET	Life Science	UGC New Delhi	1988
Ph. D	Biochemistry	Karnatak University, Dharwad	1988-94
Post Doctoral Fellow	Plant Molecular Biology	Gyeongsang National University, South Korea	2002-03

## **05. Courses Taught (Master & Ph.D Level)**

Basic Biochemistry, Basic and Applied Microbiology, Molecular Genetics, Recombinant DNA Technology, Industrial and Food Microbiology, Bioinformatics, etc.

### **Research Interests**

Bioremediation, Environmental Stress Physiology, Plant Molecular Biology, Secondary Metabolism, Bioinformatics and Medicinal Plants.

## **06. Research Projects**

1. "Novel enzymes of phthalate degradation" (1999-2000) (UGC Minor Project)
2. "Bioremediation of metal contaminants from industrial effluents" (2004- 2007) Bangalore University, Bangalore, Interdisciplinary Project Collaborating with Department of Microbiology and Biotechnology.
3. "Biological process for the remediation of desiccated coconut (DC) waste waters' UGC Major Project (2009-2011).
4. "Development of PG Teaching & Infrastructure, Department of Biochemistry BUB" VGST – GOK (2011-2014)

**07. Teaching, Research and Administrative Experience**

S.No.	Position	Teaching	Research	Administration	Period from	Period to
1	Director UGC (HRDC)	Yes	-	Yes	2023	UFO
2	Chairman	Yes	Yes	Yes	2022	2024
3	Finance Officer	-	-	Yes	2022	2022
2	Chairman	Yes	Yes	Yes	2018	2020
3	Special Officer (Specialized Centers)	-	-	Yes	2019	Current
3	Special Officer (Examinations)	-	-	Yes	2016	Current
4	Nodal Officer (UGC- Online Grievance Portal)	-	-	Yes	2016	Current
5	Nodal Officer (UGC- NAD)	-	-	Yes	2018	Current
6	Chairman	Yes	Yes	Yes	2012	2014
7	Professor	Yes	Yes	Yes	2010	Current
8	Associate Professor	Yes	Yes	Yes	2006	2010
9	Reader	Yes	Yes	Yes	2003	2006
9	Visiting Professor Gyeongsang National University, South Korea	Yes	Yes	-	2002	2003
10	Senior Lecturer	Yes	Yes	-	1998	2003
11	Lecturer	Yes	Yes	-	1994	1998

**Professional Assignments**

No	Assignment	University	Year
1	Member, Board of Studies	Bharathiar University, Coimbatore	2022
2	Member, Subject Committee	KSHEC, Bangalore	2021
3	Member, Board of Appointment	Kuvempu University, Shankarghatta	2021
4	Member, Board of Appointment	Gulbarga University, Kalaburagi	2019
5	Member, Board of Appointment	SKDU, Bellary	2018
6	Member, Board of Promotion	CFTRI, Mysore	2018
7	Chairman, Board of	Bangalore University	2012-14, 2018-

	Studies		20, 2022-24
8	Chairman, Board of Examiners, Biochemistry	Bangalore University	2007-08, 2018-19, 2022-2023
9	Chairman, Expert Committee, M.Voc courses	Bangalore University Padmashree Institute of Management & Sciences	2018-19 to Current
10	Chairman, Board of Examiners, M.Voc. courses	Bangalore University Padmashree Institute of Management & Sciences	2018-19, 2022-2023
11	Chairman, Board of Examiners	Bangalore North University	2022-2023
12	Member, Board of Appointment	Davangere University	2017
13	Member, Board of Appointment	University of Mysore	2016
14	Member, Board of Appointment	Karnatak University	2014
15	Member, Board of Studies	SV University, Tirupati	2017
16	Member, Board of Studies	SK University, Anantapur	2017
17	Member, Board of Studies	Women University, Tirupati	2015
18	Chief Custodian, MBA	Bangalore University	2010
19	Chief Custodian, Microbiology and Biotechnology	Bangalore University	2009

#### **08. Doctoral Guidance [15 awarded + 8 working]**

1. Ms. P Suneetha (2007) Bioremediation of monocyclic petroleum hydrocarbons
2. Sri. S. Chandrashekar (2010) Bioremediation of polycyclic aromatic hydrocarbons
3. Mrs. G. Vidya (2010) Microbial degradation of textile dyes
4. Mrs. M. Kushalatha (2012) Bioremediation of haloaromatic compounds by Phototropic bacteria.
5. Mrs. S Asma (2012) Synthesis and biological activity of pharmaceutically important novel compounds.
6. Mrs. H.D. Prathibha (2016) Studies on anti-bacterial, anti-fungal, anti-oxidant and anti-cancer activity of some indian medicinal plants.
7. Mrs. Renuka Sri Hari (2017) Biological activity of Phytochemicals.
8. Sri. H.R. Ravikumar (2018) Biological deterioration of domestic paints their components.
9. Mrs. Shwetha S. Rao (2018) Remediation of coconut desiccation waste by lignocellulytic fungal enzymes.
10. Sri. Fayaz Pasha (2018) Antioxidant phytochemicals in conjugation with n-3 fatty acids; their influence on release of inflammatory mediators of macrophages.
11. Sri Rajeev Ramachandra Kolgi (2020) Antioxidant and antimicrobial properties of some medicinal plants from Devarayana durga hills.

