



**SAPTHAGIRI COLLEGE OF ENGINEERING, BENGALURU-57**  
 (Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)  
 #14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru- 560 057

**DEPARTMENT OF BIOTECHNOLOGY**

**FACULTY PROFILE**

<b>Name of the faculty</b>	<b>Dr. SHOBHA G</b>
<b>Designation</b>	Assistant professor
<b>Contact Number</b>	9964591024
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**EDUCATIONAL QUALIFICATION**

Degree	Specialization	University	Year of Passing
Ph.D	Biotechnology	VTU, Bengaluru	2020
M.Phil	Biotechnology	Jain college, Bengaluru	2011
M.Sc	Bioscience	University of Mysore Hemangotri, Hassan,	2006

**WORK EXPERIENCE**

Teaching	Research	Industry
13	05	-

**PUBLICATIONS**

National/International Journals	National/International Conferences	Books Authored/Edited
17	00	-

**Area of Interest**

Enzyme technology	Agrinanotechnology
Biochemistry	

**MEMBERSHIP IN PROFESSIONAL BODIES/UNIVERSITY BODIES/ORGANIZATION**

Society for Biotechnologist
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**PUBLICATIONS NATIONAL/INTERNATIONAL JOURNALS**

Sl.No	Year	Publications
1	2020	G. Shobha & K. S. Shashidhara & Chandrashekhar Naik, Cuprous Oxide Nanoparticles Induced Antioxidant Response and Genotoxicity in <i>Lycopersicum esculentum</i> , Oct 2020, BioNanoScience, pp 1-12, <a href="https://doi.org/10.1007/s12668-020-00796-0">https://doi.org/10.1007/s12668-020-00796-0</a>
2	2020	Shobha G, Shashidhara KS, Chandrashekhar Naik, Effect of Green Synthesized Cuprous Oxide Nanoparticles on Agronomical Traits Of Tomato ( <i>Lycopersicon esculentum</i> ), Journal of Seybold Report , VOL 15(9), Sep 2020 , pp 1792-1802, ISSN NO: 1533-9211
3	2019	In Vitro Cytotoxicity Study of Green Synthesized Copper Nanoparticles, Research Journal of Biotechnology, Vol. 14 (8) August (2019), 105-111.
4	2019	Nano-cuprous oxide enhances seed germination and seedling growth in <i>Lycopersicum esculentum</i> plants, Journal of Drug Delivery & Therapeutics, 9(2):296-302
5	2018	Enzyme assisted bioactive extraction from <i>Flacourtia montana</i> and investigation of its in-vitro antioxidant and anti-diabetic activity International Journal of Pharmacy and Biological Sciences ISSN: 2321-3272 (Print), ISSN: 2230-7605 (Online) IJPBS, Volume 8 (1), JAN-MAR- 2018, 384-390.
6	2017	Biodiesel Production from Simarouba Deoiled-Cake By Transesterification And Phytochemical Analysis, International Journal Of Pharmacy And Biological Sciences, ISSN: 2321-3272 (Print), Issn: 2230-7605 (Online) IJPBS, Volume 7 (3), 36-42, 2017.
7	2017	Plant Pathovars Inhibition from Copper Based Nanoparticles Synthesized from Leaf Extract Of Flacourtia Montana, Journal Of Bionanoscience, Vol. 11(12), 1–8, 2017. Doi:10.1166/Jbns.2017.1481
8	2016	Production of bioethanol from agrowaste processed Areca catechu Water. International Journal of Pharma and bioscience, 7(2):530-536, 2016.
9	2016	Power Generation from Kitchen and Industrial Waste Water using Microbial Fuel Cells (MFCs) with Graphite Cathode and Anode.s Journal of Alternate Energy Sources and Technologies, 7(1):14-22, 2016.
10	2015	Isolation, characterization and optimization of process variables for partially purified immobilized $\alpha$ -amylase isolated from Indian chicken feather, Int J Pharm Bio Sci 2015 April; 6(2): (B) 1165 - 1171
11	2015	A review on various types of toxins, Pharmacophore, 2015, vol. 6 (4), 181-188

