

DR. GAURI ABHYANKAR

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Competent `Research & Development` personality with professional approach for successful scientific applications. Successful track-record in the fields of education, training and research.

Academics:

S.P.College, University of Pune	Botany (Principal) and Zoology and Chemistry (as subsidiary subjects)	B.Sc. First class with Distinction, 1988. 45th in University merit list.
Department of Botany, University of Pune	Botany (cytogenetics and plant breeding specialization)	M.Sc. First class with Distinction, 1990. Third in University merit list.
Centre for Plant Molecular Biology, Osmania University, Hyderabad	Genetics (Genomic and metabolomic fingerprinting of hairy root cultures of <i>Phyllanthus amarus</i> and <i>Psoralea corylifolia</i>)	Ph.D., 2007.

Research and Teaching Appointments:

Dec. 2016 onwards	Assistant Professor, Department of Botany, Abasaheb Garware College, Pune.
Feb. 2009 – Dec. 2016	Lecturer, Department of Biotechnology, Abasaheb Garware College, Pune.
June 2008 -Feb. 2009	Lecturer, Department of Biotechnology, Fergusson College, Pune.
Aug. 2007- Apr. 2008	Lecturer, Department of Biotechnology, Fergusson College, Pune.
Feb 2002 – Apr 2007	Post-Graduate Research for Ph. D. at Centre for Plant Molecular Biology, Osmania University, Hyderabad.
Apr. 2001 – Jan. 2002	Coordinator and Faculty for short courses in Biotechnology, RESOLVE, Fergusson College, Pune.
July 2000 – Apr 2001	Lecturer, Department of Botany, Fergusson College, Pune.
Feb 2000	Lecturer, Department of Botany, N. Wadia College, Pune.
Aug 1999 – Oct 1999	Lecturer, Department of Botany, Abasaheb Garware College, Pune.
1997 - 1998	Worked on a research project on "Genetic transformation by using hairy root cultures induced by <i>Agrobacterium rhizogenes</i> for enhanced production of solasodine in <i>Solanum khasianum</i> "
1991 - 1997	Worked as a Research Fellow on tissue culture of <i>Withania somnifera</i> .

Contributory teaching:

- Contributory teacher for Plant Biotechnology at Department of Biotechnology, Abasaheb Garware College, Jan – Apr 2017.
- Worked as contributory teacher for **Cell Biology** at **Department of Botany, University of Pune**, Feb.-March, 2012.
- Contributory teacher for S.Y.B.Sc. Botany practicals, in Botany Department, A.G. College, Pune, Dec.2011 – Feb. 2012.
- Contributory teacher for Plant Tissue Culture in Industrial Microbiology, Department of Microbiology, A.G. College, Pune, 2010-11.
- External examiner for practical course in Plant Tissue Culture at Department of Biodiversity, A.G. College, Pune.

Awards and Fellowships:

- Aug. 2002 – March 2007 : Research fellowship for Ph.D. from M/S Recom Biotech Ltd, Hyderabad.
- 1994 – 1997 : Senior Research Fellowship from Council of Scientific and Industrial Research, Government of India.
- 1993 – 1994 : Fellowship for research from University of Pune.
- 1989 : Silver Jubilee Award for standing first in M.Sc. I (Botany)
- 1988 : Prize from S.P. College, Pune for standing first in B.Sc (Botany) in S.P. College

Research Projects and other responsibilities:

- Isolation, purification and characterization of secondary metabolites from *Phyllanthus amarus* – funded by Sakal Research Foundation, India, for year 2012-13.
- Conducted a 6-day workshop on Plant Tissue Culture (July 21 – 26, 2014) in capacity as a **course director** at Venture Centre, NCL Innovation Park, Pune.
- Worked as a **content writer for Botany in e-PG Pathshala** project of UGC.
- Worked as an **expert reviewer for Biotechnology Ignition Grant** scheme by BIRAC.

Achievements:

- Nomination for Tetrahedron Young Investigator award, 2006.
- Developed a micropropagation system for *Stevia rebaudiana*, leaves of which are used as natural sweeteners (leaves are about 200 times sweeter than sugar without calories, so a boon for diabetics); and made it commercially viable by selling thousands of plants from CPMB, Hyderabad.
- Developed micropropagation systems for many medicinal plants viz. *Psoralea corylifolia*, *Phyllanthus amarus*, *Stevia rebaudiana*, *Chlorophytum borivillianum*, *Withania somnifera*, *Coleus forskohlii* and *Linum usitatissimum*.
- Guided 40 students for their Projects at Bachelor's & Master's Degree level.

