# Curriculum Vitaè

# DR. AFAQUE QURAISHI

#### **Education:**

Ph.D. (4.7.1998) from Pt. Ravishankar Shukla University, Raipur (CG), on:

"Studies on *in vitro* regeneration of some Fuel-wood species"

**M.Sc.** Botany (1990) from Guru Ghasidas University, Bilaspur (CG)

## **FELLOWSHIPS RECEIVED:**

## **Research Associate, CSIR:**

Project Title: Micropropagation and Somaclonal variation assessment of Neem

& Mangium

Agency: Council of Scientific and Industrial Research, New Delhi

Period: 1st February 2002 to 16th Aug. 2004

# **Project Fellow (JRF / SRF):**

Project Title: Biomass Research Center

Agency: Ministry of Non-Conventional Energy Sources, New Delhi

Period: July 1991 to June 1996

### POSITIONS HELD:

## 1. Asst Professor in Biotechnology

UTD: Pt. Ravishankar Shukla University, Raipur CG

Period: 15/09/2008 to continue

### 2. Lecturer (Botany) (Under Section 28):

College: MATS College, Pandri, Raipur CG

Period: 21/09/2007 to 15/09/2008

### 3. Coordinator (Life Science Dept):

College: Mahaveer Academy of Technology & Sciences, Pandri, Raipur CG

Period: 10/07/2006 to 21/09/2007

### 4. Lecturer in Biotechnology:

College: Rai Foundation College, Raipur (CG)

Period: 17/08/2004 to 10/7/06

## 5. Scientist:

Biotech Industry: Plant Tissue Culture Unit, Shrishrimal Plantation Ltd, Raipur CG

Period: 01/07/1996 to 31/05/2001

## **AWARD:**

## **Best Oral presentation**

**Quraishi Afaque**, Keshavkant S & Chauhan R (2018) Impact of elicitors on production of diosgenin in micro-tubers of Safed Musli. National Conference on 'Plant and

Microbial Products: Progress, Potential & IPR issues' at Dept of Botany, Guru Ghasidas Vishwavidyalaya, Bilaspur (CG), 7-9 Feb 2018, pp 34

**Young Scientist Award** (1994) by Madhya Pradesh Council of Science and Technology; at Sagar (MP), on paper "*In vitro* micropropagation from nodal segments of *Cleistanthus collinus* Benth."

#### TRAINING:

S	Training Program	Agency	Duration
N			
1.	Refresher Course on	UGC-Human Resource	3 weeks:
	"Fundamentals of Research	Development Center,	01.12.2017 -
	Methodology"	Pt. Ravishankar Shukla	21.12.2017
		University, Raipur CG	
1.	'Special Summer School' on	UGC-Human Resource	3 weeks:
	"Paradigm shift in Higher	Development Center,	20.07.2015 -
	Education"	Pt. Ravishankar Shukla	09.08.2015
		University, Raipur CG	
2.	'Refresher Course' on	UGC-Academic Staff	3 weeks:
	"Biotechnology-21st Century"	College,	17/07/2012 -
		Pt. Ravishankar Shukla	06/08/2012
		University, Raipur CG	00/00/2012
3.	'Orientation Program' on	UGC-Academic Staff	4 weeks:
	"Education & Development"	College,	28/01/2012 -
		Pt. Ravishankar Shukla	24/02/2012
		University, Raipur CG	

### **RESEARCH PROJECTS:**

- PI: "Herbal Treatment for the Rheumatoid Arthritis" Pt. Deendayal Upadhyay Memorial Health Sciences and AYUSH University of Chhattisgarh, Raipur. Rs. 3 Lakh (2018-19)
- PI: "True-to-type *in vitro* conservation of Safed Musli (*Chlorophytum borivilianum* Sant. Et Fernand.): a rare medicinal plant of India" Chhattisgarh Council of Science & Technology, Raipur. Rs. 5 Lakh (2014-17)
- Co PI: "National Centre for Natural Resources" (NCNR) Dept. of Science & Technology, New Delhi, Rs. 9.05 Cr. (2012-17)
- Co PI: "Screening of Microbes for Bioethanol production from Mahua (*Madhuca indica*) flowers" UGC Major Project: Rs. 7.41 Lakh (2011-14)
- Co PI: "Development & standardization of micropropagation protocol for banana & sugarcane" CG COST: Rs. 3.63 Lakh (2008-09)