12	2014	Study on induce defense related enzymes in <i>Capsicum annuum</i> infected with <i>Xanthomonas vesicatoria</i> , international journal of Advanced research, 2014:2(10), 720-724
13	2014	Biological transesterification of poultry waste to biodiesel using bacteria isolated from chicken feather, international journal of recent scientific research, 2014:5(9), 1729-1732
14	2014	Biological Synthesis of Copper Nanoparticles and its impact - a Review, <i>International Journal of Pharmaceutical Science Invention</i> , 2014:3(8),28-38
15	2014	Phytochemical profile, Antibacterial and Antidiabetic effect of crude aqueous leaf extract of <i>Datura stramonium</i> , Pharmacophore, 2014:5(2), 273-278
16	2014	A study on caffeine effect of tea on health, International Journal of Advanced Biotechnology and Research, 2014: 15(3), 59-363
17	2014	Study on advanced application of mint oil, Journal of Advanced Scientific Research, 2014, 5(4), 01-03
18	2014	Estimation of crude caffeine in different types of tea, J Adv Sci Res, 2014, 5(4): 39-42
19	2012	“Antagonistic effect of the newly isolated PGPR <i>Bacillus</i> spp on <i>Fusarium oxysporum</i> ” International Journal of Applied Science and Engineering, 2012:1(3), 463-474

## NATIONAL /INTERNATIONAL CONFERENCES

PAPER AND POSTER PRESENTATION		
1	2019	<b>Oral Presentation on “Genotoxicity of Cuprous oxide nanoparticle on <i>Lycopersicon esculentum</i>”</b> at National Seminar on New trends in biotechnology, 14 th conference of Society of Cytologist and geeticists and Bio entrepreneurship Summit held during 6 <sup>th</sup> -8 <sup>th</sup> March 2019 at Bapuji Institute of Engineering and Technology, Davangere College
2	2019	<b>Oral Presentation on “Rapid Biosynthesis of Copper nanoparticle and their effect on growth of <i>Lycopersicon esculentum</i>”</b> at National conference on “Smart Synergy”- Emerging trends in application of Smart materials held during 14 <sup>th</sup> February 2019 at Maharani Lakshmi Ammanni College for Women.
3	2019	<b>Oral Presentation on “Effect of Nano Cuprous Oxide particle on Seed germination of Tomatoes (<i>Lycopersicon esculentum</i>)”</b> at National conference on Biochemistry- Transcending and Intergrating Life Sciences (NCBTIL) held during 17-18 <sup>th</sup> Jan 2019 at

		Kristu Jayanti College, Bengaluru
4	2017	Presented a poster on , “ <b>A collaborative approach of waste fruit peels and activated carbon developed from the seed shell of <i>Tamarindus Indica</i> for the treatment of heavy metals in the waste water</b> ” in Environment, Health and policy Nexus held on 27-28 July 2017 at Jagadguru Sri Shivarathreeshwara University, Mysuru
5	2017	Presented a paper on , “ <b>A collaborative approach of waste fruit peels and activated carbon developed from the seed shell of <i>Tamarindus Indica</i> for the treatment of heavy metals in the waste water</b> ” in National conference on Sustainable Engineering and Management held on 26-27 May 2017 at The Oxford college of engineering, Bengaluru.
6	2016	Presented poster on “ <b>Effect of synthesized copper based nanoparticles using <i>Flacourtia montana</i> on antibacterial activity and growth of <i>Lycopersicon esculentum</i></b> ” in International conference on science and technology: Future challenges and solution – 2016” held during 8-9 <sup>th</sup> August 2016 at Vijnana Bhavan, University of Mysuru. Pp 100. 2016. Shobha G, Shasidhara KS, Vishwaprakash Mahadimane P, Ananda S
7	2016	Presented poster on “ <b>Effect of green synthesied nanoparticle on <i>Flacourtia montana</i> on Antioxidant defence related enzymes in <i>Lycopersicon esculentum</i></b> ” International conference on science and technology: Future challenges and solution.Pp 101. 2016. Madhuribhat S, Rakshitha S, Varsha Prakash, Shobha G, Ananda S
8	2013	Participated and presented a paper on “ <b>Phytochemical profile, Antibacterial and Antidiabetic effect of crude aqueous leaf extrct of <i>Datura stramonium</i></b> ” In international conference on convergence of science, engineering and management in education and research – <b>A gobal perspective</b> , held by Centers for Post graduate studies Dayananda Sagar institutions, Bengaluru from 26-27 <sup>th</sup> Sept 2013
9	2013	Participated in the National Seminar Sponsored by Indian Council of Medical Research on Nanomedicine – The concepts and Therapeutic applications on 29 <sup>th</sup> November 2013 by Dayananda Sagar College of Pharmacy.
10	2012	Participated and presented a poster on “ <b>Characterization of newly isolated <i>Bacillus</i> spp and their effect on <i>Fusariumoxysporum</i></b> ” in the 99 <sup>th</sup> Indian Science National Congress at KIIT University,

