

CURRICULUM VIETA

Dr. D.Madhusudan Reddy M.Sc., Ph.D.

Assistant Professor & OSD to Vice Chancellor

Palamuru University, Mahabubnagar, Telangana State

Phone : 9676150158 ; E-mail: dadireddy@gmail.com; coepaluniv@gmail.com

1. EDUCATION PROFILE

- ✓ **DOCTOR OF PHILOSOPHY(Ph.D.) IN MICROBIOLOGY (2002-2006)**
- ✓ **MASTER OF SCIENCE IN MICROBIOLOGY (1995-97) – First Division**
- ✓ **BACHELOR OF SCIENCE (Botany, Zoology and Chemistry) (1992-1995) –First Division.**

2. TEACHING EXPERIENCE

Twenty years of teaching experience at Graduate and Post graduate level in the following Colleges:

- **Working as an Assistant Professor for Department of Microbiology, Palamuru University, Mahabubnagar (July 2009 to till date)**
- **Worked as an Academic consultant for Department of Microbiology, Palamuru University, Mahabubnagar. (September 2008 – June 2009)- Established Department of Microbiology at PG level.**
- **Aurora's Degree and PG College, from June 2007 to October 2007 as Head and Associate Professor in the Department of Microbiology. □**
- **Nizam College, Hyderabad 2001 – to June, 2007 as an Academic consultant (Academic Consultant/Assistant Professor-contract)**

Foreign Teaching Experience

- **Al-Tahady Medical University, Department of Microbiology, Faculty of Medicine, Sirte, Libya. (October 2007 – August 2008)**

Part-Time Teaching Experience

- **Nizam College – Handled practical classes for M.Sc., Zoology (Immunology topics).**

- Nizam College – Handled theory and practical classes for Bsc., Biotechnology I Year and B.Sc., Biophysics I and II year (Biotechnology topics)

3. RESEARCH TRAINING EXPERIENCE

Global Institute of Biotechnology, Hyderabad (2003 – 2006) as a research consultant: Work includes guiding students for their curriculum projects and giving training in Medical microbiology, Industrial and Environmental Microbiology fields.

Guided students summer projects

- Screening and characterization of Alcohol producing bacteria from cellulose waste
- Screening and characterization of Alcohol producing bacteria from banana waste
- Screening of cellulolytic bacteria from fecal samples of birds and animals from Nehru Zoological park, Hyderabad, India
- Production of biopolymer from bacteria
- Production of xylanases from *Bacillus* sp
- Production of proteases from bacteria
- Analysis of antibiotic resistance in bacteria isolated from hospital samples
- Microbial analysis of packaged foods

Trained microbiologists according to BIS standards at Pathi's Foods and Beverages, Bangalore, India

4. TECHNICAL EXPERTISE

Microbiology: All basic techniques, including staining, isolation, characterization and preservation of bacterial strains, conjugation, chemical mutagenesis, replica plating.

Molecular biology: Isolation and purification of chromosomal and plasmid DNA from different gram positive and gram negative bacterial strains, DNA isolation from soils and sediments, restriction digestion, DNA electrophoresis, polymerase chain reaction (PCR).

Analytical techniques: Solvent extraction of metabolites, thin layer chromatography, high performance liquid chromatography, fatty acid methyl ester analysis (FAME) for bacterial identification,

Computer skills: Proficiency in Microsoft Windows and Microsoft Office tools.

5. RESEARCH CREDENTIALS

- Deposition of Novel strain at IMTECH, Chandigarh

The novel bacterial strain *Bacillus cereus* GHMS isolated during Ph.D. work has been deposited in IMTECH culture collection center, India, an international renowned culture collection center, under an accession number, MTCC 8550.

- The 16s rRNA partial gene sequence of novel bacterial strain *Bacillus cereus* GHMS is recognized as novel and available at NCBI website.

6. RESEARCH PUBLICATIONS

International Publications: (10 - out of which 07 as first author) ;

National Publications – 02 (02 as first author);

Books Authored : 05 (02 international and 03 National)

