

FACULTY PROFILE

Dr. Seema J Patel

Associate Professor

Department of studies in Biotechnology

Qualification : M.Sc.,Ph.D.

Areas of Specialization : Microbiology

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Vision

I would like to assist students develop their skills and abilities in reaching their potential in the field of Biotechnology. I wish to contribute my skills in academics and be a part of research activities in my field for the benefit of society.

Educational Qualifications

Sl. No.	Degree	Specialization/ Subjects	University	Year of Award/ Passing
1	PhD.,	Industrial Microbiology	Kuvempu University Under the guidance of Dr. R Onkarappa	2009
2	NET	Lifesciences	UGC CSIR	2000
3	SLET	Lifesciences	Lectureship eligibility	2000
4	PG	Microbiology	Kuvempu university	1999
5	UG	Botany, Biochemistry, Microbiology	Kuvempu university	1997

Professional Details (Academic/Research Experience)

Sl. No.	Designation	Institution/University	UG/PG	From	To
1	Associate Professor	Davangere University	PG	2019	TILL DATE
2	Professor	GMIT, Davangere	UG & PG	2015	2017
3	Assistant Professor	GMIT, Davangere	UG & PG	2009	2015
4	Senior Lecturer	GMIT, Davangere	UG	2008	2009

DAVANGERE UNIVERSITY

5	Lecturer	GMIT, Davangere	UG	2004	2008
6	Guest Lecturer	Sahyadri Science college, Shivamogga	UG	1999	2004

Areas of Research Interest:

1.	Industrial Microbiology
2.	Biofuels
3.	Probiotics

Academic/Administrative responsibilities:

1.	BOE member in Microbiology at Kuvempu University in 2008-09
2.	BOE member in Microbiology at Sahyadri Science College (Autonomous) in 2010-11
3.	BOE member in Biotechnology at Visvesvaraya Technological University in 2011-12, 2014-15
4.	Worked as Head of the department of biotechnology at GMIT from 2010 to 2011
5.	Worked as NAAC, NBA Co-ordinator for department of Biotechnology at GMIT
6.	PG coordinator for Department of Biotechnology at GMIT 2012-17.
7.	Chairman of DOS in Biotechnology, Davangere University (July2019-January2020)
8.	BOE Chairman - DOS in Biotechnology, Davangere University 2019-20
9.	Member Secretary for Internal complaints Committee, Davangere University 2020-21

Research Projects:

Sl. No.	Title of the Project	Funding Agency	Project Budget	Period	Status
1.	“Design and analysis of Microbial Fuel Cell (MFC) for sustainability” Co-investigator	Life Science Research Board of DRDO, Govt. Of India, New Delhi	12,39,000/-	03 years	Completed

Research Publications:	
a) International Journals	
1.	Fungal pretreatment studies on rice husk and bagasse, Seema J Patel*, R Onkarappa and Shobha K S, EJEAFChe, 6(4), 2007, 1921-1926.
2.	Screening For Antimicrobial Activity Of Weeds, Seema J. Patel*, Nithin Venugopalan, S. Pradeep, The Internet Journal of Microbiology, 4(1), 2007.
3.	Study Of Ethanol Production From Fungal Pretreated Wheat And Rice Straw, Seema J. Patel*, R. Onkarappa, K. S. Shobha, The Internet Journal of Microbiology. 4(1). 2007
4.	Comparative Study of Ethanol Production from Microbial Pretreated Agricultural Residues Seema J. Patel*, R. Onkarappa, K. S. Shobha., J. Appl. Sci. Environ. Manage., 11(4), 2007 137 - 141.
5.	Pretreatment studies on wheat straw and rice straw. Seema J. Patel*, R. Onkarappa & S. Gurusurthy, The Internet Journal of Microbiology, 7(1), 2009.
6.	Production and Isolation of Laccases from Cellulytic Fungi, Seema J. Patel*, Onkarappa R., Gurusurthy S.B. and Shobha K.S, Developmental Microbiology and Molecular Biology., 2(2), 2011, 93-99
7.	Ethanol production from lignocellulose hydrolyzates by different yeasts, Seema J. Patel*, Onkarappa R. and Gurusurthy S.B.. Asian. J. of Exp. Bio. Sci., 3(2), 2012, 350-354.
8.	Pharmacophore elucidation and docking studies on anti-inflammatory compounds of medicinal plants for ulcerative colitis, Hamsa N S*, Vandana P Nair, Vivek Chandramohan, Dr. Seema J Patel, Asian J Pharm Clin Res, , 6, Suppl 3, 2013, 56-61
9.	In-Silico Docking studies for the Comparative Analysis of Natural and Synthetic Compounds against <i>Leptospira Interrogans</i> , Vandana P Nair*, Hamsa N S, Vivek Chandramohan, Dr. Seema J Patel, Int. J. Drug Dev. & Res., 5(3), 2013, 361-370
10.	Enhanced production of xylanase from local fungal isolates and effectiveness in pulp treatment, Varsha D Savanth*, Seema J Patel, International Journal of Innovative Research in Science, Engineering and Technology, 2(12), 2013, 7670-7676
11.	Production and characterization of xylanase from local fungal isolates by submerged fermentation, Varsha D Savanth*, Seema J Patel, Asian Jr. of Microbiol. Biotech. Env. Sc. 16,(1) 2014,: 75-80
12.	Antagonistic potential of actinomycetes of Sharavathi estuary of Karnataka, India,Shobha KS*, Seema J Patel, Onkarappa R, Journal of biological and scientific