## **PUBLICATIONS:**

Research Papers [I] Indian Journals; [F] Foreign Journals; [JIF: 0.000]:

- Kaur Inderpal, Jadhav SK, Tiwari KL, **Quraishi Afaque** (2018) Lead tolerance and its accumulation by a tree legume: *Dalbergia sissoo* DC. *Bulletin of Environmental Contamination and Toxicology* doi.org/10.1007/s00128-018-2419-0 F JIF: 1.48]
- Kaur Inderpal, Khandwekar Sayali, Chauhan Ravishankar, Singh Vikram, Jadhav SK, Tiwari KL, **Quraishi Afaque** (2018) Exploring the efficiency of native tree species grown at mine tailings for phytoextraction of Iron and Lead. *Proceedings of the National Academy of Sciences India Section B-Biological Sciences* doi.org/10.1007/s40011-018-1010-0 (SCI journal)
- Vikram, Koche Vijaya, **Quraishi Afaque** (2018) Viral Elimination Strategies for *Musa* spp. *Research & Reviews: A Journal of Microbiology and Virology* 8(1):7-14 (UGC Journal no. 48607)
- Chauhan R, Keshavkant S, **Quraishi Afaque** (2018) Enhanced production of diosgenin through elicitation in micro-tubers of *Chlorophytum borivilianum* Sant et Fernand. *Industrial Crops & Products* 113:234-239 [F] [JIF: 3.181]
- **Quraishi Afaque**, Mehar Snigdha, Sahu Durga, Jadhav SK (2017) *In vitro m*id-term conservation of *Acorus calamus* L. *via* cold storage of encapsulated microrhizome. *Brazilian Archives of Biology and Technology*; DOI 10.1590/1678-4324-2017160378 [F] [JIF: 0.644]
- Chauhan R, **Quraishi Afaque**, Jadhav SK, Keshavkant S (2016) A comprehensive review on pharmacological properties and biotechnological aspects of Genus *Chlorophytum. Acta Physiologiae Plantarum* 38:116; DOI 10.1007/s11738-016-2132-8 [F] [JIF: 1.364]
- Chauhan R, Keshavkant S, Jadhav SK, **Quraishi Afaque** (2016) *In Vitro* Slow-Growth Storage of *Chlorophytum borivilianum* Sant et Fernand: A Critically Endangered Herb. *In vitro Cellular & Developmental Biology: Plant* 52(3):315-321; DOI: 10.1007/s11627-016-9756-7 [F] [JIF: 1.152]
- Sethia Kiran, Kaushik Alka, Jadhav SK, **Quraishi Afaque** (2015) Effect of operational parameters on cow dung mediated microbial fuel cell. *World Journal of Engineering* 12(6):541-550 (Scopus indexed; UGC Journal no. 33153)
- Chaudhary A, Thakur V, **Quraishi A,** Jadhav SK (2015) Isolation and Characterization of Biohydrogen Producing Bacteria from Rice Bran with optimization of different parameters. *International Journal of Biomass & Renewables* 4(1):10-14 **F**
- Chandrawanshi NK, Jadhav SK, Tiwari KL, **Quraishi Afaque** (2015) *In vitro* tuberization and colchicine content analysis of *Gloriosa superba* L. *Biotechnology* 14(3):142-147 DOI: 10.3923/biotech.2015.142.147 (Scopus indexed; UGC Journal no. 14902)
- Chauhan R, Jadhav SK, **Quraishi A** (2014) An efficient seed germination and seedling establishment protocol hybrid *Carica papaya* Linn. with application of plant growth regulator. *Biotechnology* 13(3): 139-142 (Scopus indexed; UGC Journal no. 14902) [F]

