

CURRICULUM VITAE

Dr. HEMANT

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Ho. No. 62, Shyam Nagar,
Near GB Pant Polytechnic,
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New Delhi-110020 India
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EDUCATIONAL BACKGROUND

➤ **Hamdard University, Hamdard Nagar, New Delhi, India**

Ph.D.in Botany (2015), Area of Specialization: **Molecular Biology**

Dissertation: **“Functional characterization of *Arabidopsis thaliana* glutamate receptors by fluorescence energy transfer”**

➤ **Jamia Milia Islamia University, Jamia Nagar, New Delhi, India**

M.Sc. in Biotechnology (2005) with first class

➤ **Delhi University, New Delhi, India**

B.Sc. in Zoology (2002) with first class

AWARDS

➤ Council of Scientific and Industrial Research Junior Research Fellowship-NET(2010-2011)

➤ Council of Scientific and Industrial Research Senior Research Fellowship-NET (2012-2014)

➤ Biotech Industrial training Program Certificate (Sponsored by BCIL and Supported by Department of Biotechnology) *“Offered to a few biotech students each year to make their carrier in R&D's of Biotech industries”.*

PROFESSIONAL EXPERIENCE

➤ **Assistant professor (Ad-hoc)** , Department of Biomedical Science, Shaheed Rajguru College of Applied Sciences for women, Delhi, from **21July2017-Till date**

➤ **Assistant professor**, Department of Biotechnology, Harlal Institute of Management and Technology, Greater Noida (UP), India from **Sept-2015 to June-2017.**

➤ **Junior Research Fellow** at Department of Biochemistry, Institute of Home Economics (Delhi University College) New Delhi from **June2009-December2009.**

➤ **Research Associate** in R&D at J.Mitra & Co.Pvt.Ltd from **December 2006-January 2009.**

TECHNICAL EXPERIENCE

Molecular Genetics

- Genomic DNA isolation from Blood, bacteria and Plant cell
- RNA isolation from plant cell
- cDNA preparation,
- Real Time PCR
- Cloning
- Gene Construct Preparation
- Competent Cell Preparation of both Bacteria and Yeast cells
- Transformation of gene into bacterial, yeast and plant cells
- Expression of protein in both bacterial and Yeast cell
- Expression, isolation and purification of protein from bacterial cell
- Plasmid Isolation,
- Restriction mapping
- Agarose gel Electrophoresis
- Conventional PCR
- RAPD

Biochemistry

- Chromatography (Size exclusion, Affinity, IMAC)
- Electrophoresis (SDS-Page, Agarose)

Microbiology

- Bacteria and Yeast cell culture
- Media Preparation
- Confocal Microscopy

Immunology

- ELISA
- Isolation and Purification of Monoclonal and Polyclonal antibodies
- Conversion of blood into serum by CaCl₂ method
- Antibodies Precipitation by salting out method
- Protein concentration by Amicon
- Buffer Preparation
- Dialysis

INSTRUMENTS HANDLED

- Multimode Microplate Reader (Beckman Coulter)
- Confocal Microscope (Leica)
- Electroporator (Bio-Rad)
- Ultrasonicator (Sonics)
- UV-Visible spectrophotometer (Perkin Elmer)
- Rota vapour (Buchi)
- Florescence microscope (Motic)
- Gel Doc (Protein Simple)
- Nanodrop Spectrophotometer (Thermo Scientific)

PUBLICATION

- Book Chapter – 02
- Research Papers Published – 09
- Conference/ Seminars/ Workshop – 06
- Abstracts Published – 04

EXTRACURRICULAR ACTIVITIES

- Guided five students from Amity University for their internship/training in the project entitled "Comparative analysis of protein expression in *E.coli* under different stress conditions". From May 30, 2022-July 15, 2022.
- Served as a convener of college Proctorial board
- Served as a co-convener of college Proctorial board
- Member of Shaheed Rajguru College Eco club
- Team member in the curriculum development of Biomedical Science course under LOCF and NEP Scheme at the undergraduate level, University of Delhi
- Member of college NAAC committee.
- Attended various seminars on research in Life Sciences.
- Participant in various events in the department during my studies
- Experience in data acquisition, analysis and presentation
- Experience in writing project reports, and scientific papers
- Handling of computer and proficiency in various software packages
- Have supervised undergraduate students from outside university for completion of their summer internship

PERSONAL INFORMATION

Name:	Hemant
Father's Name:	Late sh. Suresh kumar
Date of Birth:	2nd May 1982
Gender:	Male
Linguistics:	English, Hindi
Nationality:	Indian
Passport No:	H1385158
Marital Status:	Married
Permanent Address:	H.No-62 Shyam Nagar, New Delhi-110020(Delhi) India

AREAS OF RESEARCH INTEREST:

Biotechnology, Virology, Molecular Biology, Oncology, Biochemistry

SUBJECTS TAUGHT:

Molecular Biology, Biochemistry, Biostatistics, Medical Biotechnology, Human Genetics, Cell Biology, Biophysics, Genetics etc.

REFERENCES

Prof. Altaf Ahmad
Department of Botany,
Faculty of Life Sciences,
Aligarh Muslim University,
Aligarh 202002, U.P (India),
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Prof. M.P.Sharma
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Faculty of Life Sciences,
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Mob: +919968172445

DECLARATION

I hereby declare that the information furnished above is true to the best of my knowledge and belief. All the documents in original/attested form will be produced whenever required.