- **Madhusudan Reddy, D., Y.Harish Kumar Reddy, A.Bhaskar Rao and Gopal Reddy.** (2006). Biodegradation of 2-picoline by *Bacillus cereus* strain nov. Indian Journal of Environment Protection ; 26, (7), 629 – 633, ISSN-0253-7141.
- **Madhusudan Reddy, D., Y.Harish Kumar Reddy, P.Nataraj sekhar, P.B.Kavi**
- **kishor and Gopal Reddy (2008).** Homology modelling and 2-picoline binding study of toluene dioxygenase from *Pseudomonas putida*, *International Journal of Integrative Biology*, volume-2, No.3:157 – 165, ISSN-0973-8363.
- **Madhusudan Reddy, D., Y.Harish Kumar Reddy, M.Srijana, C.R..Raghavender and Gopal Reddy (2009).** Role of metabolic inhibitors in identification of intermediate metabolites of 2-picoline biodegradation. Indian Journal of Multidisciplinary Research. *Volume-5, ISSN- 0973-2225.*
- **Madhusudan Reddy, D., Y.Harish Kumar Reddy, M.Srijana, C.R..Raghavender and Gopal Reddy (2009).** Impact of 2-picoline contamination on soil microflora. Indian Journal of Botanical Research. *Volume-5, ISSN- 0973-2233.*
- **Madhusudan Reddy, D., Y.Harish Kumar Reddy, M.Srijana, C.R..Raghavender and Gopal Reddy (2009).** Optimization of Physiological conditions for Biodegradation of 2-picoline by *Bacillus cereus* GMHS. Indian Journal of Multidisciplinary Research. *Volume-5, No.3:157 – 165 , ISSN- 0973-2225.*
- **Madhusudan Reddy, D.,** Debarthy Paul, Y.Harish Kumar Reddy, and Gopal Reddy **(2009).** Characterization and identification of *Bacillus cereus* GMHS; An efficient 2-picoline degrading bacterium. *International Journal of Integrative Biology*, volume-5, No.3:187 – 191, ISSN-0973-8363.
- Harish Kumar Reddy, Y., Srijana M, **Madhusudan Reddy D.** and Gopal Reddy **(2010).** Coculture fermentation of banana agro-waste to ethanol by cellulolytic thermophilic *Clostridium thermocellum* CT2. *African Journal of Biotechnology*, Volume 9 (13): 1926-1934, ISSN 1684-5315.

- Harish Kumar Reddy, Y., Srijana M,N.Harikrishna, **Madhusudan Reddy D. and Gopal Reddy (2010)**. Ethanol tolerant anaerobic cellulolytic ethanologenic bacteria isolated from decomposed paper. Current trends in Biotechnology and Pharmacy , Volume 4 (3): 820-833, ISSN 0973-8916.
- **Madhusudan Reddy, D.** and Gopal Reddy (2011). Biodegradation of Pyridine and its derivatives. Review article – Elsevier Publications.

National Publications: (2)

- **Madhusudan Reddy, D., Shaban R.A.Bagar and Gopal Reddy (2009)**. Survey of leishmaniasis in out patients of Ibn Sina Hospital, Sirte, Libya. Bioinfolet
- **Madhusudan Reddy, D., Neeti Saxena and Gopal Reddy (2009)**. Biodegradation of 2-picoline by Immobilized cells of *Bacillus cereus* GMHS. Bioinfolet [Paiers Rnder Uespspon](#)
- **Madhusudan Reddy,D. and Gopal Reddy (2015)**. Effect of Nutritional and Environmental conditions on Poly- β -hydroxybutyrate (PHB) Production in *Bacillus cereus* GMHS. Iranian Journal of Biotechnology.
- **Madhusudan Reddy,D., P.Narmada, N.V.Naidu and Gopal Reddy (2015)**. Production of Poly β -hydroxybutyrate by *Bacillus cereus*. Indian Journal of Microbiology.

7. BOOKS AUTHORED

No. of Books Authored :05 (02-International and 03-National)

1. Text book chapter on Actinomycetes by Taylor and Francis Publications, United Kingdom. (a group of authors from US, France and India have contributed for this book and I am one among the Indians who have contributed)
2. Review on Biodegradation of Pyridine compounds – Elsevier Publications
3. Microbiology Text Book for Under Graduate II Year – Telugu Academy Publications- Govt.Of AP
4. Science and Technology and Current Science for Competitive examinations – Telugu Academy Publications, Govt. Of AP.
5. Science and Technology for Competitive examinations – Telugu Academy Publications, 2015 Govt. Of Telangana.