12. Sri. S. L. Shivakumar (2020) A comparative study on phytochemicals of some medicinal plants from Tumkur district, Karnataka state.
13. Smt. Kamala A. (2020) Influence of plant growth regulators and elicitation on products of secondary metabolites in *Cyperus rotundus* L (Purple nutsedge).
14. Smt. Sajeeda N (2020) Phytochemical composition and biological activities of medicinal plant: *Simarouba glauca*.
15. Sri. Nagendra K (2021) Evaluation of the role of Phytochemicals present in *Garcinia indica* consequent to radiotherapy.

#### 09. Research Publications [Citations 1625, H-index=19, i10-index=23 ]

1. An incipient marker to monitor inflammation, overtraining, and recovery in athletes Payali Chatterjee Usha Sri Kaniganti, **CS Karigar** International Journal of Physical Education, Sports and Health (2022)9:138-41.
2. Antibacterial activity of silver nanoparticles synthesized using endophytic fungus—*Penicillium cinnamopurpureum* B Dinesh, N Monisha, HR Shalini, GK Prathap, Jagadeesha Poyya, Manjula Shantaram, Jayanth S Hampapura, **Chandrakant S Karigar**, Chandrashekhar G Joshi Spectroscopy Letters (2022) 55: 20-34.
3. Biogenic synthesis of silver nanoparticles using *Aspergillus Aureoles* (Endophyte) and demonstration of their anti- microbial activity B Dinesh, MU Chethan, GK Pratap, Jagadeesha Poyya, Manjula Shantaram, Jayanth S Hampapura, **Chandrakant S Karigar**, Chandrashekhar G Joshi Analytical Chemistry Letters (2021) 11: 899-910.
4. A Review on herbal medicines as neuroprotective agent Prathiba H.D & **Chandrakant. S. Karigar** International Journal of Public Mental Health and Neurosciences (2021) 8: 1-7.
5. Lifestyle recommendations for prevention and treatment of metabolic syndrome diet -A review Prathiba H.D & **Chandrakant. S. Karigar** World Journal of Pharmaceutical and Life Science (2021) 7: 66 – 69.
6. Antioxidant Studies, in vitro Cytotoxic and Cell Viability Assay of Flavonoids and Alkaloids of *Leucas aspera* (Wild.) Linn Leaves Sharangouda J Patil Rajeev Ramachandra Kolgi, Haleshappa R, Sajeeda N, Keshamma E, **Chandrakant S Karigar** Asian Journal of Biological and Life sciences (2021) 10: 165-1714.
7. Physicochemical properties of starch obtained from *Curcuma karnatakensis* - A new botanical source for high amylose content D.H.Tejavathi B.S.Sujatha **C.S.Karigar** Heliyon (2020) 6: (1), e03169.
8. Caspase Activators: Phytochemicals with Apoptotic Properties Targeting Cancer, a Health Care Strategy to Combat this Disease Asma Saqib, Sharath Pattar, **Chandrakant Shivappa Karigar**, Shailasree Sekhar Indian Journal of Pharmaceutical Education and Research, (2020) 54:496-508.
9. Comparative phytochemical profile and antioxidant property of bark, flowers and leaves extracts of *Simarouba glauca* Sajeeda N Kolgi RR Shivakumara SL Shivaraj Y and **Karigar CS** Asian J Pharm Clin Res, 12: (2019), 56-63.
10. *In vitro* anticancer activity of bark, flower and leaves extracts of *Simarouba glauca* on HCT 116 cells. Sajeeda N Shivakumara SL Kolgi RR and **Karigar CS** International Journal of Scientific & Technology Research. (2019) 8: 69-73.

