

CURRICULUM VITAE

JAYA PHILIP

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Educational qualification:

GATE, NET qualified, Gold medal awarded (B.Sc (Hons) Microbiology)

Pursuing PhD

Topic: Polyphasic and Molecular Characterization of cellulolytic bacteria isolated from Agricultural wastes and optimization of the Physio-chemical Parameters for cellulase production.

M.Sc Microbiology (2012) from SHIATS, Allahabad – CGPA-10.0

B.Sc (Hons) Microbiology (2009) from SHIATS, Allahabad – CGPA- 10.0

Experience of Teaching: 6.5 years

Administrative experience:

- Coordinator of the Department of Industrial Microbiology since August 2016
- Chairperson of the Board of Studies (BoS), Department of Microbiology, Patna Women's College
- Member of the committee, Star College Scheme of DBT, Patna Women's College.
- Worked as the organising secretary of the national seminar organised by the departments of Botany & IMB, Patna Women's College, 2018.

Technical Skills:

- Diploma in Computer Application
- Training in Latex (Spoken tutorial project conducted remotely from IIT Mumbai, funded by MHRD)

Languages known: Proficient in Hindi and English

Awards:

- Awarded **100% Attendance** award in ISC
- Awarded **Gold medal in B.Sc Hons Microbiology**

- Awarded **best poster at National conference** on Antimicrobial resistance at SHIATS, Allahabad
- Awarded **Active member of the Society of Microbiologists**, SHIATS, Allahabad
- Awarded **certificate of appreciation in International workshop** on Women in Stem Roadshow organised by the US, Department of State, Patna region.

Membership: Indian Science Congress Association

Dissertation / training/course undertaken:

- UGC sponsored short term course (one week) in Disaster Management from HRDC, JNU, New Delhi
- Training on Atomic Absorbtion Spectrophotometer at Mahavir Cancer Institute and Research Centre.
- One month Summer training in Clinical Biochemistry at Motilal Nehru Medical College, Allahabad
- One month summer training at Quality Control Section at Lucknow Producer's Cooperative milk union LTD.
- One month summer training on Role of Microbes in Agriculture in the Department of Plant Protection, SHIATS, Allahabad.
- Six months Dissertation on "Antimicrobial Activity of Neem against selected bacterial pathogens", from AAIDU, Allahabad.
- Six months Dissertation on Prevalence and antimicrobial resistance of *Campylobacter Spp.* isolated from raw chicken meat from Allahabad Region" from SHIATS Allahabad.

Research project supervised under the Basic Scientific Research Scheme of UGC - 06

- Isolation, Biochemical Characterization and Antimicrobial Susceptibility Pattern of bacterial isolates from Heritage site in 2013
- Biodegradation of Kitchen waste and detection of the degradation potential of cellulose degrading bacteria in 2014
- The role of cellulose degrading microorganisms in organic and inorganic waste degradation used singly and in consortium in 2015
- Extraction of tomato carotenoids mediated by crude bacterial cellulase in 2016
- Isolation, screening and characterization of cellulase producing bacterial isolates from garbage dumping sites in 2017
- Biofertilizer production from nitrogen fixing bacteria isolated from root nodules of leguminous plants in 2018

Research project supervised under the CPE Scheme of UGC – 06

- Utilization of fruit wastes for the production of single cell Protein from Yeast in 2013
- Efficiency of bacterial isolates to degrade textile dyes in 2014
- Isolation and screening of cellulolytic bacteria from agro wastes and its effect in bio washing of Denims in 2015.

- Bioethanol production by optimizing cellulase production from bacteria in 2016
- Prevalence of multidrug resistant *Pseudomonas* Species in water sample of Patna region.in 2017
- Antimicrobial effect of essential oils alone and in combination with antibiotics against *E. coli* and *S. aureus*

Research project supervised under the Star college scheme of DBT– 01

- Isolation, identification and characterization of *E. coli* from Ganga water.

Publications:

In house journals:

- Production of bio surfactants by two different isolates of *Bacillus* sp. 2013, IRIS Journal for Young Scientists, Vol III ISSN 2278-618X (PRINT) and ISSN 2278-6384(Online): Pg. 33-37.
- Isolation, biochemical characterization and antibiotic Susceptibility Pattern of bacterial Isolates from Heritage site. 2014. IRIS Journal for Young Scientists, Vol III ISSN 2278-618X (PRINT) and ISSN 2278-6384(Online): Pg. 45-50.
- Utilization of Fruit wastes for the production of single cell protein from yeast. 2014, Explore- journal of Research for UG and PG students. Vol VI. ISSN 2278 – 0297 (PRINT) and ISSN 2278-6414(Online). pg. 33-37
- Biodegradation of Kitchen waste and detection of the degradation potential of cellulose degrading bacteria in 2015 IRIS Journal for Young Scientists, Vol V. ISSN 2278-618X (PRINT) and ISSN 2278-6384(Online): Pg.32 -37.
- Efficiency of bacterial isolates to degrade textile dyes in 2015. Explore - journal of Research for UG and PG students. Vol VII. ISSN 2278 – 0297 (PRINT) and ISSN 2278-6414(Online). pg. 32-36
- The role of cellulose degrading microorganisms in organic and inorganic waste degradation used singly and in consortium in 2016 IRIS Journal for Young Scientists, Vol VI ISSN 2278-618X (PRINT) and ISSN 2278-6384(Online): Pg.39 -45.
- Isolation and screening of cellulolytic bacteria from agro wastes and its effect in bio washing of Denims.2016. Explore - journal of Research for UG and PG students. Vol VIII. ISSN 2278 – 0297 (PRINT) and ISSN 2278-6414(Online). pg. 23-29

