

CURRICULUM VITAE

Dr.(Mrs) MEENA VANGALAPATI

Associate Professor

CONTACT INFORMATION:

Associate Professor, Dept.Of.Chemical
Engg, A.U.C.E (A), Andhra University,
Visakhapatnam, Andhra Pradesh.

Phone: (O) 0891-2844884,

Mobile: 09490187300

Email:meenasekhar2002@yahoo.com

Date of Birth: 28/07/1976



Education:

Ph. D Biotechnology

Dissertation: “Studies on production of Itaconic acid through submerged process using *Aspergillus species*”

M.Tech Chemical engineering

B. Tech Chemical Engineering

Employment: Associate Professor AUCE (A)

<i>Professor:</i>	<i>From -</i>	<i>To -</i>
<i>Associate Professor:</i>	<i>From: April'2008</i>	<i>To: Till date</i>
<i>Assistant Professor:</i>	<i>From: July 2001</i>	<i>To: March 2008</i>

Wish To Add Anything to Enhance Your Image

Monograph(s) Published (2)

1. Dr.Meena Vangalapati, 2011, Studies on Itaconic acid Production using *Aspergillus* sps. Statistical approach for Optimization, Immobilization and Biokinetics in LAP LAMBERT Academic Publishing GmbH& Co.KG,Germany with Number: 31294 and ISBN: 978-3-8465-2401-5
2. Sumanjali Avanigadda and Dr. Meena Vangalapati, 2011, Studies on Andrographolide from *Andrographis paniculata* - Extraction, Development and

Journal Publications (24)

1. V.Meena, 2010, "Heat transfer strategies in itaconic acid production by using *Aspergillus terreus* MTCC 479", Biosciences, Biotechnology Research Asia, vol .7(1)., pp. 259-266.
2. Meena.V, Sumanjali.A, Dwaraka.K, KM.Suburathinam, K.R.S.SambasivaRao , 2010, "Production of itaconic acid through submerged fermentation employing different species of *Aspergillus*", Rasayan international journal of chemical sciences,vol.3(1). pp. 100 – 109
3. V. Meena, 2010, "Scale- Up Criteria for Heat Transfer in Itaconic Acid Production" International Journal of Biological Sciences and Engineering, Vol. 1 (1), pp.104 – 110
4. V. Meena, 2010, "New spectrophotometric methods for studies on Optimization, immobilization and kinetic parameters for the production of itaconic acid by *Aspergillus terreus* MTCC 479", International Journal of Chemical Sciences, Vol.8(2), pp.1200- 1214.
5. K. Sobha , K. Surendranath, V. Meena, T. Keerthi Jwala, N. Swetha and K. S. M. Latha,2010, "Emerging trends in nanobiotechnology", Biotechnology and Molecular Biology Reviews Vol. 5 (1), pp. 001-012.
6. Usha Priyanka. D, Kanakaraju. Ch, Sumanjali.A, Dwaraka.K, Meena.V, 2010, "Critical studies on kinetic parameters for the production of protease from SSF by *Bacillus subtilis* NCIM 2724", International Journal of Chemical Sciences, Vol.8 (2), pp.935-942.

2010- 2011

7. V. Meena, K. Sobha, K.R.S. Sambasiva Rao and K .M. Subbarathinam, 2010, "A Comparative Study of Kinetics of Itaconic Acid Production Using Four Species of the Genus *Aspergillus*", International Journal of Genetic Engineering and Biotechnology. Vol. 1(3), pp. 165-175.
8. Sumanjali Avanigadda and Meena Vangalapati, 2010. "Experimental and Modelling Studies of Andrographolide Extraction from *Andrographis Paniculata*" International Journal of Chemical, Environmental and Pharmaceutical Research Vol. 1(1), pp. 32-36.
9. Dwaraka Kothapalli and Meena Vangalapati ., 2010. "Kinetic Studies on Dairy Wastewater Using Immobilized Bed Anaerobic Digester" International Journal of Chemical, Environmental and Pharmaceutical Research Vol. 1(1), pp. 1-5.