11. Preliminary phytochemical screening and antioxidant activity of alkaloids and flavonoids contents of methanolic extracts of *Dodonaea viscosa* (L) jacq and *Acalypha indica* (L) Shivakumara S.L Rajeev R. Kolgi, Sajeeda Niketh, Shivaraj Y and **C. S. Karigar** I JCAR (2019), 8: 17822-27.
12. Estimating the phytochemicals and the antioxidant property of *Leucas aspera*. Rajeev Ramchandra Kolgi, Sajeeda Niketh, Shivakumara S L, Shivaraj Y and **Chandrakant S. Karigar** IJRAR (2019) 6: 460-70.
13. Therapeutic properties of extracts of *Leucas aspera* and *Anisomeles malabarica* Rajeev Ramchandra Kolgi, Shivakumara S L, Sajeeda Niketh, Shivaraj Y and **Chandrakant S. Karigar** Int J Biol Med Res.(2019) ;10:6631-6634.
14. Molecular docking of seed bioactives as dual COX-2 and LOX-3 inhibitors in context to osteoarthritis. Lydia Jothi, Asma Saqhib, Shailasree Sekhar, **Chandrakant Shivappa Karigar** Pharmacogn. Commn (2018) 8:232-37.
15. Plants in traditional medicine with special reference to *Cyperus rotundus* L: a review. Arunagiri Kamala, Sushil Kumar Middha, Chitra Gopinath, H. S. Sindhura, **Chandrakant S. Karigar** (2018) 3 D Biotech 8:309.
16. *In vitro* Antioxidant potentials of *Cyperus rotundus* L. rhizome extracts and their phytochemical analysis Arunagiri Kamala, Sushil Kumar Middha, **Chandrakant S. Karigar** (2018) Phcog Mag. 14:261-7.
17. Biodegradation of halogenated phenol by immobilized phototrophic bacterium *Rhodospseudomonas palustris*. Kushalatha M and **C S Karigar** International Journal of Engineering & Scientific Research (2018) 6: 75-85.
18. Traditional Indian Medicine (TIM) and Traditional Korean Medicine (TKM): A Constitutional-Based Concept and Comparison YM Kang, R Komakech, **CS Karigar**, A Saqib Integrative Medicine Research (2017) 6: 105-113.
19. Biodegradation of Pigment Green-10 by *Aspergillus flavus* **CS Karigar** HR Ravikumar International Journal of Sciences & Applied Research (2017) 4: 78-84
20. Biodegradation of pigment yellow-73 (PY-73) by *Rhizopus stolonifer* (Ehrenb.: Link) Lind **CS Karigar** HR Ravikumar International Journal of Applied Research (2017) 3:1028-1031.
21. Biodegradation of 4-Chlorophenol by *Providentia* sp. CJ-3 isolated from contaminated soil sediment Kushalatha M, **Karigar C.S**, Suneetha P, Gowri Neelima M, Jolitha A.B, Saraswati S. International Journal of Sciences & Applied Research (2017) 4: 34-40.
22. Documentation of Traditional Medicinal plants of Sira taluk of Tumkur district, Karnataka, state, India Shivakumar SL **Karigar CS** International Journal of Advanced Scientific Research and Publications (2016) 2:100-106
23. Management of Arthritis; an integrated medicinal approach Fayaz Pasha P, **Chandrakant S. Karigar**. International Journal of Pharmacy and Integrated Life Sciences (2016) 4:1-13.
24. Gas Chromatographic Method for the Quantitative Determination of a Hydrolytic Degradation Impurity in Busulfan Injectable Products H. Ramakrishna Reddy, N. Chandrasekhar and **C. S. Karigar** J Chromatogr Sci (2016) 54: 1475-80.