Techniques known:

- Various plant tissue culture techniques for micropropagation, callus initiation, maintenance and regeneration, suspension cultures, haploid production, protoplast isolation, culture and fusion.
- Techniques of genetic transformation using *Agrobacterium rhizogenes* and *A. tumefaciens*.

- Molecular biology techniques like electrophoresis, PCR, DNA-RNA and plasmid isolation, restriction digestion and southern blotting.
- AFLP as a DNA marker technology.
- Isolation, purification and characterization of plant natural products.
- Animal cell cultures with special reference to human cancer cells. Conversant with assays and related techniques for testing natural products against cancer cell lines.
- Hydroponics as an alternative system for growing plants in unsuitable or waste soils.
- Cultivation of oyster and button mushrooms

Papers published in refereed journals:

- **Gauri Abhyankar**, K.V. Rao, V.D. Reddy **(2013)** Genomic and metabolomic fingerprinting of *Phyllanthus amarus* (Schumm & Thonn) hairy root clones – *Annals of Phytomedicine*, 2(1):74–88.
- Madhavi Doma, **Gauri Abhyankar**, V.D. Reddy, P.B. Kavi Kishor **(2012)** Carbohydrate and elicitor enhanced withanolide (withaferin A and withanolide A) accumulation in hairy root cultures of *Withania somnifera* (L.) – *Indian Journal of Experimental Biology*, 50(7): 484-490.
- **Gauri Abhyankar**, P. Suprasanna, B.N. Pandey, K.P. Mishra, K.V. Rao & V.D. Reddy **(2010)** Hairy root extract of *Phyllanthus amarus* induces apoptotic cell death in human breast cancer cells – *Innovative Food Science and Emerging Technologies*, 11(3): 526-532.
- Pavan Manikonda, **Gauri Abhyankar**, K.V. Rao, V.D. Reddy, C. Subramanyam **(2009)** Salt stress enhances daidzein production in hairy root cultures of *Psoralea corylifolia* L (Fabaceae) – *Proc A.P. Akademi of Sciences*, 13(1 & 2):1-15.
- **Gauri Abhyankar** & V.D. Reddy **(2007)** Rapid micropropagation via axillary bud proliferation of *Adhatoda vasica* Nees from nodal segments – *Indian Journal of Experimental Biology*, 45:268-271.
- **Gauri Abhyankar**, V.D. Reddy, C.C. Giri, K.V. Rao, V.V.S. Lakshmi, S. Prabhakar, M. Vairamani, B.S. Thippeswamy, P.S. Bhattacharya **(2005)** Amplified fragment length polymorphism and metabolomic profiles of hairy roots of *Psoralea corylifolia* L – *Phytochemistry*, 66: 2441 – 2457.
- Chinchankar G.S., Malpathak N.P., **Abhyankar G.A.** **(1997)** Multiple shoot formation from leaf cultures in *Solanum khasianum* Clarke – *Indian Drugs*, 34(6): 362-363.
- **Abhyankar G.A.**, Chinchankar G.S. **(1996)** Response of *Withania somnifera* Dunal leaf explants in vitro - *Phytomorphology*, 46(3):249-252.
- Chinchankar G.S., David S.B., **Abhyankar G.A.** **(1991)** In vitro response of pollen of *Solanum indicum* L. – *Biol. Ind*, 2(1&2):67-72.

Workshops / Seminars attended:

- Teachers' workshop on "New revised syllabus of T.Y.B.Sc. Botany, SPPU, Pune" organized by Department of Botany, Prof. Ramkrishna More Arts. Commerce and Science College, Akurdi, Pune, Sept. 3, 2021.
- Participated in 4 days "Capacity Building ICT Workshop", organized by Abasaheb Garware College, April 29, 2020.
- **National seminar on "Medicinal plants: Bioprospecting, agrotechniques and enhancement of secondary metabolites" organized by Department of Botany, University of Pune, Feb 13-14, 2014.
- **National seminar on "Exploring strategies for enhancement of secondary metabolites in medicinal plants" – organized by Department of Botany, University of Pune, Feb 13-14, 2013. **(3rd prize for poster presentation)**