8. PAPERS PRESENTED AT SYMPOSIA/ CONFERENCES

- **Madhusudan Reddy. D., Y.Harish Kumar Reddy and Gopal Reddy.**
- Biodegradation of Alpha picoline. National symposium on Biotechnology, Bioresources and Bio-enterprise organized by Department of Zoology, Osmania university and Indian Society for Life Sciences, Hyderabad, November 19th – 21st, 2003.
- **Madhusudan Reddy. D., Y.Harish Kumar Reddy and Gopal Reddy.**
- Biodegradation of 2-picoline: A plasmid borne activity. National Seminar on Bioprocess and production Technologies, (sponsored by CSIR, New Delhi and Andhra Pradesh Academy of Sciences) organized by Center for Biotechnology and Department of Environmental Sciences, Nagarjuna University, Andhra Pradesh, December 21st – 23rd, 2004.
- **Madhusudan Reddy. D., Y.Harish Kumar Reddy and Gopal Reddy. *Bacillus cereus* strain nov., A 2-picoline degrading bacterium. 46th Annual Conference of Association of Microbiologists of India “Macrobiotic 2005”, organized by Department of Microbiology, Osmania University, Hyderabad, Andhra Pradesh, India, December 8th – 10th, 2005.**
- **Madhusudan Reddy. D., Y.Harish Kumar Reddy, P.Natraj Shekar, P.B.Kavikishor and Gopal Reddy.** Role of Dioxygenases in Biotransformation of 2-picoline- a Molecular Modeling study. International symposium on Frontiers in Genetics and Biotechnology -Retrospect and Prospect, organized by Department of Genetics, Osmania University, Hyderabad, Andhra Pradesh, India, January 8th – 10th, 2006.

9.SYMPOSIA / WORKSHOP ATTENDED

- Biotech India International 2003, International Exhibition and Conference on Biotechnology, organized by Biotech Consortium India Limited, HITEX, Hyderabad, September 24th - 27th, 2003.
- Recent Advances in Hepatitis B and C –Diagnosis and Management, organized by Center for Liver Research and diagnostics, Owaisi Hospital and Research centre, Hyderabad, December 20th, 2003.
- **APNLBP (Andhra Pradesh-Newzeland Biotechnology project) sponsored workshop on Plant Biotechnology, Organized by Centre for Plant Molecular Biology, Osmania University, Hyderabad, March 1st – 20th, 2004.**

- Entrepreneurship Awareness camp in Biotechnology, organized by Entrepreneurship Development cell, JNTU, Hyderabad and Agri-Business incubator, ICRISAT, February 1st – 3rd, 2005.
- Bioasia -2005, Organized by Genome valley in association with State Government of Andhra Pradesh, Hyderabad, February 10th – 12th, 2005.
- **ASM-short course on molecular ecology on biodegradation conducted by the University of Florida, U.S.A. and Microbial Type Culture Collection (MTCC), Institute of Microbial Technology, Chandigarh, India, at the Institute of**
- **Microbial Technology, Chandigarh, India 21st March-1st April, 2005. (<http://molecol.ifas.ufl.edu/Workshops/Workshop.htm>)**
- International Symposium on Frontiers in Genetics and Biotechnology – Retrospect and Prospect – Organized by Department of Genetics, Osmania University, Hyderabad, 8th – 10th, January, 2006.
- National Seminar – SV University- Tirupati – 2009- Organized by Dept of Microbiology.
- National Seminar – Telangana University – 2010- Organized by Department of Botany.
- National Seminar – Palamuru university-2012-Organized by Dept of Microbiology.

10. MEMBERSHIP

Life member of Association of Microbiologists of India (AMI) (Membership No: 1896 ; 2005).

11. ADMINISTRATIVE EXPERIENCE

- **Controller of examinations-** Palamuru University has got 143 Higher Educational institutes under its jurisdiction and as the Controller of Examinations and certificates issuing authority, I am discharging duties in framing the curriculum, conducting examinations, releasing the results and issuing the certificates.
- **Member Board of Studies, for UG and PG Departments, Microbiology Palamuru University.**
- **Member of Academic inspection team for various UG, PG and B.Ed. colleges under Palamuru University.**

- Nodal Officer-Ministry of Human Resource and Development, Govt. Of India- Govt. of India has appointed one Officer as Nodal Officer for every University to communicate with the Govt. from the year 2010. I have been appointed as Nodal Officer for Palamuru University and coordinating in sending statistical data of University College and affiliated colleges online in the AISHE (All India Survey on Higher Education) portal.
- RUSA (Rastriya Uchhattar Shiksha Abhiyaan) Institutional Co-ordinator for Palamuru University .
- Regional Co-ordinator ICET – State Govt. conducts prestigious ICET Examination every year to admit candidates for MBA and MCA courses and appoints one regional Co-ordinator for every district. I have been appointed as Regional Co-ordinator for Mahabubnagar District for the past 6 years (2010-2015).
- Camp Officer EdCET- State Govt. conducts web counseling to admit B.Ed aspirants and appoints one Co-ordinator for the help line center for one dist. I have discharged my duties as Co-ordintor for District for the past 6 years (2010-2015).
- Expert member of UGC peer team for inspection of MVS Govt.PG and Degree College for conferring autonomy.
- External CO-ordinator for University of Hyderabad Entrance Examinations-2015.

(Dr. D. Madhusudan Reddy)