25. High-Throughput Screening by In silico Molecular Docking of *Eryngium Foetidum* (Linn.) Bioactives for Cyclooxygenase-2 Inhibition Pavan Rangahanumaiah, Ravishankar Vittal Rai, Asma Saqhib, Lydia Jothi, Marula Siddha Swamy, **Chandrakant Shivappa Karigar** Shailasree Sekhar Pharmacogn. Commn (2016) 6:232-37
26. Management of Arthritis; an integrated medicinal approach Fayaz Pasha P, **Chandrakant S. Karigar** International Journal of Pharmacy and Integrated Life Sciences (2016) 4:1-13.
27. Overexpression of IPP isomerase and limonene synthase enzymes in *Mentha spicata* and their influence on the terpenoid metabolism Young Min Kang, Dong Jin Park, Dong Gi Lee, Hyun Jin Song, Seung Mi Kang, Ji Yun Min, **Chandrakant Shivappa Karigar**, Byeong Cheol Moon, & Myung Suk Choi Romanian Biotechnological Letters (2015) 20: 10358-68. [IF 0.367]
28. Enhancement of Seed Germination and Seedling Growth of *Allium victorialis* var. *platyphyllum* by the soaking treatment of plant growth regulators Mi Jin Jeong, Hyun Jin Song, Seon Jeong Sim, Yeong Rong Seo, Hyeon Jeong Im, Gang Uk Suh, **Chandrakant. S. Karigar**, & Myung Suk Choi Journal of Agriculture & Life Science (2015) 49:51-62.
29. Decolourization of acid blue 113 by *Saccharomyces cerevisiae* isolated from dye contamination site Vidya Govindareddy, Kushalatha mutharasaiah and **Chandrakant Karigar** Vijnana Ganga, Journal of Science & Technology, Gulbarga University, (2014) 5: 6-12.
30. *In silico* Molecular Docking Studies of 1-substituted-2-((methyl)substituted)-1H-benzo[d]imidazole derivatives as Cyclin Dependent Kinase-2 Inhibitors Sreenivas Enaganti, R.D. Shailimavardhini, Akkiraju. Pavan Chand, Pavani Medoju, J. Usharani, G. Kamala, P. Ravindra reddy, and **C.S.Karigar** Int. J. Pharm. Sci. Rev. Res. (2014), 28: 1 -7.
31. Enhancing Production of Terpenoids in Metabolically Engineered Transgenic Spearmint (*Mentha spicata* L.) by Salt and Fungal Elicitors Myung Suk Choi, Dong Jin Park, Hyun Jin Song, Ji Yun Min, Seung Mi Kang, Chong Kyu Lee, Kye Man Cho, **Chandrakant Karigar**, Ho Kyoung Kim and Young Min Kang Journal of Forest & Environmental Science, (2014) 30: 243-252.
32. Habitat influences the composition of volatile constituents in *Allium victorialis* var. *Platyphyllum* Jae Kyung Yang, Ji Su, Ji Young Jung, Mi Jin Jeong, Hyun Jin Song, Chung Weon Yun, Hyong Ho Kim, Eun Su Do, Jun Pok Chang, S **Chandrakant Karigar**, Myung Suk Choi, and Hyun, Shik Moon Pakistan J. Botany (2014) 46::271-278 [IF 0.87]
33. Influence of Nitrogen, Phosphorous, Potassium and Sucrose on the Shoot and Bulb Growth of *Allium victorialis* var. *platyphyllum* Myung Suk Choi, Mi Jin Jeong, Hyun Jin Song, Seon Jeong Sim, Eun Soo Doh, Jun Pok Chang, Jae Kyung Yang, Chung Weon Yun, Cheol Ho Lee, **Chandrakant. S. Karigar** Korean J. Medicinal Crop Sci. (2012) 20: 101-107.
34. Comparative analysis of terpenoids in in vitro culture media of metabolically engineered transgenic and wild type spearmint (*Mentha spicata* L.) Young Min Kang, Dong Jin Park, Hyun Jin Song, **Chandrakant Karigar** and Myung Suk Choi Korean J. Medicinal Crop Sci. 20 : 301-307 (2012).

35. Rapid Selection of Polyphenol-rich Tea Trees (*Camellia sinensis* L.) Employing a Colorimetric Method. Chang-Mi Heo, Yong-Duck Kim, Taek-Keun Oh, Ji-Yun Min, Jung-Gyu Hwang, Mi-Jin Jeong, Hyun-Jin Song, Hak-Gon Kim, Seon-Jeong Sim, Myung-Suk Choi, **Chandrakant S. Karigar**, Hyun-Shik Moon, Seung-Joo Lee and Yoshiyuki Shinog. J. Fac. Agr., Kyushu Univ. (2012) 57: 467-471.[IF 0.273]
36. Frequencies of aneuploid seedlings obtained from aneuploid apple accessions (*Malus × domestica*) pollinated with diploid ‘Hongro’. Park, S. M., C. H. Zhang, A. Wakana and **C. S. Karigar.**, Journal of Faculty of Agriculture, Kyushu University (2012) 57: 67-72. [ IF 0.273]
37. Molecular docking studies of novel palmitoyl-ligands for cyclooxygenase-2 Raghu Bhagavat, Asma Saqib, **Chandrakant Karigar** Chemical Biology & Drug Design(2012) 79:1043-1048. [ IF 2.28]
38. *In vitro* selection of salt-tolerant *Ailanthus altissima* Swing Young Min Kang, Hyun Jin Song, Hyun Shik Moon, Jong Gab Kim, Cheol Ho Lee, **Chandrakant Karigar**, Myung Suk Choi Forest Science & Technology (2012) 8:16-20.
39. Synthesis, characterization and pharmacological evaluation of palmitic acid derivatives of salicylic acid and anthranillic acid. Asma Saqib., **Karigar. C.S.**, Pasha M.A., Harish. M.S. Journal of Pharmaceutical Research and Opinion (2012) 2: 35-38.
40. Biodegradation of 2-chlorophenol by *Rhodopseudomonas palustris*. Kushalatha Mutharasaiah, Vidya Govindareddy, and **Karigar Chandrakant** Bioremediation Journal (2012) 16:1-8.
41. Biodegradation of Paints: A Current Status. Ravikumar. H.R., Shwetha S. Rao, and **Karigar C. S.** Indian Journal of Science & Technology (2012) 5: 1977-87.
42. Role of microbial enzymes in the bioremediation of pollutants: A Review. **Karigar C.S.** and Shwetha S Rao Enzyme Research Volume 2011, Article ID 805187, 11 pages doi:10.4061/2011/805187 [ISSN 2090-0414].
43. Enhanced production of tropane alkaloids in transgenic *Scopolia parviflora* hairy root cultures over-expressing putrescine *N*-methyl transferase (PMT) and hyoscyamine-6 $\beta$ -hydroxylase (H6H) Y. M. Kang, D. J. Park, J. Y. Min, H. J. Song, M. J. Jeong, Y. D. Kim, S. M. Kang, **C. S. Karigar** and M. S. Choi In Vitro Cellular & Developmental Biology – Plant (2011) 47:516-524 [IF 1.06]
44. Biodegradation of 2-chlorophenol by *Bacillus subtilis* isolated from industrial sludge Kushalatha M, Vidya G and **Karigar C S**, The Bioscan; Inter-National J. Life Sciences (2011) 6: 305-309.
45. Effects of plant growth regulators on rapid *in vitro* propagation of *Camptotheca acuminata* from axillary buds. Seung-Mi Kang, Ji-Yun Min, Dong-Jin Park, Mi-Jin Jeong, Hyun-Jin Song, Chang-Mi Heo, Hyun-Shik Moon, Jong-Gab Kim, **Chandrakant S. Karigar**, Myung-Suk Choi Journal of Agriculture & Life Science (2011) 45: 33-40.
46. Potassium chloride elicits enhancement of bilobalide and Ginkgolides production by *Ginkgo biloba* cell cultures Seung Mi Kang; Ji Yun Min; Dong Jin Park; Mi Jin Jeong; Hyun Jin Song; Chang Mi Heo; Hak Gon Kim; Jae Kyung Yang; Cheul-Ho Lee; **Chandrakant S. Karigar**; Myung Suk Choi Forest Science and Technology (2010) 6: 49 – 54.

