

Name: Dr. Teena Pathak

Designation: Assistant Professor

Specialization: Biotechnology & Biosensor

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Education

M.Sc. - Biotechnology (2004): Thapar University, Patiala, India

M.Phil – Biotechnology (2009): Vinayaka Mission University, Tamilnadu

Ph.D. - Biotechnology (2017): M.M. University, Mullana Haryana, India

Title of Ph. D Thesis: Production of L-Asparaginase from *Cannabis sativa* and development of biosensor for monitoring asparagine in leukemic cells under the supervision of **Dr Raman Kumar** & co-supervision of **Dr Kuldeep Kumar**.

Professional Experience:

Assistant Professor (Adhoc): Department of Biotechnology, M.M. Modi College, Patiala, India (2007-2018).

Quality Consultant (2004) under Quality Control Lab **Pepsico India Holdings Private**

Limited (Frito-Lay) Channo; Sangrur (7 Months).

Teaching Interests:

- Genetics
- Immunology
- Tissue culture technology
- Fermentation Technology
- Biochemistry & Biophysics

Research Interest:

Biosensor Technology,

Publications

1. **Kuldeep Kumar**, Jagjeet Kaur, Shefali Walia, Teena Pathak and Diwakar Aggarwal (2014). L-Asparaginase: An Effective Agent in the Treatment of Acute lymphoblastic Leukemia. *Leukemia and Lymphoma*. 55(2): 256-262

<https://doi.org/10.3109/10428194.2013.803224>

2. Kuldeep Kumar, **Teena Pathak** and Diwakar Aggarwal (2013). Asparagine based Plant Biosensor for Leukemia. *The Pharma Innovation Journal* 2 (10): 75-82
<https://doi.org/10.3109/10731199.2012.716062>
3. Kuldeep Kumar, Sandeep Punia, Jagjit Kaur and **Teena Pathak** (2013). Development of plant asparagine biosensor for detection of leukemia. *Journal of Pharmaceutical and Biomedical Sciences* **35(35)**: 1796-1801.
4. **Teena Pathak**, Raman Kumar and Kuldeep Kumar (2014) Isolation of L-asparaginase from *Cannabis sativa* and development of biosensor for detection of asparagine in leukemic serum samples. *Research J. Pharm. and Tech* 7 (8): 850-855.
5. **Teena Pathak** and Jagjeet kaur, Raman Kumar and Kuldeep Kumar (2016). Development of electrochemical biosensor for detection of asparagines in leukemic samples. *International Journal of Pharmaceutical Sciences and Research*. 7 (2): 783-788.

Book Chapters:

- **Teena Pathak**, Mandeep Kataria and Kuldeep Kumar (2014). (2014) Enzyme Based Biosensors and Its Application. In Industrial Enzymes: Trends, Scope and Relevance. Nova Science Publishers Inc. New York, 156-172 (ISBN: 978-1-63321-343-2).
- **Teena Pathak**, Mandeep Kataria and Kuldeep Kumar (2014) Nanobiosensors for Leukemia. Nano-Inspired Biosensors for Improved Healthcare. *CRC Press-USA* .
- Jagjit Kaur, Sandeep Punia, **Teena Pathak**, Mandeep Kataria and Kuldeep Kumar (2016) Role of Biosensors in Environmental Monitoring. IN Modern Approaches to Environmental Biotechnology. Nova Science Publishers Inc. New York.
- Jagjit Kaur, **Teena Pathak**, Apoorva Singh and Kuldeep Kumar (2017) Application of Nanotechnology in the Environment Biotechnology. Springer. 155-165.

M.Sc Dissertations:

20 (Completed, 2011-2019) and 06(On-going)

Conferences / Symposia Presentations:

- 1st National Annual Conference on “Recent Advances in Chemical and Environmental Sciences (RACES-2009)” in the M.M.Modi College, Patiala.