10. Seema chaitanya Ch, Srinivasa Rao B, Sharan V, Meena V., 2011. "Critical Review on pharmacognostic and pharmacological aspects of *Centella asiatica*"., International Journal of Chemical Sciences., Vol. 9(2), pp. 784-794.
11. Seema chaitanya Ch, Sharan V, Srinivasa Rao B, Meena V., 2011. "In Vitro Anti-inflammatory Activity of Methanolic Extract of *Centella asiatica* by HRBC Membrane Stabilisation"., Rasayan an International quarterly Research journal of Chemistry., Vol. 4(2), pp. 457-460.
12. Seema chaitanya Ch, Sharan V, Srinivasa Rao B, Meena V., 2011. "In Vitro Anti-oxidant Activity and Estimation of Total Phenolic Content in the Methanolic Extract of *Centella asiatica*"., International Journal of Applied Biotechnology and Biochemistry., Vol. 1(1), pp. 261-267.
13. Meena V, Seema chaitanya Ch, Srinivasa Rao B, Sharan V., 2011. "Statistical Optimisation of Process Parameters for the Production of Itaconic acid by *Aspergillus terreus*"., International Journal of Applied Biotechnology and Biochemistry., Vol. 1(1), pp. 269-275.
14. Sharan V, Srinivasa Rao B, Seema chaitanya Ch, Meena V., 2011. "In Vitro Anti-oxidant Activity and Estimation of Total Phenolic Content in the Methanolic Extract of *Bacopa monniera*"., Rasayan an International quarterly Research journal of Chemistry., Vol. 4(2), pp. 381-386.
15. Seema chaitanya Ch, Sharan V, Srinivasa Rao B, Meena V., 2011. "In Vitro Anti-Arthritic Activity of Methanolic Extract of *Centella asiatica*"., Biosciences, Biotechnology Research Asia., Vol. 8(1), pp 337-340.
16. Sharan V, Srinivasa Rao B, Seema chaitanya Ch, Meena V., 2011. "In Vitro Anti-inflammatory Activity of Methanolic Extract of *Bacopa monniera* by HRBC Membrane Stabilisation"., Biosciences, Biotechnology Research Asia., Vol. 8(1), (In press).
17. Sharan V, Srinivasa Rao B, Seema chaitanya Ch, Meena V., 2011. "In Vitro Anti-Arthritic Activity of Methanolic Extract of *Bacopa monniera*"., International Journal of Chemical, Environmental and Pharmaceutical Research., Vol. 2(2), (In press).
18. Haritha Meruvu, Meena Vangalapati (2011), Protecting Circulation with Enzyme Nutrition, *Biosciences, Biotechnology Research Asia*, Vol. 8(1), pp 205-211.
19. Haritha Meruvu, Meena Vangalapati (2011). Comprehensive overview of cardiokinase sustenance. *Rasayan Journal of chemistry*. 4(2): 408-412
20. Haritha Meruvu, Meena Vangalapati (2011). Nattokinase : A review on fibrinolytic enzyme. *International Journal of Chemical, Environmental and Pharmaceutical Research*. 2(1): 61-66

2011- 2012

21. Srinivasa Rao Bammidi, Sharan Suresh Volluri, Seema Chaitanya Chippada, Sumanjali Avanigadda, Meena Vangalapati, 2011. A Review on Pharmacological Studies of *Bacopa monniera*” Journal of Chemical, Biological and physical sciences, Vol. 1(2) pp 241- 250.
22. Seema chaitanya Ch, Meena V., 2011“Antioxidant, Anti-inflammatory and Anti-Arthritic activities of *Centella asiatica* Extracts”, Journal of Chemical, Biological and physical sciences, Vol. 1(2) pp 251- 265. .
23. Meena Vangalapati, Seema Chaitanya Chippada, Sumanjali Avanigadda, Sobha Kota, Padmavathi Veernala 2011“ Biological treatment of the sewage wastewater by Immobilized Anaerobic Digester under mesophilic conditions”, International Journal Of Bio-Engineering, Sciences And Technology (in press)
24. V. Meena, N. Sree Satya, D.V. Surya Prakash, A. Sumanjali, “Optimisation of Physico – Chemical parameters of Protease production through SSF by *Bacillus subtilis* NCIM 2724”, Bioresearch Bulletin. (in press)

Training Programs/Workshops Attended (3)

1. ISTE Training Program on “Induction Training for teachers Guntur, January 2002”
2. A short term Course on “The chemical Engineering aspects of Bio-technology”, Vadlamudi, November, 2004.
3. “3 Day workshop on ASPEN PLUS AND MODELLING” National level Chemical Engineering & Biotechnology faculty Development Programme, November, 2007

Papers Presented/Participated (54)

1. Studies in fermentation of Glucose using different bio-reactors, Nations Seminar on modern biology, Nagarjuna University, Guntur, October, 2003.
2. Studies on production of Itaconic acid using *Aspergillus* Species, National Seminar on Bioprocesses and production technologies, Acharya Nagarjuna University, Guntur. December 2004.
3. Production of High value chemicals by Bioconversion of organic wastes a study on the status of Itaconic acid production, Chemical Engineering Congress Indians Institute of Chemical Engineers, Baruch, Chemcon 2006
4. Design of the Tubular loop Bioreactor for scale up and scale down of Fermentation processes, Organized by ANU, Guntur, on December, 2006.
5. Studies of critical design parameters of Itaconic acid using *Aspergillus terreus*, Organized by ANU, Guntur, on December 2006.