- Agrawal T, **Quraishi A**, Tiwari KL, Jadhav SK (2013) Ethanol Production from Mahua (*Madhuca indica* J. F. Gmel) Flowers by Soil Bacteria. *Researcher* 5(12): 102-106 F
- Thakur V, Tiwari KS, **Quraishi A**, Jadhav SK (2012) Biohydrogen production from rice mill effluent. *Journal of Applied Sciences in Environmental Sanitation* 7(4): 237-240 **F**
- **Quraishi A**, Jadhav SK, Gupta S (2011) *In vitro* clonal propagation *of Cassia tora* L. (Coffee Pod): A medicinal plant. *Biotechnology* 10(6): 546-550 (Scopus indexed; UGC Journal no. 14902)
- Sharma P, Koche V, **Quraishi A**, Mishra SK (2005) Somatic embryogenesis in *Buchanania lanzan* Spreng. *In vitro Cellular & Developmental Biol.: Plant* 41: 645-647 [F] [JIF: 1.152]
- Quraishi A, Koche V, Sharma P, Mishra SK (2004) *In vitro* clonal propagation of neem (*Azadirachta indica*). *Plant Cell, Tissue & Organ Culture* 78(3): 281-284 [F] [JIF: 2.002]
- **Quraishi A,** Mishra SK (1998) Micropropagation of nodal segments from adult trees of *Cleistanthus collinus. Plant Cell Reports* 17(5): 430-433 [F] [JIF: 2.869]
- **Quraishi A**, Koche V, Mishra SK (1997) Micropropagation of *Lagerstroemia parviflora* through axillary bud culture. *Silvae Genetica* 46(4): 242-245 [F] [JIF: 0.25]
- Quraishi A, Koche V, Mishra SK (1996) *In vitro* micropropagation from nodal segments of *Cleistanthus collinus*. *Plant Cell Tissue & Organ Culture* 45: 87–91 [JIF: 2.002]
- **Quraishi A**, Biswas J, Mishra SK (1996) Seed weight related germination capacity in *Cleistanthus collinus. Indian Journal of Forestry* 19(1): 79 82 [I]

### Book edited:

Jadhav SK, Sahu KK, **Quraishi A**, Shukla KK, Chandrawanshi NK (2014) Biotechnology and traditional knowledge. Biotech Books, New Delhi (ISBN: 978-81-7622-330-0)

## Book Chapter:

**Quraishi A** (May, 2013) *In vitro* clonal propagation of forests trees: By bud culture technique. In: Modern Biotechnology and its Applications: Part 1. KK Behera (Ed.) New India Publishing Agency, New Delhi, pp 47-56 (ISBN: 9789381450833)

### Paper presented in Seminars / Conferences:

- **Quraishi Afaque**, Keshavkant S & Chauhan R (2018) Impact of elicitors on production of diosgenin in micro-tubers of *Safed Musli*. National Conference on 'Plant and Microbial Products: Progress, Potential & IPR issues' at Dept of Botany, Guru Ghasidas Vishwavidyalaya, Bilaspur (CG), 7-9 Feb 2018, pp 34
- Chauhan R, **Quraishi Afaque**, Jadhav SK & Keshavkant S (2016) *In vitro* conservation of *Chlorophytum borivilianum* Sant *et* Fernand, via vitrification based cryopreservation. 3<sup>rd</sup> International Congress of the Society for Ethnopharmacology, India- "Ethno-pharmacology & Evaluation of Medicinal Plants –