	opinion, 2(1), 2014,10-14
13.	Comparative Study of Invitro Antioxidant and Antiacne Activity of Wine and Fruit Juices, Seema J Patel*, Jyothi, Sowmya S R, Apoorva, Amrin banu, International Journal of Innovative Research in Science, Engineering and Technology. 2015, 4 (2), 492-496.
14.	Effect of Different Substrates and Effluent on Vermicomposting by Surface Feeder Species, Shobith G M, Pallavi Rajpurohit, Seema J Patel*, International Journal of Science and Research, 4(2), 2015, 951-953.
15.	Invitro Evaluation of Botanicals and Biocontrol Agents against Pomegranate Bacterial Blight Pathogen, Seema J Patel*, Shalini D B, Sripriya PA, Priyanka S, Sowmya BM, , International Journal of Innovative Research in Science, Engineering and Technology, 2015, 4 (3), 1210-1215.
16.	Phytoremediation of Copper and Lead by Using Sunflower, Indian Mustard and Water Hyacinth Plants, Seema J Patel*, Promith Bhattacharya, Suman Banu, Lakshmi Bai, Namratha, International Journal of Science and Research, 4 (3), 2015, 113-115.
17.	Production, Purification and Characterization of Bacteriocins from Lactic Acid Bacteria, Seema J Patel*, Maithri M, Dharani Prasad, Praneetha VA and Yashaswini, Int. J. Pure App. Biosci. 3 (1), 2015, 236-240.
18.	Review on fungal xylanases and their applications, Seema J Patel*, Varsha D Savanth, International journal of advanced research, 3 (3), 2015, 311-315.
19.	Pharmacogenomic analysis of single-nucleotide polymorphisms of Angiotensin-I converting enzyme gene in stroke, Maheshwari L Patil*, Seema J Patel, Asian Journal of pharmaceutical and clinical research, 8(2), 2015, 308-310.
20.	A comprehensive review on probiotics, Seema J Patel*, Int. J. Pure App. Biosci. 3 (2), 2015, 286-290.
21.	Review on Biosorption of Dyes by Fungi, Seema J Patel*, International Journal of Innovative Research in Science, Engineering and Technology, 5(1), 2016, 1115-1118.
22.	Gene expression profile of ovarian cancer dataset that helps to predict potential biomarkers, Divya, V*, Anitha P. Muttagi, Seema J Patel, Gurumurthy, H. and Prashantha Nagaraja, International Journal of Current Research in Life Sciences, 4 (8), 2015, 321-327.
23.	Whole transcriptome cerebral cortex gene analysis in Alzheimer's diseases, S Pooja*, Anitha P. Muttagi, Seema J Patel, Gurumurthy, H. and Prashantha Nagaraja, Computational Molecular Biology, 6(2), 2016, 1-9
24.	Transcriptome analysis of mRNA expression profiling to predict potential Biomarkers