6. Biodegradable plastics, Bravura'06 2nd National level technical symposium, Audisankara College of Engineering and Technology, Dec 2006.
7. Method of the production of itaconic acid using *Aspergillus terreus* using Solid state fermentation, 2nd National level technical symposium, Audisankara College of Engineering and Technology, Dec 2006
8. Technology for Itaconic acid production from Natural waste, International Conference on “cleaner technologies and waste management, Pondicherry University, Pondicherry, India. January 2007.
9. Biological treatment of Industrial waste water by using up flow anaerobic contact filter, National conference on Mineral biotechnology, RRL, Bhubaneswar, Orissa. January 2007.
10. Decolorisation of Textiles Dyes by *Aspergillus Ochraceus*, All India seminar on catalyzing vision 2020.Challenges of Indian Chemical Engineers 2020 NIT, Rourkela, Orissa, January 2007.
11. Treatment Technologies for Air pollutants – Bio filtration, International Conference on Cleaner Technologies and Environmental management. Pondicherry Engineering College Pondicherry January 2007.
12. Optimizations of process parameters for production of Itaconic acid, National Seminar on pharmacy and Biotechnology prospects and perspectives, Chebrolu Hanumaiah Institute of Pharmaceutical Sciences Guntur December 2007.
13. Microbial Hydrogen Production: Progress and future prospects, Chemical Engineering Congress Indians Institute of Chemical Engineers, Kolkata, Chemcon 2007.
14. Biosorption of *Rhizopusarrhizus* Biomass to accumulate zinc from its aqueous solution, Chemical Engineering Congress Indians Institute of Chemical Engineers, Kolkata, Chemcon 2007.
15. Kinetic studies on the production of protease from SSF by *Bacillus subtilis* NCIM 2724, International Conference on Challenges in Biotechnology and Food Technology, Department of Chemical Engineering, Annamalai University, Tamilnadu Oct 2009.
16. Kinetic studies of immobilised *aspergillus* terms using contengous bed column n reactor, 2nd AP Science Congress, S. V. University, Tirupati, Nov 2009
17. Bio Degradation of Petroleum Hydrocarbons in Seawater at Low Temperatures (0°-5° C) and Bacterial Communities Associated With Degradation, International Symposium on Emerging Trends in Biomediacal & Nanobiotechnology: Relevance to human health, Acharya Nagarjuna University, Guntur, Dec 2009
18. Microbial Fuel cell as a BOD sensor using respiratory inhibitor, International Symposium on Emerging Trends in Biomediacal & Nanobiotechnology: Relevance to human health, Acharya Nagarjuna University, Guntur, Dec 2009

19. Study and Modelling of Biodegradation and Biosorption of Parathion in soil, 23rd annual conference of orissa chemical society & national seminar on recent trends in chemical science and technology, NIT, Rourkela, Orissa, Dec 2009
20. Biodegradation of Reactive Textile Dyes by *Aspergillus ochraceus* (NCIM 1146), Chemical Engineering Congress Indians Institute of Chemical Engineers, Visakhapatnam, Chemcon 2009.
21. Determination of Kinetic parameters for production of protease from SSF by *Bacillus subtilis* NCIM 2724, Chemical Engineering Congress Indians Institute of Chemical Engineers, Visakhapatnam, Chemcon 2009.
22. Comparative study of two types of microbial fuel cell – an alternate method for power generation, Chemical Engineering Congress Indians Institute of Chemical Engineers, Visakhapatnam, Chemcon 2009.
23. Optimisation studies on the adsorption of Methylene Blue by *Psidium guajava*, Chemical Engineering Congress Indians Institute of Chemical Engineers, Visakhapatnam, Chemcon 2009.
24. Phenol degradation using microbial fuel cells, 97th Indian Science Congress, University of Kerala, Kerala, Jan 2010.
25. Modelling of Andrographolide from *Andrographis Paniculata* in a Soxhlet Extractor, Biomical 2010, GITAM University. March 2010.
26. Biosorption of Xenobiotics by *Talaromyces helices*, NCCPPE-2010 School of Chemical Engineering Vignan University, March 2010
27. Spectrophotometric assay of andrographolides in *Andrographis paniculata*, ALISCI-2010, Annamalai University, Annamalai Nagar, March 2010
28. Assay of andrographolides in *Andrographis paniculata* using spectrophotometric method, Annamalai University, Annamalai Nagar, March 2010
29. Assay of andrographolides in *Andrographis paniculata* using spectrophotometric method RRTSONPC II, SV University, Tirupati, March 2010
30. Experimental and Modelling Studies of Andrographolide Extraction from *Andrographis Paniculata*, International Conference on Biological Sciences & Engineering, ICBE 2010, August, 2010.
31. *Centella asiatica*: A Plant With Immense Medicinal Potential, Organised by A.P Science Congress held at JNTU Hyderabad, November 2010.
32. Comparison of Various Extraction Methods Triterpenoid Saponins from *Bacopa monnieri*, Organised by A.P Science Congress held at JNTU Hyderabad, November 2010.
33. Kinetic studies on dairy waste water using immobilised fixed bed anaerobic digester, Organised by 63rd Indian Chemical Engineering Congress Chemcon, Annamalai university, Chidambaram in December 2010.