- Global Perspectives. National Center for Natural Resources, Pt. Ravishankar Shukla University, Raipur, Feb 19-21, 2016, pp 73
- Naik ML, Jadhav SK, Lader S, Bhushan S, Sharma DK, Nishad CK & **Quraishi A** (2016) A phyto-sociological analysis of forests of Raigarh (CG) district. National Seminar on 'Innovations & Prospects in Biotechnology' School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur CG, 2 4 Jan 2016, pp 36
- Mehar S, Jadhav SK & **Quraishi A** (2012) *In vitro* conservation of *Acorus calamus* L. National Seminar on 'Changing Environment and its Impact on Biodiversity.' Dept of Botany, Govt. DB Girls PG Autonomous College, Raipur CG, 11 12 Oct 2012, pp 49
- **Quraishi A** (1994) *In vitro* micropropagation from nodal segments of *Cleistanthus collinus* Benth. Ninth M.P. Young Scientist Congress by Madhya Pradesh Council of Science and Technology at Dr. HS Gour Vishwavidyalaya,, Sagar (MP), 28<sup>th</sup> Feb to 2<sup>nd</sup> March 1994, pp 22-23.
- **Quraishi A**, Koche V, Mishra SK (1997) Studies on *in vitro* propagation of *Lagerstroemia parviflora*. IUFRO Symposium on Innovations in Forest Tree Seed Science & Nursery Technology at School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, 22<sup>nd</sup> to 25<sup>th</sup> Nov 1997, pp 104.

# Papers in proceedings:

- **Quraishi A**, Admane N & Jadhav SK (2013) Primer designing for indexing of Banana Bunchy Top Virus in tissue cultured banana plants of Chhattisgarh region. National Seminar on "Application of Artificial Intelligence in Bioinformatics/Life Sciences" National Institute of Technology, Raipur CG; 17<sup>th</sup> Jan 2013, pp 115-119
- Chandra J, Thakur S, **Quraishi A** & Jadhav SK (2013) Selection of efficient *Rhizobium* strains from Soybean (*Glycine max* L. Merill) crop for biofertilizer production. National Seminar on "New Vistas in Plant Science and Biotechnology" New Arts, Commerce and Science College, Shevgaon Dist- Ahmednagar (MS), 2 3 Aug 2013, pp 96-100 (ISBN 978-81-924820-4-0)
- Agrawal T, **Quraishi A** & Jadhav SK (2013) Fermentation of *Madhuca indica* J.F. Gmel flowers for bioethanol production using *Pichia stipitis* NCIM 3497. National Seminar on "New Vistas in Plant Science and Biotechnology" New Arts, Commerce and Science College, Shevgaon Dist- Ahmednagar (MS), 2 3 Aug 2013, pp 137-139 (ISBN 978-81-924820-4-0)
- Agrawal T, **Quraishi A**, Tiwari KL & Jadhav SK (2013) Comparative study on bioethanol production from Mahua flowers by commercial and indigenously isolated yeas strain. National Conference on 'Traditional Knowledge and Biotechnology' at School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur CG, 22 24 Nov 2013, pp 37-41 (ISBN 978-81-7622-330-0)
- Chandrawanshi NC, Tiwari KL, **Quraishi A** & Jadhav SK (2013) Study of antibacterial activities of two types of Tulsi leaves (*Ocimum*). National Conference on 'Traditional Knowledge and Biotechnology' at School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur CG, 22 24 Nov 2013, pp 55-62 (ISBN 978-81-7622-330-0)

- Chauhan R, Jadhav SK & **Quraishi A** (2013) *In vitro* propagation of *Plumbago zeylanica*: An endangered medicinal plant of Chhattisgarh. National Conference on 'Traditional Knowledge and Biotechnology' at School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur CG, 22 24 Nov 2013, pp 63-68 (ISBN 978-81-7622-330-0)
- Paul JS, **Quraishi A**, Thakur V & Jadhav SK (2013) Biohydrogen production from dairy effluent by anaerobic batch fermentation process. National Conference on 'Traditional Knowledge and Biotechnology' at School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur CG, 22 24 Nov 2013, pp 171-182 (ISBN 978-81-7622-330-0)