- Extraction of tomato carotenoids mediated by crude bacterial cellulase. 2017. IRIS Journal for Young Scientists, Vol VII ISSN 2278-618X (PRINT) and ISSN 2278-6384(Online): Pg.31 -36.
- Utilization of Fruit wastes for the production of single cell protein from yeast. 2017, Explore- journal of Research for UG and PG students. Vol IX. ISSN 2278 – 0297 (PRINT) and ISSN 2278-6414(Online). Pg. 42-49

International Journal:

- Occurrence of Cellulose Degraders in Fruit and Vegetable Decaying Wastes. 2016. J Bioremediat Biodegrad 7: 373. doi: 10.4172/2155-6199.
- Molecular Characterization of cellulase producing *Microbacterium barkeri* Isolated from Agricultural Waste. 2017 Int. J. Adv. Res. 5(8), ISSN: 2320-5407. Pg. 1344-1349
- 16S rRNA characterization of cellulase producing *Bacillus cereus* prevalent in decaying agro waste. 2018 Int. J. Adv. Res. ISSN: 2320-5407. 6(9), 473-478

Oral/paper presentation: last 5 years

- On “Characterisation of Cellulase Producing Bacteria” in the national seminar organised by the Indian Science Congress Association Patna Chapter on 16th, 17th and 18th December 2016 on the theme Science and Technology for national development.
- On “Occurrence of cellulase producing microorganism in soil contaminated with pollutants” in the national seminar organised by the Department of Chemistry, Patna Women’s College on 9th and 10th December 2016 on the theme Science and Technology for national development.
- On prevalence of Antimicrobial Resistant *Campylobacter* spp. in raw chicken meat in the national seminar organised by the ISCA, Patna Chapter on 8th February 2016.
- On “Application of cellulose degraders in Agrowaste” in the national seminar organised by the Indian Science Congress Association at Ganga Devi Mahila Mahavidyalaya on 6th, March 2016.
- On “Isolation and characterisation of cellulolytic bacteria” in the national seminar organised by department of Zoology, PU in collaboration with CEED on 21st and 22nd of march 2018 on the theme Environmental Challenges: Monitoring, Assessment and remediation.
- On “Application of cellulase” in the national seminar by the Indian Science Congress Association Patna Chapter on 10th december 2016 on the theme Future India: Science and Technology.

- On “Biodiversity of Cellulose Degrading Bacteria in decaying vegetable peel” at national seminar at ZSI on 23rd, Feb 2016 on the theme Faunal Diversity of Gangetic Plains Ecosystem.

Poster presentation: last 5 years

- On “Removal of arsenic – a potent Carcinogen, from drinking water” at national Symposium on recent Scenario and advancements in Cancer Research organised by S S Hospital and Research Centre, Patna in 2014.
- On Bio fertilizer : A way towards sustainable Agriculture at the national seminar organised by the departments of botany & IMB, Patna Women’s College on the theme “New Horizons of Biological Sciences: Advantages and Challenges” on 27th and 28th of November 2018.
- On Diatoms: a boon to mankind at the national seminar organised by the departments of botany & IMB, Patna Women’s College “New Horizons of Biological Sciences :Advantages and Challenges” on 27th and 28th of November 2018.

Seminar/conference/workshops attended: (Last 5 years)

- MHRD Sponsored workshop on Awareness of National Mission on Education Technology through ICT organised NIT, Patna on 17th and 18th January 2014
- National symposium on recent Scenario and advancements in Cancer Research organised by the SS Hospital and Research Centre, Patna on 22nd and 23rd March 2014.
- International Conference on Science and Technology organised by B Brains Development Society and Magadh Mahila College on 23rd to 25th of December 2014
- National seminar on ICT and Women Empowerment organised by department of Computer Science, Patna Women’s college on 22nd January, 2015
- National seminar on sustainable solutions to water, wastewater and Solid waste organised by A N College, Patna on 8th and 9th May, 2015
- Seminar cum Workshop on Neuro Linguistic Programming at St. Xavier College, Patna on 18 – 20th May 2015.
- National Symposium on Role of Molecular Diagnostics in Cancer treatment on March 12th, 2015 organised by Mahavir Cancer Institute and Research Centre Patna.
- One day National seminar on Science and Technology for Indigenous Development in India organised by the ISCA, Patna Chapter held on 8th February, 2016
- Workshop on “Star College Scheme for the Colleges for the colleges of Bihar and Jharkhand organised by Patna Women’s College under DBT on 25th January, 2018
- National Seminar on “Research Frontiers in 21st century” organised by B N College, Patna University on 29th and 30th May 2018