47. Antibacterial and immuno-modulatory activity of ethanol extracts from *Lespedeza* sp. during *Helicobacter pylori* infections. Jae-Kyung Yang, Hee-Dong Yeo, Seung-Chul Baik, Ji-Young Jung, Bo-Min Kim, Mi-Jin Jeong, Cheul-Ho Lee, **Chandrakant S. Karigar**, Han-Min Park, and Myung-Suk Choi. *Biotechnol. Bioprocess Eng.* 15:1077-1083(2010). [IF 1.42].
48. The Habitat Influences the Composition of Minerals and Amino Acids in *Allium victorialis* var. *platyphyllum* (Wild Garlic) Jae Kyung Yang, Ji Su Kim, Ji Young Jung, Mi Jin Jeong, Hyun Jin Song, Chung Weon Yun, Eun Su Do, Jun Pok Chang, **Chandrakant S. Karigar** and Myung Suk Choi *J. Korean For. Soc.* 99: 762-769 (2010).
49. Enzymatic hydrolysate from non-pretreated biomass of Poplar (*Liriodendron tulipifera*) is an alternative resource for bioethanol production. Ji Young Jung, Myung Suk Choi, Ji Su Kim, Mi Jin Jeong, Young Wun Kim, Byeng Tae Woon, Jin Ke Yeo, Han Na Shin, Young Bon Goo, Keun Ok Ryu, **Chandrakant S Karigar** and Jae Kyung Yang *J. Korean Forest Society* 99:744-749(2010).
50. *In vitro* propagation of *Chamaecyparis obtusa* sieb. ET ZUCC. Ji Yun Min, Dong Jin Park, Mi Jin Jeong, Hyun Jin Song, Yong Duck Kim, Young Min Kang, **Chandrakant Shivappa Karigar**, and Myung Suk Choi *Propagation of Ornamental Plants* 10: 117-121 (2010). [IF 0.50 ISSN 1311-9109]
51. Photobiodegradation of halogenated aromatic pollutants Kushalatha M, **Karigar C S**, Vidya G *Advances in Bioscience and Biotechnology* 1, 238-240 (2010). [ISSN 2156-8456]
52. Rapid selection of catechin-rich tea trees (*Camellia sinensis*) by a colorimetric method Yong Duck Kim, Ji Yun Min, Mi Jin Jeong, Hyun Jin Song, Jung Gyu Hwang, **Chandrakant S. Karigar**, Gang Won Cheong, Myung Suk Choi *J Wood Sci* 56: 411-417 (2010). [IF 1.0]
53. Biodegradation of anthracene by immobilized *Pseudomonas fluorescens* KCP2. Chandrasekhar N. and **C. S. Karigar**. *Asian J Microbiology, Biotechnology & Environmental Sciences* 12: 112-18 (2010).
54. Synthesis of palmitic acid derivatives of *p*-aminophenol and *p*-amino benzoic acid with improved pharmacodynamic profiles. Asma Saqib., Pasha M.A., **Karigar. C.S.** Harish. M.S. *Acta. Pharmaceutica. Scientia.* 52: 205-212 (2010). [IF 0.5].
55. Production of Tropane Alkaloids During De-differentiation of *Scopolia parviflora* Calli Yong Duck Kim, Seung Mi Kang, Ji Yun Min, Won Kyun Choi, Mi Jin Jeong, **Chandrakant. S. Karigar**, Myung Suk Choi. *J. Natural Products* 73: 147-150 (2010) [IF 3.128].
56. Biodegradation of naphthalene by immobilized *Pseudomonas fluorescens* KCP1. Chandrasekhar N. and **C. S. Karigar**. *The Bioscan; Inter-National J. Life Sciences* (2009) 4: 387-393.
57. Cyclooxygenase isoforms in health and disease. Asma Saqib and **Chandrakant. S. Karigar**: *Internet Journal of Pharmacology* (2009) www.ispub.com. 7: Accessed 18 June 2009.