## Chairperson

Chair the Poster Presentation Session I in 3<sup>rd</sup> International Congress of the Society for Ethno-pharmacology, India- "Ethno-pharmacology & Evaluation of Medicinal Plants – Global Perspectives. National Center for Natural Resources, Pt. Ravishankar Shukla University, Raipur, Feb 19-21, 2016

### **Invited Lecture**

- "Key Steps of Micropropagation" (20.11.2017) During International Training Program on Commercial Plant Tissue Culture at Raipur (India), organized by- Biotech India Consortium Limited, New Delhi, an organization created by the initiative of Department of Biotechnology, Government of India
- "Prevention of Contamination and Elimination of Endophytes during tissue culture" (28.11.2017) During International Training Program on Commercial Plant Tissue Culture at Raipur (India), organized by- Biotech India Consortium Limited, New Delhi, an organization created by the initiative of Department of Biotechnology, Government of India
- "Plant Tissue Culture: Techniques & Applications" (27.02.2016) In two days workshop on 'Implication of plant tissue culture on plant biodiversity' 26 -27 Feb 2016 at Sai College, Sector 6, Bhilai (CG)

# Training organized:

International Training program- Organized a four-days training program on 'banana virus indexing' and 'genetic fidelity testing in tissue-cultured banana plants', for 13 African candidates from July 23 to 26, 2018; funded by Biotech Consortium India Ltd. (BCIL), New Delhi. BCIL is an organization created by Dept. of Biotechnology, New Delhi, GoI.

**Supervisor of Ph.D.- Biotechnology:** Three candidates registered.

# Supervised M. Phil. Biotechnology:

S N	M. Phil. Students	Year	Dissertation
1	Ms Shabina	2015	Effect of different pre-treatment methods on biohydrogen production from de-oiled rice bran using <i>Clostridium acetobutylicum</i> NCIM 2877
2	Ms Anjali Kosre	2015	In vitro plant regeneration through meristematic zone of pseudo stem of Costus pictus D. Don
3	Ms Rakhi Thakur	2014	Heavy metal 'Lead' tolerance and phytoextraction by in vitro grown seedlings of Leucaena leucocephala (Lam.) de Wit
4	Ankush Kerketta	2014	Lead tolerance and phytoextraction by <i>in vitro</i> grown seedlings of <i>Dalbergia sissoo</i> Roxb.
5	Ms Sneha Harishchandra	2014	Lead uptake and effects on <i>in vitro</i> grown seedlings of leguminous tree <i>Peltophorum pterocarpum</i> (DC.) Backer ex Heyne
6	Ravishankar Chauhan	2013	<i>In vitro</i> germination of papaya seeds to develop healthy and disease-free planting material.
7	Ms Poonam Kumari	2013	In vitro production of secondary metabolites from Cleistanthus collinus (Roxb.) Hook. f.
8	Ms Nikita Admane	2013	Banana bunchy top virus indexing of cultivated and tissue cultured banana plants of Chhattisgarh region.
9	Ms Shraddha Churendra	2013	In vitro production of Azadirachtin from Neem tree leaf culture.
10	Satyajit Kanungo	2012	In vitro Propagation of Plumbago zeylanica L.; A valuable medicinal plant
11	Ms Smriti Adil	2012	Uptake and accumulation of iron and analysis of accumulated metal concentration in Indian Mustard ( <i>Brassica juncea</i> )
12	Ms Snigdha Mehar	2012	In vitro mid-term conservation of Acorus calamus L. (Bach)
13	Ms Sheetal Gupta	2011	Micropropagation and characterization of secondary metabolites of <i>Cassia tora</i> L. (Charota)
14	Ms Durga Sahu	2011	In vitro microrhizome induction, encapsulation and cold storage for germplasm conservation of Acorus calamus L. (Bach)
15	Ms Tripti Motgare	2011	Micropropagation in Vigna radiata (L.) Wilczek