

SHARADA MALLUBHOTLA POTUKUCHI

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❖ Current position

Associate Professor

Department of Biotechnology, Faculty of Sciences

❖ Work Experience

- **2 years** experience in **Industry at the Level of Lecturer (1988-1990)** on various aspects of Hybrid Seed Production Quality Control & Certification.
- **21 years** of **Research** experience in the field of Medicinal and Aromatic Plant Biotechnology. Have published work in peer reviewed journals and guiding of students for research at UG/PG & Doctoral level.
- **~11 years** of **Teaching** experience at UG/PG & Doctoral level.

❖ Research Interests

- Production of bioactive metabolites and therapeutic proteins from *in vitro* cultures
- Propagation & Conservation of Medicinal & Aromatic plants using *in vitro* & *ex vitro* approaches
- Development of bioreactor system for plant cell & organ cultures for elicitation studies
- Genetic transformations: (Ti/Ri) based

❖ Visits abroad

- i. USA for presenting paper (17-27 July, 2015) Gordon Research Conference - Plant Metabolic Engineering 2015 at **Waterville Valley, New Hampshire, USA** along with visit to Fermi Lab, **Naperville, USA** and Morton Arboretum, **Chicago, USA**.
- ii. USA for presenting Paper (11-17 July, 2010) International Conference on Bioinformatics and Computational Biology (BIOCOMP'10); **Monte Carlo Convention Center, Las Vegas, USA**.
- iii. South Africa as Post Doctoral Fellow under National Research Foundation Fellowship under the scheme "Women in Research" (May 2006-April 2007) Worked with Prof. G. Naidoo, Prof. F. Shode & Dr Nisha Singh at School of Biological & Conservation Sciences,

Westville Campus, **University of KwaZulu Natal, Durban, South Africa.**

- iv. Switzerland, France, United Kingdom as accompaniment to spouse (March 1990 - Nov. 1993) Worked as Volunteer Assistant at **Jardin Botanique', Geneve', Switzerland** for Conservation of Endangered and exotic plant species.

❖ **Technical Work Experience**

May 1988 - February 1990 :	Production Assistant, Senior Research Assistant , Pioneer Seed Co. Ltd., Hyderabad
August 1996 – July 1997:	Project Fellow, DBT Sponsored Project , Regional Research Laboratory, Jammu
October 1997 – October 2000:	Senior Research Fellow – CSIR Regional Research Laboratory, Jammu
November 2000 – May 2001 :	Honorary Fellow , Regional Research Laboratory, Jammu
June 2001 – September 2004:	Project Officer – NMITLI Regional Research Laboratory, Jammu
October 2004 – April 2006:	Honorary Fellow , Regional Research Laboratory (now IIIIM), Jammu
May 2006 – April 2007:	Post-doctoral Fellow , National Research Foundation, University of KwaZulu-Natal, Durban, South Africa
May 2007 – June 2007:	Research Associate , School of Biotechnology, Shri Mata Vaishno Devi University, Katra, J&K
July 2007 – July 2008:	Lecturer , School of Biotechnology, Shri Mata Vaishno Devi University, Katra, J&K
July 2008 – 21 Apr 2015:	Sr. Assistant Professor , School of Biotechnology, Shri Mata Vaishno Devi University, Katra, J&K
22 Apr 2015 – Till date:	Associate Professor , Department of Biotechnology, Shri Mata Vaishno Devi University, Katra, J&K

❖ Supervision of students for thesis/dissertations

A. Ph. D Guidance

- i. **Mr. Munish Sharma:** (Supervisor): “*In vitro* studies on selected genotype of *Bacopa monnieri* (L.) for the production of bacosides”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J&K (**Awarded 30.06.2014**)
- ii. **Ms. Saima Khan:** (Co-supervisor): “Identification, isolation, characterization and purification of Phosphohydrolases from *in vitro* cultures of *Atropa accuminata*” (pursuing 2012).
- iii. **Ms. Jyotsna Sharma:** (Co-supervisor): “Studies on regeneration, biochemical profiling and bioactivity analysis in selected medicinal plant species” (pursuing 2013).
- iv. **Ms. Anuja Koul:** (Supervisor): “Phytochemical and Genetic Diversity Assessment on *in vitro* Regeneration aspects in Selected Accessions of *Bacopa monnieri* (L.) Wettst” (pursuing 2014).
- v. **Ms. Savita Sharma:** (Supervisor): “An Investigative Study on *in vitro* Regeneration and Production of Phytochemicals in Selected Medicinal Plant Species” (pursuing 2014).
- vi. **Ms. Vidushi Abrol:** (Co-supervisor): “Studies on secondary metabolites production in drug producing fungi by chemical mutagenesis”(pursuing 2015).

