

ASSOCIATE PROFESSOR

## **Details**

A 506 Kanishka Tower, Ashoka Enclave Main, Sector 34, Faridabad New Delhi, 121003 India 9013627342 satyakamg173@gmail.com

NATIONALITY

Indian

DATE / PLACE OF BIRTH

09/05/1977 Dibrugarh

#### Skills

**Effective Time Management** 

Ability to Work in a Team

Communication Skills

**Effective Teaching** 

Classroom Management

## Hobbies

Cooking

## Languages

English

Hindi

Bengali

Assamese

## **Profile**

Keen to promote interest among youngsters for extensive studies in plant sciences and have abilities to motivate people for a team effort. Hardworking, committed with good communication skills and can deal with any type of problem with great dedications. Interested in cultural and social activities. Currently involved in co-ordinating training programme on self self-defense for girl students.

# **Employment History**

## Associate Professor, Hansraj College, New Delhi

AUGUST 2020 - APRIL 2023

Associate Professor, Deptartment of Botany at Hansraj College, University of Delhi, New Delhi

# Assistant Professor, Hansraj College, New Delhi

DECEMBER 2010 - JULY 2020

Joined as Permanent faculty on 14-12-2010 in Hans Raj College, University of Delhi

# Assistant Professor (Ad Hoc), Sri Venkateswara College, New Delhi

AUGUST 2008 - DECEMBER 2010

Ad Hoc faculty at the Department of Botany, Sri Venkateswara College, University of Delhi, New Delhi

## Assistant Professor, Jaipur National University, Jaipur

JUNE 2008 - JULY 2008

Faculty at Jaipur National University, Jaipur, Rajasthan

## Assistant Professor (Ad Hoc), Hansraj College, New Delhi

FEBRUARY 2008 - MARCH 2008

Ad Hoc faculty at the Department of Botany, Hansraj College, University of Delhi, New Delhi

## **Education**

# Ph D, University of Delhi, New Delhi

DECEMBER 2002 - JANUARY 2008

Best Thesis Award.

\* Professor N. S. Rangaswamy Medal 2008, for best Ph. D. thesis entitled "In Vitro Propagation of Orchids: Heterotrophy to Autotrophy" was awarded by Department of Botany, University of Delhi.

## M Phil, University of Delhi, New Delhi

SEPTEMBER 2001 - NOVEMBER 2002

First Division

#### M Sc, Jamia Hamdard University, New Delhi

JULY 1999 - JULY 2001

First Division

#### B Sc, Gauhati University, Guwahati

JULY 1995 - JULY 1998

First Division with Distinction. 14th position in the University

# **Courses**

# Marketing Management and International Tourism with Computers , Tradewings Institute of Management

JULY 1995 - JULY 1996

### List of Publications (Peer Reviewed International Journals):

Guha S., Rao I. U. 2010. Culture surface and exogenous putrescine-altered shoot growth pattern in mannitol-and cadmium chloride pretreated callus of *Cymbidium* Via del Playa "Yvonne". In Vitro Cell Dev. Biol. Plant 46:491-498 DOI 10.1007/s1167-010-9322-7

Vyas S., Guha S., Kapoor P., Rao I. U. 2010. Micropropagation of *Cymbidium* Sleeping Nymph through protocorm-like bodies production by thin cell layer culture. Scientia Horticulturae. 123: 551-557

Vyas S., Guha S., Bhattacharya M., Rao I. U. 2009. Rapid regeneration of plants of *Dendrobium lituiflorum* Lindl. (Orchidaceae) by using banana extract. Scientia Horticulturae, 121: 32-37

Chugh S., Guha S., Rao I. U. 2009 Micropropagation of Orchids: A review on the potential of different explants. Scientia Horticulturae, 122: 507-520

Guha S., Rao I. U. 2012. Nitric oxide promoted rhizome formation, as an antioxidant under magnesium deficiency on shoot buds of *Cymbidium* Via del Playa "Yvonne". Biologia Plantarum 56 (2): 227-236, 2012

Vyas S., Kapoor Pandey P., Guha S., Rao I. U. 2011 Synchronous plantlet formation by using banana extract and *in vitro* hardening In orchid, *Dendrobium lituiflorum* Lindl. Journal of Ornamental and Horticultural Plants 1(3): 175-184

Vyas S., Kapai V., Kapoor P., Guha S., Rao I. U. 2012. *In vitro* plantlet regeneration from protocorms of *Dendrobium lituiflorum* Lindl. and *Cymbidium* bicolor Lindl. and their acclimatization: effect of salts, sucrose and banana extract. Journal of Horticultural Science and Biotechnology 87: 485-492

Satyakam Guha and I. Usha Rao (2020). Multiple Shoot Formation in Cymbidium aloifolium L. (Sw.) Shoot Explants under the Infuence of KMnO4 within the Culture Vessel in Thidiazuron Containing Medium. Phytomorphology 70(3&4), 103-107.

Antul Kumar, Anuj Choudhary, Harmanjot Kaur, Satyakam Guha, Sahil Mehta, Azamal Husen (2022). Potential Applications of Engineered Nanoparticles in Plant Disease

Management: A Critical Update. Chemosphere. https://doi.org/10.1016/j.chemosphere. 2022.133

### **Indian Journals:**

Guha S., Rao I. U. 2010 A review on MADS-BOX Genes: Defining the specialized structures of Orchid flowers. Journal of Palynology 46: 53-64

#### **Chapter in Book:**

Guha S., Rao I. U. 2010. Floral Diversity in Orchids: An Evolutionary Consequence of Deception? Chapter 11, Current Trends in Plant Biology edited by Prof. P. C. Trivedi and Prof. S. K. Sopory, Aavishkar Publishers, Jaipur, Rajasthan.