	induced in breast cancer-brca1, Reshma Jacob J*, Seema J Patel, Prashantha CN, Asian Journal of pharmaceutical and clinical research, 9 (6), 2016, 270-273.
25.	Analysis of gene expressions in both melanoma and melanocyte cell Lines by chip-seq technology, Bilwashri H * and Seema J Patel, International Journal of Recent Scientific Research, 7 (11), 2016, 14181-14188,
26.	Evaluation of Anti-Acne and Anti-Dandruff Activity of Seed Protein Extracts, Seema J Patel*, Komal B Harihar, Sagar Hugar and Vanditha M G, International Journal of Pharmacognosy and Phytochemical Research 2017; 9(5); 654-656.
27.	Comparative Study on Probiotic Bacterial Isolates and Formulation into Product, Seema J Patel, Prabhurajeshwar, Kavya TU, Kirankumar SP, Meghana D Hegde, Rakesh Kumar S, International Journal of Biotechnology Research and Development (IJBTRD), Volume 2, Issue 1, January-June 2020, pp. 53-61
b) National Journals	
1.	Biosorption of congo red a textile dye by fungi , R Onkarappa*, Seema J Patel and Shobha K S , Journal of ecotoxicology and environmental monitoring, 16(6), 2006, 515-519.
2.	Comparative efficacy of fungicides and biocontrol agents against fungal rots in vanilla-invitro, R Onkarappa*, Shobha K S and Seema J Patel, Karnataka Journal of Agricultural Sciences, 19(1),2006, 170-173.
3.	Bioleaching of congo red a textile dye by some common fungi, R Onkarappa*, Seema J Patel and Shobha K S, Karnataka Journal of Agricultural Sciences, 19(1), 2006, 174-176.
4.	Erudition Of Genetic Diversity Of Finger Millet In Haveri District, Seema J Patel*, B Basavarju, Manjunath, Puneeth, Chetan and Umesh, Research & Reviews in BioSciences, 1(3), 2007, 119-122.
5.	Cellulase production from <i>Trichoderma reesei</i> and <i>Aspergillus niger</i> on different lignocellulosic wastes, Seema J Patel*, R Onkarappa, B Basavaraju, Pramod, Pradeep, Mohan and Santhosh, Biotechnology, an Indian Journal, 1(3), 2007, 126-129.
6.	Screening of actinomycetes for antifungal metabolites production from Kodachadri Soils. K.S.Shobha* and Seema J. Patel, Biotechnology, an Indian Journal, 3(2), 2009.
7.	A patent titled “ CYSTEINE-FUNCTIONALIZED GOLD NANOSTRUCUTURES AS CHEMICAL SENSORS”. Patent No. 202141036928 A, No. ofpages: 11) ISSUE No. 34/2021 dt. 20-08-2021, Government of India, Patent Office, Intellectual Property Building, Chennai-600032, India

c) National Conference	
1.	Partial Purification and Characterization Of Industrially Important Xylanase From <i>Aspergillus niger</i> Isolates On Corncob at Delta 15.0 national level techfest, GMIT, 2015 and won first prize
2.	Antimicrobial activity of weeds against bacterial pathogens at AMI conference, UAS, Dharwad, 2003 (Poster presentation)
3.	Antimicrobial activity of medicinally important plants, at AMI conference, UAS, Dharwad, 2003 (Poster presentation)
4.	Srividya D, Anil H Shyam Mohan ,Seema J Patel, Saroja Narsing Rao, poster presentation on “Disruption of Lon gene using linear DNA cassette in E .coli BL21 star DE3”, CSIR sponsored 7th Bioprocessing India conference “ Advances in Bioprocessing of Agri-Food Resources”, CSIR-CFTRI, Mysuru, 14-16,Dec, 2019.
d) International Conference	
1.	Nilambari S Patil, Seema J Patel et.al.,-Poster presentation on “Synthesis, characterization of Silver nanoparticles from Scenedesmus species and its antioxidant and anti-inflammatory activity” at International conference on “Advances in materials, ceramics & Engineering sciences (AMCES-2020) organized on 17-18th January 2020 by Dayanand Sagar Collge of Engineering, Bangalore.

Book Published / Book Chapters Published:	
➤ Title	: Plant and animal tissue culture
Authors	: Dr. Seema J Patel
Publisher:	Lulu Publications, US, 2017
➤ Title	: Clinical Biotechnology
Authors	: Dr. Seema J Patel
Publisher:	Educreation, Delhi, 2017
➤ Title	: Pharmaceutical Biotechnology
Authors	: Dr. Seema J Patel
Publisher:	Sara Publication, Ahmedabad, 2017
➤ Book chapter	- Fungal enzymes for second generation ethanol production in book “Recent advances in Microbial, Agricultural and Environmental Biotechnology”(RAiMAEB-vol:1) ISBN-978-81-940490-6-7, InSc publishing (In Press 2021)

Research Guidance Details (M.Sc., Engg by Research):

Sl.No	Name of the Scholar	University	Registration month & Year	Research Area
1.	Varsha D Savanth	VTU	2010 Awarded in 2013	Biotechnology

Research Guidance Details (Ph.D.):

Sl.No	Name of the Scholar	University	Registration month & Year	Research Area
1.	Srividya D (DST/ KSTePS fellowship awarded)	Davangere University	February 2020	Biotechnology