- **National conference on Biodiversity Assessment, conservation and utilization – organized by Department of Biodiversity, Abasaheb Garware College, Pune and BAIF, Pune, Feb. 9-11, 2012.
- **International conference on Biodiversity and its conservation – organized by Modern College of Arts, Science and Commerce, Pune, Jan. 28 – 30, 2011.
- Seminar on food safety issues with specific emphasis on GM food crops – organized by National Chemical Laboratory, Pune, Nov. 14 – 16, 2010.
- **National symposium on Plant Molecular Biology and Biotechnology: perspectives – organized by Centre for Plant Molecular Biology, Osmania University, Hyderabad, Nov. 16 – 17, 2007.
- **International conference on Biotechnology for sustainable agriculture and agro industry – organized by Andhra Pradesh Industrial Development Corporation, Hyderabad, March 9 – 11, 2006.
- **International symposium on frontiers in Genetics - retrospect and prospect, organized by Dept.of Genetics, Osmania University, Hyderabad, Jan. 8 – 10, 2006.
- **DAE-BRNS symposium on Molecular Biology of Stress Response and its applications organized by Bhabha Atomic Research Centre, Mumbai, Dec. 19 – 21, 2005.
- **International seminar on Developmental Biology, Mahabaleshwar, Dec. 17 – 21, 1997.
- **Seminar on recent advances in Plant Cell, Tissue and Embryo Culture – Department of Botany, University of Pune, 1996
- Workshop on Chromatography, principles and applications – Chemistry Department, S. P. College, Pune, Feb. 4 – 5, 1994.
- *Indian Science Congress Association, 81st session – Jaipur, Jan 3 – 8, 1994
- *National seminar on modern trends in Botany – Department of Botany, University of Pune, Feb. 21 – 24, 1991.

[Papers/ posters presented in seminars, symposia and abstracts published.]**

Training programs completed:

- Completed two week refresher course in “Natural Sciences”, organized by Teaching Learning Centre, Ramanujan College, University of Delhi, from June 28 – July 12, 2022.
- Completed two week interdisciplinary refresher course / Faculty Development Program for “Advanced Research Methodology Tools and Techniques”, organized by Teaching Learning Centre, Ramanujan College, University of Delhi, from January 30 – February 14, 2021.
- Completed 4 weeks Orientation / induction program "Faculty in Universities / Colleges / Institutes of Higher Education", organized by Teaching Learning Centre, Ramanujan College, University of Delhi, from November 10- December 09, 2020.
- Faculty Development Programme on “Hands on training for E content Development using E tools for college teachers”, organized by Abasaheb Garware College, July 7 – Aug 19, 2020.
- DBT sponsored training course on “Methodologies used in gene expression analysis”, organized by department of Botany, Savitribai Phule Pune University, Sept 29-Oct 20, 2015.
- DBT sponsored training course on “Molecular markers and their application in plant sciences”, organized by department of Botany, University of Pune, Feb 2 – 22, 2010.
- **Worked in J.K. Agrigenetics, Jeedimetla, Hyderabad, for completing a part of research work for Ph.D.**
- **Worked as a resource person for** APNL, UGC, RVPSP, DST and APCOST sponsored refresher course on Plant Biotechnology, organized by CPMB, Hyderabad, Feb. 19 – March 11, 2007.

- Workshop on Recombinant DNA Technology, organized by CFBTR, Madurai, May 14 – May 26, 2001.
- **Worked as a Resource Person** for the Exhibition (Plant World 2000) held by S.P.College, Pune, Dec. 31, 1999 – Jan. 3, 2000.
- National Training Course on Cultivation of Mushrooms, conducted by National Research Centre for Mushrooms (ICAR), Solan, Himachal Pradesh (**First Rank**), Aug. 3 – Aug. 17, 1999.
- Use of quantitative methods in life sciences, conducted by Department of Botany, University of Pune, June 5 – July 2, 1996.
- Grudstufte Eins from Maxmuellar Bhavan, Pune with 92,75 marks (**First Rank**), Jan. 3 – Feb. 17, 1996 (200 hrs).
- Delivered lectures and conducted practicals on mushroom cultivation (oyster and button) in Nursery course conducted by Kirti College, Mumbai.
- Delivered lectures on Plant Tissue culture in Moving Academy, Pune.

Personal Profile:

Date of Birth: 25 / 12 / 1967

Passport No.: F8039331

Marital Status: Married.

References :

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