58. High frequency plant regeneration following abnormal shoot organogenesis in the medicinal tree *Hovenia dulcis* Mi Jin Jeong ., Hyun Jin Song., Dong Jin Park., Ji Yun Min., Jin Seong Jo., Bo Min Kim., Hak Gon Kim., Yong Duck Kim., Ru Mi Kim., **Chandrakant S. Karigar.**, and Myung Suk Choi Plant Cell Tiss Organ Cult (2009) 98:59–65. [IF 3.09]
59. Antimicrobial agent from *Schima wallichii* ssp. *liukuensis* against *Candida* spp. Kuen Shin., Ji Yun Min., Seung Mi Kang., Dong Jin Park., Song Hyun Jin., Oh Woong Kwon., Jae Kyung Yang., **Chandrakant S Karigar.**, and Myung Suk Choi Korean J Medicinal Crop Sci. (2009) 17: 61-67.
60. Effect of biotic elicitors on the accumulation of bilobalide and ginkgolides in *Ginkgo biloba* cell cultures Seung-Mi Kang, Ji-Yun Min, Yong-Duck Kim, **C.S. Karigar**, Seon-Won Kim, Gwan-Hyo Gu and Myung-Suk Choi Journal of Biotechnology (2009) 139:84-88. [IF 3.288]
61. Phytochemical Distribution Profile among *Solanaceae* Members SL Shivakumar, Saqib Asma and **CS Karigar** *Vegetos* (2009) 22 : 59 – 66. [IF 0,039]
62. Cobalt(II), Ni(II), Cu(II), Zn(II), Cd(II), Hg(II), UO<sub>2</sub>(VI) and Th(IV) complexes from ONNN schiff base ligand. Ramakrishna Reddy, K., Suneetha, P., **Karigar, C.S.**, Manjunath, N.H., Mahendra, **K.N.** Journal of the Chilean Chemical Society (2008) **53**: 1650-1652. [IF 0.448 ISSN 0717-9324]
63. Efficient Release of Ferulic Acid from Sweet Potato (*Ipomoea batatas*) Stems by Chemical Hydrolysis. Myung-Suk Choi, Ji-Hyun Park , Ji Yun Min , Bu-Kug Lim , Byung Hyun Lee , Gang Won Jung , Jong-Yoon Lee , **Chandrakant S. Karigar** , and Jae-Kyung Yang. Biotechnol. Bioprocess Eng. (2008) 13: 319-324. [IF 1.42 ISSN 1226-8372]
64. Toluene Degradation by *Moraxella* species-CS3 isolated from a hydrocarbon contamination site. **Karigar C.S.**, Suneetha. P. and Manjunath. N.H. The Bioscan; Inter-National J. Life Sciences (2008) 3: 271-276.
65. An assessment of fluoride ecotoxicity biomarkers in earthworms. Hanumantha Reddy H. and **Karigar C. S.** Asian J Microbiology, Biotechnology & Environmental Sciences (2008) 10: 191-194.
66. Degradation of ethylbenzene by free and immobilized *Pseudomonas fluorescens*-CS2 Suneetha Parameswarappa, Manjunath Nagenahalli, and **Chandrakant Karigar** Biodegradation (2008) 19: 137-144. [IF2.01]
67. Rapid screening and selection of low-caffeine-containing tea (*Camellia sinensis*) trees by a colorimetric method Y. D. Kim , J. Y. Min, **C. S. Karigar**, G. W. Cheong , J. W. Kim and M. S. Choi Plant Breeding (2007) 126, 634- 637. [IF 1.596]
68. Enzymatic release of ferulic acid from the *Ipomoea batatas* L. (sweet potato) stem Min, J.-Y., Kang, S.-M., Park, D.-J., Kim, Y.-D., Jung, H.-N., Yang, J.- K., Seo, W.-T., Kim, S.-W., **Karigar, C.S.**, Choi, M.-S. Biotechnology and Bioprocess Engineering (2006) 11: 372-376. [IF 1.42].
69. Two-Phase Batch Culture System (TPBCS): A Solution for the elimination of metabolite inhibition during the biodegradation of BTEX components Parameswarappa Suneetha, Nagenahalli Manjunath, and **Chandrakant Karigar**. Vijnana Bharathi Bangalore University J. Science & Technology (2006) 18: 118-123.