- 2nd National Annual Conference on “Recent Advances in Chemical and Environmental Sciences (RACES-2010)” in the M. M. Modi College, Patiala.
- 3rd National Annual Conference on “Recent Advances in Chemical and Environmental Sciences (RACES-2011)” in the M. M. Modi College, Patiala.
- **Treasurer:** National Symposium on “Emerging Trends in Biotechnology (NSETB 2012)” in the M.M. Modi College, Patiala. **(24 February 2012).**
- **Treasurer:** 8th National Annual Conference on “Recent Advances in Chemical, Biological and Environmental Sciences (RACES-2016)” in the M. M. Modi College, Patiala. **(February 2016).**
- **Organizing Secretary:** 2nd National Symposium on “Emerging Trends in Biotechnology (NSETB 2016)” in the M.M. Modi College, Patiala. **(12 November 2016).**
- **Teena Pathak**, Kuldeep Kumar and Diwakar Aggarwal (2012). Asparagine based Plant Biosensor for Leukemia. International Conference on Industrial Biotechnology in Punjabi University Patiala, India Nov. 21-23 (2012).
- **Teena Pathak** Whole- cell based Asparagine Biosensor for Leukemia NSETB -2012 National Symposium on Emerging Trends in Biotechnology.
- Kuldeep Kumar, **Teena Pathak** and Neelam Verma. L-Asparagine based Plant Biosensor for Leukemia NSETB -2012
- **Teena Pathak** and Kuldeep Kumar National Conference On Current Trends in Biotechnology April 3, 2012 K.V.A.D.A.V. College For Women, Karnal Haryana
- Kuldeep Kumar, Diwakar Aggarwal, **Teena Pathak** and Deepika Shrama (2013). Bioremediation: Cost-effective Alternative to Clean Environmental Messes. Recent Advances in Chemical and environmental Sciences at M.M.Modi College, Patiala, India Jan. 31.
- **Teena Pathak**, Raman Kumar and Kuldeep Kumar (2014). Exteraction of L-Asparaginase from *Canabis Sativa* and development of Biosensor for monitoring L-Asparagine level in normal and leukemia serum samples. Natioanl conference on Plant Bioresource managment and Biotechnology at University of Rajsthan, Jaipur January 29-31, 2014.

Trainings attended/ Workshop

- One Day UGC Sponsord Faculty Development Programme on ‘Quality Research in Higher
- Education Institutions organized by M.M. Modi College, Patiala (April 28, 2014).
- 15 Day UGC Sponsord Faculty Development Programme on organized by M.M. Modi College, Patiala (April 28, 2014).
- 7 Day Faculty Development Programme on “ Training of Trainers onLife skills” organized by Rajiv Gandhi National Institute of Youth Development, Regional Centre at M. M. Modi College, Patiala (06-12 July 2015).
- 7 Day UGC Sponsord Faculty Development Programme on organized by M.M. Modi College, Patiala (9-16 January, 2017).
- **Organizing Committee Member:** Workshop on Modern Techniques in Science at M. M. Modi College, Patiala (11-20 July 2016).

- **Organizing Committee Member:** ‘2nd Workshop on Modern Techniques in Biological Sciences.’ (July 21- August 01, 2017).
- **Organizing Committee Member:** ‘3rd Workshop on Modern Techniques in Biological Sciences.’ (July 31- August 06, 2018).
- **Organizing Committee Member:** ‘4th Workshop on Modern Techniques in Biological Sciences.’ (July 27- August 05, 2019).
- **Organizing Committee Member:** 3rd national conference on ‘Innovations in Bioscience and Technology’ (NCIBT-2020), March 07, 2020.
- **Attended Two Weeks Faculty Development Programme** on"ADVANCED CONCEPTS FOR DEVELOPING MOOCS"organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry Of Human Resource Development PanditMadan Mohan Malaviya National Mission On Teachers And Teaching (PMMMNMST) (02 July–17 July, 2020)
- Participated in the Two Days National Workshop titled “Blended Learning Approaches in Teaching” (WS-BLAT) organized by Microbiologist Society,India. (17-18 July, 2020). **[Online]**