34. Biosorption of Heavy Metals from Aqueous Solutions by using *Azadirachta indica*, Organised by 63rd Indian Chemical Engineering Congress Chemcon, Annamalai university, Chidambaram in December 2010.
35. Comparison of Various Extraction Methods Triterpenoid Saponins from *Bacopa monnieri*, Organised by RIPPLES 2010, Andhra University, Visakhapatnam in December 2010.
36. *Centella asiatica* (L.) : A Multipurpose Medicinal Plant, Organised by RIPPLES 2010, Andhra University, Visakhapatnam in December 2010
37. Typical Anti Cancer Studies of Andrographolide from *Andrographis Paniculata* Leaves, Organised by 98th Indian Science Congress held at SRM University Chennai in January 2011.
38. Novel Nitrifying Microbial Fuel Cell for Waste Water Treatment - An Alternate Source for Power Generation, Organised by 98th Indian Science Congress held at SRM University Chennai in January 2011.
39. Studies on Treatment of Dairy Waste Water under Mesophilic Conditions, Organised by 98th Indian Science Congress held at SRM University Chennai in January 2011.
40. Typical Studies on Pharmacological activities of medicinal herb : *Bacopa monnieri* National Conference on New Frontiers in Industrial Biotechnology held at BEC, Bapatla in July, 2011
41. In-vitro Antioxidant and Anti-inflammatory activities in the Methanolic Extract of *Centella asiatica*, International Conference on Biotechnology in Pharma and Food Industries. July, 2011.
42. Assessing the Cytotoxic potential of Few Drugs using MTT Assay against Carcinoma of Scalp, International Conference on Biotechnology in Pharma and Food Industries. July, 2011.
43. Screening of In-Vitro Anti Inflammatory and Anti Arthritic activities of medicinal herb: *Bacopa monnieri*, International Conference on Biotechnology in Pharma and Food Industries. July, 2011.
44. Estimation of Total Phenolic Content in Methanolic Extract, In-vitro Antioxidant activity of *Bacopa monnieri*, Organised by A.P Science Congress held at Gitam University, November 2011.
45. In-Vitro Anti-Arthritic Activity of Methanolic Extract of *Centella asiatica*, Organised by A.P Science Congress held at Gitam University, November 2011.
46. Anaerobic Treatment of the Sewage Wastewater By Immobilized Anaerobic Digester Under Mesophilic Conditions, Organised by 64th Indian Chemical Engineering Congress Chemcon 2011, MSRamaiah Institute of Technology in December 2011. (Accepted)
47. Estimation of Total Phenolic Content In the Methanolic Extract of *Centella Asiatica* - In-Vitro Antioxidant Activity, Organised by 64th Indian Chemical Engineering