Conference/ Workshops/Trainings attended/organized:

International/National Conferences:

1. AMI conference (national level) at UAS, Dharwad, 2003
2. Chaired a session in 15th Kannada Vignana Sammelana held on 15-17th September 2019, at Davangere University, Davangere
3. National Conference on “Phytochemicals and microbial bioactive compounds – Role in agriculture and human welfare” (PMBC-2019) on 3rd and 4th October 2019 organized by Department of Microbiology and Biotechnology, Bangalore University, Bangalore

Organized:

4. JAIVIK 2011 (National level Biotechnology technical paper presentation) at GMIT
5. National conference NCERTEM 2016 (at department level)
6. National Webinar series on “Biotechnology for Mankind” conducted by DOS in Biotechnology, Davangere Univeristy from 16th to 30th June 2021

Workshops/Seminars/Symposium Attended:

1. State level seminar on “50 years of DNA” at DVS college of arts and science, Shimoga, 11-12 September 2004
2. QIP (for 5 days) on “Bioinformatics” at IISc, Bangalore, 14-18 Feb 2005
3. Workshop on 8th semester subjects at NMAMIT, Nitte, 13-14 Feb 2006
4. Recent trends in Biotechnology at BIET, Davanagere, 11 November 2006
5. Recent developments in Microbiology at Sahyadri Science College, Shimoga, 19 March 2010
6. National Symposium Biosatum-2012: on advances in biotechnology, biochemical engineering and career opportunities in biotechnology at BIET, Davangere, 11-12 May 2012
7. International symposium on biorisk management at NIAS,IISc, Bangalore, 15 March 2015
8. Faculty development programme at New Horizon College of Engineering, Bangalore, 8-9 Feb 2006
9. Mission10X (Faculty development program 2-6 Feb + 19-20 April advanced workshop) by Wipro at

BIET, Davangere, 2010

10. Two day workshop for Biotechnology faculty on academia and industry integration in Biotechnology at BIET, Davangere, on 7th and 8th February 2014.
11. Feel teacher Workshop organized by CLHRD at GMIT, Davangere, 27-29 July 2015
12. National level workshop on Accreditation process at JSSAET, Bangalore, 25-26 26-27 August 2016
13. Faculty Development Program on 6-13th January 2020, organized by Davangere University, Davangere
14. 10 hours Online Course on “Clinical Applications of Flow Cytometry” 12th May – 17th May, 2020 Conducted by Flowcytometry Solutions and supported by Trust for Education and Training in Cytometry
15. Virtual workshop of “ SARS-Cov2 Diagnosis by Real Time PCR” organized jointly by Immugenix Biosciences (IGB), Chennai and Crescent Innovation and Incubation Council (CIC) Chennai on 30th May 2020.
16. National Level Online Faculty Development Program on “Innovation and Research Opportunities for Faculty in the New Normal” organized by the Research & Development Cell in association with Internal Quality Assurance Cell (IQAC), Women’s Christian College, Chennai, held on 5th June 2020.
17. Two week online workshop on “Comprehensive e-learning to e-training guide for administrative work” May25-June 05, 2020 sponsored by MHRD Pandit Madan Mohan Malaviya National Mission on teachers and teaching.
18. Two weeks Faculty development Programme on “Advanced Concepts for developing MOOCS” July02 to July 17, 2020 sponsored by MHRD Pandit Madan Mohan Malaviya National Mission on teachers and teaching.
19. One week workshop on NAAC revised accreditation framework –resolving practical snags (under UGC PRAMARSH scheme)17th to 24th Aug 2020 conducted by GHG Khalsaa College of Eductation, Ludhiana
20. Three days National convention on ‘NEP 2020’ organized by Davangere University in association with KAAS from 21st to 23rd September 2020.
21. Online FDPon “Genome engineering & Technology” organized by AICTE training and learning (ATAL) academy from 28th September 2020 to 2nd October 2020
22. Workshop on “Academic accreditations” organized by Davangere University on 2nd February 2021
23. Workshop on NAAC criteria organized by Davangere University from 3rd to 10th February 2021
24. One week online training programme on Biostatistics organized by Science Tech Institute, Lucknow from February 21st to 27th , 2021

Achievements/Awards / Abroad visit / Professional Membership	
1.	Zindal Jubilee gold medal For scoring highest marks in M.Sc., Microbiology
2.	Life member for Indian Society for Technical Education (ISTE)(LM43084)
3.	Life member for AFSTI (AFSTI/LM/4-2020/DVG/3511)