70. Rapid Micropropagation of *Hovenia dulcis* Thunb. Through in vitro Stem Nodal Cultures Dong-Jin Park, Young-Min Kang, Ha-Na Jung, Ji-Yun Min, Yong-Duck Kim, **Chandrakant S. Karigar** and Myung-Suk Choi Journal of Korean Forest Society (2006) 95: 155-159.
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72. Phenol degradation using free and immobilised cells of *Arthrobacter citreus* **C.S. Karigar**, Aravind. Mahesh and N.H. Manjunath & Yun DJ. Biodegradation (2006) 17: 47-55. [IF2.01].
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75. Biodegradation of Monocyclic Aromatic Compounds P. Suneetha, **C. S. Karigar** and N.H. Manjunath Vignana Bharathi Bangalore University J. Science & Technology (2005) 17:103-108.
76. Biotransformation and Impact of Ferulic Acid on Phenylpropanoid and Capsaicin Levels in *Capsicum annuum* L. Cv. P1482 Cell Suspension Cultures. Seung-Mi Kang, Hee-Young Jung, Young-Min Kang, Ji-Yun Min, **C. S. Karigar**, Jae-Kyung Yang, Sun-Won Kim, Yeong-Rae Ha, Sung-Ho Lee, And Myung-Suk Choi J. Agric. Food Chem. (2005) 53: 3449-3453. [IF 2.816].
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78. The Nobel Prize in Chemistry 2004 ‘Ubiquitous’ Quality Control of Life. **C S Karigar** and K R Siddalinga Murthy. Resonance (2005) 10: 41-49.
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82. Metabolism of dimethylterephthalate by *Aspergillus niger*., S. H. Ganji, **C.S.Karigar** and B.G.Pujar., *Biodegradation* (1995) 6: 61-66 [IF2.01]
83. Synthesis and antimicrobial activity of 1',2',3',4'-Tetrazolyl/ 1',3',4'- Oxa diazolyl indoles. A.G.Kamat, **C. S. Karigar** and G. S. Gadaginamath., *Indian Journal of Heterocyclic Chemistry* (1993) 2:191-194. [IF 0.3]
84. Metabolism of benzaldehyde by *Pseudomonas* sp. S.H.Ganji, **C.S.Karigar** and B.G.Pujar., *World Journal of Microbiology & Biotechnology* (1993) 9: 597-598. [IF 1.53]
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## 10. BOOK CHAPTERS

1. A review on biochemical approaches for discovering protein-protein interactions **Chandrakant S. Karigar** Proceedings of The National Conference on Recent Discoveries in Protein Science (2013) Karnataka State Higher Education Council and Tumkur University pp106-117. [ISBN 978-81-923331-5-1]
2. Metabolic engineering of terpenoid metabolism in *Mentha spicata* **C. S. Karigar**, M. Jayaramu and Meyong Suk Choi Proceedings of The National Conference on Recent Discoveries in Protein Science (2013) Karnataka State Higher Education Council and Tumkur University pp118-128. [ISBN 978-81-923331-5-1]
3. Catabolism of 4-chlorophenol by *Rhodopseudomonas palustris* Kushalatha M, Jayaramu M and **C. S. Karigar**, Proceedings of The National Conference on Biotechnological Approaches for Sustainable Environmental Management (2013) Karnataka State Higher Education Council and Tumkur University pp56-63. [ISBN 978-81-923331-7-5]
4. Bioremediation of Toxic Polycyclic Aromatic hydrocarbons **C. S. Karigar**, Proceedings of The National Conference on Biotechnological Approaches for Sustainable Environmental Management (2013) Karnataka State Higher Education Council and Tumkur University pp1-12. [ISBN 978-81-923331-7-5]
5. Review on Technologies for Precise delivery of Nanomedicines in Health Care **C. S. Karigar**, and M. Jayaramu Proceedings of Lectures delivered on Discovery and Applications of Innovative Materials (2012) Karnataka State Higher Education Council and Prof. CNR Rao Centre for Advanced Materials, Tumkur University pp122-132. [ISBN 978-81-923301-5-0].