(HEMANT)

List of Publications

Book Chapter

- Yadav D, Anwar MF, Suri S, **Kardum H**, Belwal M, Singh S, Garg V, Asif M. Novel Strategies in the Drug Delivery Development of Anticancer Drugs: The Nanoparticulate Formulations, In: Frontiers in Anti-cancer Drug Discovery, Ed. Bentham Science Publisher, 2014, 3, 263-291.
- Hemant**, Mohamed M. Ibrahim, Maryam Sarwat, Altaf Ahmad. Glutamate Receptor-Like Ion Channels in *Arabidopsis thaliana*: <http://link.springer.com/book/10.1007/978-3-319-42183-4>

Paper Published/ Accepted

- Yousuf PY, Ahmad A, Ibrahim MA, Munir O, **Hemant**, Ganie AH, Iqbal M: Salt stress- Responsive chloroplast proteins in Brassica juncea genotypes with contrasting salt tolerance and their quantitative PCR analysis. Protoplasma, 2015, DOI 10.1007/s00709- 015-0917-z
- Hemant**, Ahmad: A Response of glutamate receptor, AtGlr1.1, of *Arabidopsis thaliana* to heavy metal stress. International journal on Biological Sciences 2014, 5: 63-70.
- Mohsin M, Abdin MZ, Nischal L, **Kardam H**, Ahmad: A Genetically encoded FRET-based Nanosensor for in vivo measurement of leucine. Biosensor and Bioelectronics 2013, 50:72-77
- Nischal L, Mohsin M, Khan I, **Hemant**, Wadhwa A, Abrol YP, Iqbal M,Ahmad: An Identification and comparative analysis of microRNAs associated with low-N tolerance in rice genotypes. Plos One 2012. DOI. 10.1371/journal.pone. 0050261.
- Chaudhary AA, **Hemant**, Mohsin M, Ahmad A: Application of loop- mediated isothermal amplification (LAMP)-based technology for authentication of *Catharanthus roseus* (L.) G. Don. Protoplasma 2011,17 (41), 11478.
- Anis Ahmad Chaudhary, Deepak Yadav, **Hemant**, Sayed Shakir Jamil and Mohd Asif:Real time sequence characterized amplified region (RT-SCAR) marker: Development and its application for authentication and quantification of *Catharanthus roseus* L. Don. Journal of Medicinal Plants Research, 2012, 6(32), 4748-4754.
- Yousuf P Y, Ahmad A, **Hemant**, Ganie AH, Are IM, Iqbal M. Potassium and calcium application ameliorates growth and oxidative homeostasis in salt-stressed Indian mustard (brassica juncea) plants. Pok.J.Bot. 2015, 47(5), 1629-1639.
- Makol V, Wadhwa V, Hemant, Khatri M. Comparative protein analysis of heat responsiveness among different strains of *E.coli*..IJJAMR.2022, 2(22), 2583-4452.

Abstract published

Yadav D, Chaudhary AA, Garg V, Anwaar MF, **Hemant**, Beg MN, Jamil SS, Asif M
Cytoprotective Activity of Paclitaxel Loaded Nipaam/VP/AA Nanoparticles against Hydrogen Peroxide Induced Toxicity in Hepatocellular Carcinoma (HepG2) Cells.
International Symposium on Macro and supramolecular architecture and materials, Nov. 21-25, 2012. Centre of Nano science and Technology, Coimbatore, India.

Chaudhary AA, Yadav D, **Hemant**, Ahmad A, Asif M. **Rapid molecular authentication of medicinal plant Mako (*Solanum nigrum*), by the development of LAMP (loop-mediated isothermal amplification) - based marker.** UGC-SAP sponsored National Seminar on Medicinal Plants Research in India, March 16-17, 2012, Department of Botany, Jamia Hamdard, New Delhi, India.

Yadav D, Chaudhary AA, Garg V, **Hemant**, Suri S, Ahmad A, Jamil SS, Sarwat M, Asif M.
NIPAAm/VP Co-polymeric micelles for *Zingiber officinale* in breast cancer cell line (MCF-7) International conference on RACS-5 &TM 2012, February 16, 2012, Amity University, Noida India.

Chaudhary AA, Yadav D, **Hemant**, Ahmad A, AsifM. **Rapid molecular authentication of medicinal plant *Trigonella foenum groecum* , by the development of LAMP (loop-mediated isothermal amplification) - based marker** International conference on RACS-5 &TM 2012, February 16, 2012, Amity University, Noida India.

Seminars / Conferences Attended /Workshop

1. Participated in National Seminar on Plant Biotechnology: Advances, Impact And Relevance, Deptt. of Botany , AMU, Mar.20th ,2010
2. Attended International Nitrogen Conference, India, Dec. 3-7, 2010.
3. Attended National seminar on Environment Management and biodiversity conservation (present status and future strategy), Churu, Oct.06-07, 2012.
4. Attended Third National Conference on “**Emerging Synergistic Trends in Ayurvedic and Biomedical Sciences**”. Bundelkhand University, Jhansi, February 19-20, 2020.
5. Successfully completed one day hands-on workshop “**Forensic Frontiers: A Skill Enhancement Workshop for Faculty**”, organized by the Department of Biomedical Science and Forensic Science Skill Center of Acharya Narendra Dev Biomedical Science and Forensic Science Skill Center of Acharya Narendra Dev College, University of Delhi on September 23, 2026.
6. Attended six days Faculty Development Program on “Organic Farming and Fertilizers”. Organized by Guru Angad Dev Teaching Learning Centre at Hisar Agriculture University.