B. M. Sc. Dissertations

- i. **Pooja Sharma:** “Production of Bacosides *in vitro* in *Bacopa monnieri* under the influence of Abiotic stress – Effect of Salicylic acid”; Banaras Hindu University, Varanasi, UP (2004).
- ii. **Khursheed Alam Rather:** “Production of bioactive metabolites from plant cell and tissue cultures”; Floriculture & Landscaping, Allahabad Agriculture Instt., (Deemed University), Allahabad, UP (2005).
- iii. **Rajesh Sharma** – “Isolation of endophytic fungi from medicinal plant *Bacopa monnieri* for extraction and isolation of novel bioactive molecules”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2011).
- iv. **Atiya Parvez** – “Effect of Microwave and Chilling treatments on Bacoside production in *in vitro* cultures of *Bacopa monnieri*”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2011).
- v. **Kamana Jha** – “Effect of fungal extracts as elicitors for bacoside production in *in vitro* cultures of *Bacopa monnieri*”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2011).
- vi. **Salvi Khajuria** – “Effect of pH on bacoside production in *in vitro* cultures of *Bacopa monnieri*”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2012).

- vii. **Jharna Pandotra** – “Effect of light and temperature on bacoside production in *in vitro* cultures of *Bacopa monnieri*”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2012).
- viii. **Kirti Sharma** – “Cholchipoity as a means of induction of variation in *Bacopa monnieri* and their influence on bacoside production in *in vitro* cultures”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2012).
- ix. **Arti Sharma & Sofia Gupta** – “Effect of plant growth media and growth regulators on *in vitro* regeneration of different accessions of *Bacopa monnieri* (Wettset)”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2013).
- x. **Vijay Laxmi & Nisha Saini** – “Effect of cultural practices on *in vitro* regeneration of different accessions of *Withania somnifera* (Dunal) and their phytochemical analysis”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2014).
- xi. **Manoj Kumar** – “Production and characterization of nanoparticles from secondary metabolites of selected medicinal plant species regenerated *in vivo* and *in vitro*”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2015).
- xii. **Sourabh Sharma** – “Micropropagation, biochemical screening and synthesis of bioactive nanoparticles of *Kickxia ramosissima* (Wall.) Janch”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2015).
- xiii. **Mohd Khaliq** – “Optimization of culture media for *in vitro* regeneration and phytochemical analysis of selected accession of *Boerhavia diffusa*”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2015).
- xiv. **Sourabh Sharma** – “Effect of nutrient supplements on *in vitro* regeneration and production of phytochemicals in *Kickxia ramosissima* (Wall.) Janch”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2016).
- xv. **Fidrah Batool & Rajni Sharma** - “Studies on Exploration and Mapping of Medicinal Plant Species of Shri Mata Vaishno Devi University Campus, Kakryal, Katra, J&K”; Department of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2017).

C. B. Tech/B. Sc. Dissertations

- i. **Abhishek Sharma**: “Accumulation of withanolides in methyl jasmonate treated multiple shoot cultures of *Withania somnifera* (L.) Dunal”; Biotechnology, Acharya Institute of Technology, Bangalore, Karnataka (2006).
- ii. **Payal Dhar**: “Production of solasodine from *in vitro* cultures of *Solanum nigrum* under the influence of plant growth regulators”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2009).