## 11. Books published

1. University Biochemistry, General Physiology, 2021, Scholar's Press, ISBN 9786138954842

2. Integrated Graduate Microbiology, 2019, Lambert Academic publishing. ISBN 9786200210746
3. University Biochemistry, November 2008, Tanish Publishers, Bangalore
4. TB of Biochemistry B.Sc Semester VI, January 2007 United Publishers, Mangalore
5. TB of Biochemistry B.Sc Semester V, June 2006, United Publishers, Mangalore
6. TB of Biochemistry B.Sc Semester III, Aug 2005, United Publishers, Mangalore.
7. TB of Biotechnology B.Sc Semester III, Aug 2005, United Publishers, Mangalore.
8. TB of Biochemistry B.Sc Semester IV, Dec 2005, United Publishers, Mangalore
9. Principles of Biochemistry B.Sc Semester II, Jan 2005, United Publishers, Mangalore.
10. Biochemistry B.Sc Semester I, Aug 2004, United Publishers, Mangalore.

## **12. Papers and Special Lectures presented at Symposia/Workshops**

1. An invited lecture on “Recent Policy on Scientific Misconduct” on 27-03-2019, One Day Conference, Department of Biochemistry, KUD, Dharwad.
2. “Evaluation Reforms In Higher Education” at UGC-HRDC, Sponsored Refresher Course in Life Sciences, Bangalore University Bangalore, Dec, 28<sup>th</sup>, 2018.
3. “Bioinformatic & Applications” at UGC-HRDC, Sponsored Orientation Course, Bangalore University Bangalore Jan, 27<sup>th</sup> 2018.
4. “Cheminformatic & Applications” at UGC-HRDC, Sponsored Orientation Course, Bangalore University Bangalore Jan, 27<sup>th</sup> 2018.
5. “Bioinformatic databases” and “Metabolic Engineering” at UGC-HRDC, Sponsored Refresher Course in Life Sciences, Bangalore University Bangalore July 6<sup>th</sup>, 2016.
6. An invited lecture on “Molecular basis of cancer” at UGC Sponsored Refresher Course in Chemistry, Academic Staff College, Bangalore University, Bangalore 16<sup>th</sup> March, 2012.
7. Oral presentation: “Evaluation of pharmacodynamic actions of palmityl derivatives of salicylic and anthranilic acids” at National Symposium on Bioactive molecules from discovery to industry, at Department of Biochemistry, University of Mysore, Mysore on 6<sup>th</sup> and 7<sup>th</sup> April 2009.
8. An invited lecture on “Bioinformatic databases and tools” at UGC Sponsored Refresher Course in Computer Science, Academic Staff College, Bangalore University Bangalore March 28<sup>th</sup>, 2009.
9. Invited special lectures on “Bioinformatics” at Chaithanya Post Graduate Degree College (Autonomous), Warangal Andhra Pradesh on 8-9<sup>th</sup> March 2009.
10. Invited special lectures on “Biochemical mutagenesis, Bioenergetics and Human physiology” at Sri Padmavathi Mahila University Tirupati on 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> March 2009.
11. Assessment of fluoride ecotoxicity biomarkers in earthworms H. Hanumantha Reddy and C. S. Karigar. National Conference in Chemistry, Central College, Bangalore University, Bangalore- September 2006.
12. Two-Phase Batch Culture System: a solution for the elimination of substrate toxicity during the biodegradation of BTEX components P. Suneetha, C.S. Karigar, & N.H. Manjunath. National Conference in Chemistry, Central College, Bangalore University, Bangalore- September 2006.

13. Screening of microbial consortia for degradation of polycyclic aromatic hydrocarbons N.Chandrasekhar & C. S. Karigar National Conference in Chemistry, Central College, Bangalore University, Bangalore- September 2006.
14. Decolorisation of acid blue-113 by *Saccharomyces* species G. Vidya and C S. Karigar National Conference in Chemistry, Central College, Bangalore University, Bangalore- September 2006.
15. An invited lecture on “Metabolic Engineering” at UGC Sponsored Refresher Course in Chemistry Academic Staff College, Bangalore University Bangalore Dec 1-22, 2003

### 13. Membership of Professional Societies:

No	Name of the Society	Year	Membership
1	Society of Biological Chemists(SBC) (India)	2000	Life Member
2	Indian Liquid Crystal Society(ILCS)	2003	Life Member
3	Indian Science Congress Association(ISCA)	2005	Life Member
4	National Environmentalists Association(NEA)	2008	Life Member
5	Society for Plant Research (S.P.R.)	2010	Life Member

### 14. Awards & Recognitions

1	Fellow Member Eudoxia Research Center (FMERC)	2023
2	Fellow Member Eudoxia Research University (FMERU)	2023
3	Fellow of Society for Plant Research (F.S.P.R.)	2010
4	Fellow of National Environmentalists Association (F.N.E.A.)	2008

**Last updated: 1<sup>st</sup> December 2023**