## **Extra-curricular activities**

#### Attended Academic/Faculty Development Programmes on Higher Studies:

1. Refresher Course on Life Sciences, duration: 25th February-16th March, 2013; organized by "Faculty of Interdisciplinary and Applied Sciences", University of Delhi South Campus and Centre for Professional Development in Higher Education (CPDHE).

- 2. **Orientation Programme (OR-74)**, duration: 20th June-17th July, 2013; organized by Centre for Professional Development in Higher Education (CPDHE).
- 3. **Two-week** (Online) faculty development programme on "**Biomathematics**-" (15th October-28th October, 2020) organized by Department of Mathematics, P.G.D.A.V. College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi.
- 4. One week (online) faculty development programme on "Moving Towards New Normal through Effective Online Teaching" (1st December- 7thDecember, 2020) organized by Kalindi College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi.
- 5. One week (online) faculty development programme on "Digital Pedagogy to Enhance Teaching and Learning Experience" (15th December-21stDecember, 2020) organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education (MOE) and Maitreyi College, University of Delhi.
- 6. One week (online) faculty development programme on "Exploratory Data Analysis using Statistical Software R and SPSS" (07th January- 13th January, 2021) organized by Department of Statistics and Internal Quality Assurance Cell (IQAC), Mata Sundri College for Women, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi.
- 7. One week (online) interdisciplinary faculty development programme on "Student-Centric Pedagogic Methods" (27th January-02nd February, 2021) organized by Janki Devi Memorial College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi.
- 8. One week (online) interdisciplinary faculty development programme on "-Intellectual Property Rights" (10th February-17th February, 2021) organized by IQAC, Hansraj College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi.
- 9. One week (online) interdisciplinary faculty development programme on "-Hypothesis Testing and Techniques for Data Analysis" (05th March-11thMarch, 2021) organized by Department of Commerce, Shivaji College, University of Delhi (Knowledge partner: Department of Commerce, DSE, University of Delhi) in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi.
- 10. Completed the coursework on "R-Analyticals" organized by Delhi University Botanical Society, Department of Botany, University of Delhi from 27th to 29th November 2017.
- 11. Attended three days faculty development programmes on the topic" Fundamentals of Intellectual Property Rights" from 23rd -25th, 2020 organized by IQAC and Mahatma Hansraj Faculty Development Programme, Hansraj College.
- 12. Organized two days faculty development programme on the topic "Agriculture, Health and Society (Interdisciplinary) in Hansraj College 15th -16th March 2019.
- 13. **Organized 'INSPIRE' programme** funded by DST, as a member of organizing team in Hansraj College from 12thto 16th December, 2017.
- 14. Attended two days' workshop on "Design of Experiment (DOE) using statistical tools" organized by 'Phytomics', the botanical society of Bhaskaracharya College of Applied Sciences, University of Delhi held on 6th and 7th November 2020.

15. Organized a two-day National Conference on Medicinal Plants, frontier areas of research and development by Department of Botany, Hansraj College, supported by AYUSH, Government of India on 16th -17th March 2023.

### Participation in seminars or conferences (Recent)

Participated in one day National symposium on the topic 'Bioimaging' on 19th February, 2020 organized by Department of Botany, Dyal Singh College, University of Delhi.

Attended a Webinar on topic "Bioentrepreneur ship: Prospects, Challenges and opportunities in India" organized by Department of Botany, Hansraj College, University of Delhi on 26thNovember 2022.

Participated in 1st Annual National Conference on advances in plant biology 2022 held on 9thDecember 2022, organized by Department of Botany, Hansraj College, University of Delhi.

## **Academic Responsibilities:**

Elected as the President of Delhi University Botanical Society (DUBS) the only academic society of DU since 1950 in the academic year 2005-2006.

Appointed as the 'Staff advisor' of the botanical society "Botanique" of Department of Botany, Hansraj College in the academic year 2017-2018.

Appointed as the 'Convenor' of the botanical society "Botanique" of Department of Botany, Hansraj College in the academic year 2018-2019.

Appointed as the 'Convenor' of scholarship committee of Department of Botany, Hansraj College in the academic year 2018-2019.

Appointed as admission-in-charge for online admission to Life Science B.Sc. Programme of Hansraj College for the academic session 2020-2021

Conducted the admission procedure of undergraduate and postgraduate courses of Botany in the capacity of 'Teacher-in-Charge' of Department of Botany, Hansraj College for the academic year 2021-2022.

Appointed as Teacher-in-Charge on rotation basis of Department of Botany, Hansraj College, University of Delhi for the academic session 2021-2022.

### Member of academic /learned bodies

Appointed as the member of courses committee, Department of Botany, University of Delhi from 2021-2023.

Life member of "International Society of Plant Morphologists", Department of botany, University of Delhi

#### Areas of interest and specialization:

**Molecular Biology**: Agrobacterium mediated transformation of higher plants, restriction digestion, ligation, DNA isolation, SDS page, blotting etc.

**Electron Microscopy**: Transmission and Scanning electron microscopy

**Microbial genetics**: Ames test for reverse mutagenesis, screening of drug resistance, microbial culture, cloning of *E. coli* by CaCl2 method etc.

Biochemistry: chromatography, enzyme estimations etc.

**Drosophila genetics:** Mendelian crossing, isolation and mounting of polytene chromosomes

**Biostatistics**: Tools and Techniques of biostatistics and survey-based research on social issues

Plant Physiology: specifically, hormone interaction associated with growth

Plant biotechnology: With specific reference to Orchid's