

Dr. Navpreet Kaur

Email:

maannavpreet@ymail.com, maanchimpal@ymail.com

Telephone: 9872284754

**Career**

Assistant Professor in Environment Sciences (2018- march 2020)

Assistant Professor in Food processing and preservation (March 2020-present)

Area of Specialization

Biochemistry, Biosensor technology and Molecular Biology.

Research Experience

2 years as junior Research fellow (DBT) and 1 year as Senior Research fellow (DBT)

Techniques known

Various techniques of cell and molecular biology such as DNA Extraction, DNA Amplification, Protein isolation, PCR, RT-PCR Gel Electrophoresis, DNA and Protein estimation, Restriction digestion, HPLC and HPTLC, PAGE, and their practical applications, fiber-optic analysis, Electrochemical analysis of Oligonucleotides and electro-chemistry

Education

M.Sc (2011): Biotechnology

CSIR-UGC NET (2012): Life Sciences

Ph.D (2019): Faculty of Life Sciences

Title: Molecular Beacons Based Biosensor for SNP analysis of hypertensive and diabetic patients

Project & research work

1. M.Sc thesis Project under the supervision of Dr. (Prof.). Neelam Verma on **“Degradation of Organophosphorus Pesticides by Organophosphorus hydrolase ”** in Department of Biotechnology, Punjabi University, Patiala
2. Currently registered as **Ph.D Research Scholar** with Punjabi University, Patiala under the supervision of Dr. Neelam Verma in Department of Biotechnology. The research topic is, **“Molecular Beacon Based Biosensor For SNP Analysis of Hypertensive and Diabetic Patients”**.
3. Worked as **Junior Research Fellow** from 29th August 2013 to 30th August 2015 under the project entitled **“DBT-Punjabi University Patiala Interdisciplinary Life Science Programme for Advance Research and Education”** granted to Punjabi University by Department of Ministry of Science and Technology, Government of India.
4. Worked as **Senior Research Fellow** from 1st September 2015 under the project entitled **“DBT-Punjabi University Patiala Interdisciplinary Life Science Programme for Advance Research and Education”** granted to Punjabi University by Department Of Ministry of Science and Technology, Government of India.
5. Worked As Assistant Professor in Environment Sciences at Guru Nanak College for Girls, Sri Muktsar Sahib from 15th July, 2018 to 30 April, 2019.

INDUSTRIAL TRAININGS, CONFERENCES AND WORKSHOPS

1. Attended national seminar on **“Recent trends in Modern Biosciences”** and integrated workshop on **“Techniques in Tissue Culture”** held at Hans Raj Mahila Maha Vidyalaya, Jalandhar on 29th and 30th September, 2008.
2. 1 month training at biolage mohali.
3. 40 days training programme on **“Biotechnological Tools For Biodiversity Analysis”** at National Bureau of Animal Genetic Resources (ICMR), Karnal during 6th July to 16th August 2010.
4. Participated in workshop on Science-Technofest 2012, held at Punjabi University on 25th -26th October, 2012.
5. Attended workshop on **“Basic Molecular Biology Techniques”** held at SIC, Punjabi University, Patiala on 26th-29th August,2014.
6. Attended 4th International Science Congress held at Pacific University, Udaipur, Rajasthan on 8th and 9th December, 2014. Also presented oral presentation entitled **“Molecular Beacons: New era of sparkling lights for disease diagnosis”**.

7. Participated and presented a poster entitled **“Degradation of Organophosphorus Pesticides by Organophosphorus Hydrolase”** at 7th national Conference on “Recent Advances in Chemical ,Biological and Environmental Sciences organized Multani Mal Modi College, Patiala on January 30-31.
8. Attended workshop on **“Interactive programme for Ph.D students”** organized by UGC-Human Resource Department Centre(HRDC) at Punjabi University, Patiala.
9. Participated and presented a poster entitled **“Hypertension and its Link to rs699 SNP”** at 8th National Conference on “Recent Advances in Chemical ,Biological and Environmental Sciences organized Multani Mal Modi College, Patiala on February 19-20,2016.
10. Presented paper entitled **Microbial Assisted Pesticide Degradation** in National seminar ‘Emerging Research Trends in Experimental Physics (ERTEP-2019)’ sponsored by Chandigarh Development Council, Chandigarh at Guru Nanak College for Girls, Sri Muksar Sahib on February 22, 2019.
11. Attended two Days National Workshop jointly organized by Deptt. of Basic Sciences, Guru Nanak College For Girls, Sri Muksar Sahib and IANCAS, Bhabha Atomic Research Centre, Mumbai from 9-10 march 2019

Publications

1. Research Paper entitled, **“ Study of rs699 SNP of hypertensive patients with gold surface immobilized molecular beacon biosensor”** in **International Journal of Research Scientific Research.**
2. Review Paper entitled, **“ Molecular Beacons: Fundamental Aspects and applications”** communicated to **Biosensors and Acutators.**
3. Research paper entitled, **“Application of molecular beacon based biosensor against rs699 SNP in hypertensive and non- hypertensive Punjabi population”** published in **International Journal of Pharmacognosy.**