		Bhubaneswar, Odisha (3 -7/1/2012).
11	2006	Participated and presented a paper on “ <b>Involment of peroxidase enzyme in Bacterial Spot pathogenesis of tomato</b> ”, in <b>National symposium on “Biotechnological Methods for crop &amp; diseases management”</b> organized by Department of Plant Pathology, Faculty of Agriculture, Annamalai University, Tamilnad during 3-4 <sup>th</sup> March 2006

## FACULTY DEVELOPMENT PROGRAMME PARTICIPATED

- Participated in one-week faculty development program on “**Bimolecular Separation techniques**”, conducted at Department of Biotechnology, BMS college of Engineering from 27<sup>th</sup> Feb – 3<sup>rd</sup> March, 2017
- Participated in one day “**Faculty development program**” conducted in Sapthagiri college on 22<sup>nd</sup> of Jan 2015
- Participated in the FDP on “**DNA finger printing technology, Molecular Markers and bioinformatics**” organized by Department of Biological Sciences, Dayananda Sagar institutions, Bengaluru and Karnataka Science and Technology Academy, Department of Science and technology, Government of Karnataka on 28<sup>th</sup> Feb – 1<sup>st</sup> March 2014
- Participated in the FDP on “**Pesticide residue analysis and HPLC**” organized by Department of Biotechnology, PES institute of technology, Bengaluru sponsored by TEQIP from 14<sup>th</sup> Feb – 16<sup>th</sup> March 2013

## WORKSHOP ATTENDED

1. Participated in one day workshop on “**Wine processing and Wine Tasting**” on 2016, conducted at Heritage Grape Winery, Madhur.
2. Participated in the three-day Workshop on “**Research Methodologies and Latex**” organized by VTU e- learning center, Mysuru from 29<sup>th</sup> to 31<sup>st</sup> December 2014 at Vidya Vikas Institute of Engineering and Technology, Mysuru
3. Participated in “**Advanced Mission 10X**” conducted in Sapthagiri college of engineering from 30<sup>th</sup> Jan to 3<sup>rd</sup> Feb 2012
4. Participated in the “**Skill development programme**” organized by Jain university at Center for

research in social sciences and education held on 23-24<sup>th</sup> September 2011

## AWARDS/RECOGNITION/ACHIEVEMENT/OTHERS

- **Best project award** for “Bioplastic Extraction from Waste Grease Produced in Industries Using as Glycerol as a Substrate” from Karnataka State council for Science and Technology in the year 2019
- **Best Oral Presentation** on “Rapid Biosynthesis of Copper nanoparticle and their effect on growth of *Lycopersicon esculentum*” at National conference on “Smart Synergy”- Emerging trends in application of Smart materials held during 14<sup>th</sup> February 2019 at Maharani Lakshmi Ammanni College for Women.
- **Ph.D in Applied Science (Biotechnology)- “Rapid biosynthesis of copper nanoparticle and its effects on agronomical traits of *Lycopersicon esculentum*” Under VTU awarded in 2020**

### Projects Sanctioned

Sl.No	Project No	Project	Amount
1	KSCST -BF 2020	43S-BE-0378 Development of Bioplastic by cross linking of Agar and glycerol derived from Biodiesel	5,500
2	VGST-RGSF 2019-2020	Development of Ecofriendly Biopolymer by cross linking of Agar and Glycerol derived from Biodiesel for domestic purpose	3 Lakh
3	KSCST -BF 2019	42S_B_BE_003 Bioplastic Extraction from Waste Grease Produced In Industries Using As Glycerol As A Substrate	5,000
4	KSCST -BF 2018	41S_B_BE_076 - Design and Lab scale ultrasound batch reactor for the production of biodiesel from the slaughter waste	8,500
5	KSCST - BF 2016	39S_B_BE_050 - Simarouba Oil cake: The solid low value substrate to produce lipase with potential application in Biodiesel extraction and to assay the toxicity of phytochemical in inhibition of lipase activity	13,000
6	KSCST - BF 2015	38S_B_BE_038 - The potential utilization of processed areca catechu water an agrowaste for bioethanol production by fermentation process, from	7,000
7	KSCST-BF 2014	37S_B_BE_022 – Biological conversion of poultry waste to biodiesel using bacteria isolated lipase for trans esterification	9,500