- Congress Chemcon 2011, MSRamaiah Institute of Technology in December 2011. (Accepted)
48. HRBC Membrane Stabilisation of Methanolic Extract of *Bacopa Monniera* - in Vitro Anti Inflammatory Activitiy, Organised by 64th Indian Chemical Engineering Congress Chemcon 2011, MSRamaiah Institute of Technology in December 2011. (Accepted)
 49. In-Vitro Anti-Arthritic Activity of Methanolic Extract of *Bacopa Monniera*, Organised by 64th Indian Chemical Engineering Congress Chemcon 2011, MSRamaiah Institute of Technology in December 2011. (Accepted)
 50. Evaluation of Kinetic Parameters for Production of ITACONIC ACID Using *Aspergillus Sps.*, Organised by 64th Indian Chemical Engineering Congress Chemcon 2011, MSRamaiah Institute of Technology in December 2011. (Accepted).
 51. Typical pharmacological studies of *Centella asiatica* Extracts, organized by NIT, Warangal in December 2011 (Accepted).
 52. Optimization, Immobilization and Kinetic Parameters For The Production Of Itaconic Acid By *Aspergillus Terreus* Mtcc 479, Organised by 99th Indian Science Congress held at KIIT University, Bhubaneswar in January 2012. (Accepted).
 53. In Vitro Anti inflammatory Activity of Methanolic Extract of *Centella asiatica* by HRBC Membrane Stabilisation, Organised by 99th Indian Science Congress held at KIIT University, Bhubaneswar in January 2012. (Accepted).
 54. In-Vitro Anti-Arthritic Activity of Methanolic Extract of *Bacopa monniera*, Organised by 99th Indian Science Congress held at KIIT University, Bhubaneswar in January 2012. (Accepted).

Papers Published In Conference Preceedings (5)

1. “Biological treatment of Industrial waste water by using up flow anaerobic Contact filter” National conference on Mineral biotechnology, RRL, Bhubaneswar, Orissa, January 2007.
2. “Decolorisation of Textiles Dyes by *Aspergillus Ochraceus*”, All India seminar on catalyzing vision 2020.Challenges of Indian Chemical Engineers 2020 NIT, Rourkela, Orissa, January 2007.
3. “Treatment Technologies for Air pollutants – Bio filtration” International Conference on Cleaner Technologies and Environmental management. Pondicherry Engineering College Pondicherry, January 2007.
4. “Biodegradation of Azodyes by *pleurotus* species” International Conference on Cleaner Technologies and Environmental management. Pondicherry Engineering College Pondicherry, January 2007.
5. “Technology for itaconic acid production from natural wastes” International Conference on Cleaner Technologies and Environmental management. Pondicherry Engineering College Pondicherry, January 2007.

Detailed Research Area:

“Studies on production of Itaconic acid through submerged process using *Aspergillus species*”

Itaconic acid is commercially produced by the cultivation of *Aspergillus terreus* with different carbon sources. Molasses is one of the best carbon sources among various carbohydrates, because it is pure, inexpensive and available in a mass supply. The reaction was carried out at various molasses concentrations, temperatures, incubation time intervals, agitation speed and pH. The present study reveals that the maximum itaconic acid was produced at 35 °C, molasses concentration of 10%, agitation speed of 200 rpm, at 3.5 pH and incubation time of 120 hrs with a yield of 0.4976 g/Lt, specific growth rate of 0.04199 hr⁻¹ and minimum doubling time of 14.84 hrs. And also the maximum itaconic acid concentration was obtained for 0.5 cm cube and doubled the concentration after 14 days with immobilized mycelium than free mycelium.

Ph.D guidance

Awarded: Nil Registered: **02**

PhD works under progress

1. Sumanjali AvaniGadda “Invitro, Insilico Pharmacognostic Studies on divergent Herbal Medicinal Plants”
2. Sumalatha Mallipudi “Decolourisation of Azodyes and Anthraquinone dyes from Textile effluent by using Natural adsorbents”

M.Tech Desertations

Awarded: **04** Registered: **03**

M. Tech guided

1. Usha Priyanka Dantuluri, Studies on the production of Protease from solid state fermentation by *Bacillus subtilis*.
2. Sumanjali AvaniGadda, Studies on Extraction of Andrographolide, Development and characterization of AR K562 cell lines from *Andrographis paniculata* nees.

3. Seema Chaitanya Chippada, Invitro Pharmacological studies on multipurpose medicinal herb Centella asiatica
4. Srinivasa Rao Bammidi, Ethnopharmacological studies of Bacopa monniera

Memberships associated:

- Member of IICHE
- Member of the association of biotechnology and pharmacy
- Member of editorial board in journal of chemical, biological and physical sciences (JCBPS).

Courses Taught

- **Post graduate level:** Advanced downstream processing, Industrial biotechnology, Bioreactor design, Biochemical engineering.
- **Undergraduate level:** chemical process and equipment design, biochemical engineering, chemical engineering thermodynamics, chemical reaction engineering, environmental engineering, inorganic chemical technology, organic chemical technology, petroleum refinery engineering.

Services (Professional service):

Reviewer for the journals

- African journal of microbiology research
 - International research journal of agricultural science and soil science
 - Journal of chemical, biological and physical sciences (JCBPS).
-