- iii. **Shreya Sharma:** “Effect of plant growth regulators on production of bioactive metabolites in *Stevia rebusiana* Bertonii”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2009).
- iv. **Imteyaz Ahmed:** “Effect of elicitors (biotic) on production of bacosides in *Bacopa monnieri*”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2009).
- v. **Surbhi Dubey:** “Effect of elicitors (abiotic) on production of bacosides in *Bacopa monnieri*”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2009).
- vi. **Sneha Shukla:** “Studies on conservation of *Simarouba glauca* (Paradise Tree)”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2009).
- vii. **Garima Choudhary:** “Establishment of shoot cultures in *Raj Harad* using different explants”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2009).
- viii. **Radhika Khandelwal:** “Establishment of shoot culture lines in *Hypericum perforatum* and isolation of proteins”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2010).
- ix. **Barneet Singh:** “Establishment of callus culture lines in *Hypericum perforatum* and phytochemical analysis for secondary metabolite production”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2010)
- x. **Himani Raina:** “Studies on cultural practices on plant regeneration in selected medicinal plants”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2011)
- xi. **Gurleen Kaur:** “Evaluation of *Bacopa monnieri* as a suitable hyperaccumulator for Copper contaminated soil using *in vitro* techniques”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2012)
- xii. **Palak Arora:** “Isolation and characterization of endophytic fungi from *Cedrus deodara* and their bioactive potential”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2013).
- xiii. **Sonakshi Gupta:** “Production of valuable phytochemicals from callus and suspension cultures of *Atropa belladonna*”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2014).
- xiv. **Richa Shrivastava:** “Gene transfer *via Agrobacterium* for Functional Study of OsWRKY42 Transcription Factor of Rice”; School of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2015).
- xv. **Niyaz Ahmad Yatoo & Peerzada Abdul Maajid:** “Phytochemical and Biochemical Analysis in Selected Indigenous Medicinal Plants of Jammu Region”; Department of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (Summer Project 2016).
- xvi. **Chahat Gupta -** “Studies on Exploration and Mapping of Medicinal Plant Species of Shri Mata Vaishno Devi University Campus, Kakryal, Katra, J&K”; Department of Biotechnology, Shri Mata Vaishno Devi University, Kakryal, J & K (2017).
- xvii. **Rigzin Dorje:** “Establishment of shoot cultures in *Simarouba glauca* (Paradise Tree) using different explants”; B. Sc. Department of Forestry,

Doon (P.G.) College of Agriculture Science and Technology, Dehradun (2009).

❖ **Membership of professional societies**

- i. All India Biotech Association
- ii. Indian Botanical Society
- iii. Indian Science Congress (2005, 2013 onwards) (A2290)
- iv. Indian Society of Plant Genetic Resources
- v. Society for Biochemistry & Biotechnology
- vi. Society for Physiology and Biochemistry
- vii. Biological Forum – India (Life Member)
- viii. Scientific Advisory Board (USA)
- ix. Society for Applied Biotechnology (Fellow Member)
- x. Journal of Environmental Research & Development
- xi. The Orchid Society of India (Life member)

❖ **R & D Projects (pursued & on-going)**

- i. **Saffron (*Crocus sativus* L.) Tissue Culture for Development of an Efficient Regeneration System & Genetic Improvement**, sponsored by DBT, Govt. of India (**Project Fellow**, Aug. 1996-July 1997).
- ii. **Development of a reliable procedure for high frequency plant regeneration through tissue cultures and *Agrobacterium* transformations of *Withania somnifera* (L.)**, Senior Research Fellow – CSIR (Oct. 1997-Oct. 2000).
- iii. **Development of Technologies for Pathway Engineering of *Withania somnifera***, sponsored by NMITLI, CSIR, India (**Project Officer 'A'**, June 2001-Sept. 2004).
- iv. **Establishment of a “Herbal Garden – Trikuta Hills” at Shri Mata Vaishno Devi University**, sponsored by National Medicinal Plants Board, Govt. of India (**Principal Investigator**, Nov. 2007-July 2010) for Rs. 10 Lakhs.
- v. **Establishing a “Trikuta Bans Vatika – Bamboo Park & Inventorization of Bamboo Species – in order to assess the National & International Status**, sponsored by National Bamboo Mission, Govt. of India (**Team member**, 2009-2011) for Rs. 10 Lakhs.
- vi. **Special Assistance Programme, DRS – I**, University Grants Commission, Govt. of India, (**Deputy Co-ordinator**, April 2011-2016) for Rs. 64.75 lakhs (on-going).
- vii. **Additional Grant SAP**, University Grants Commission, Govt. of India, (**Deputy Co-ordinator**, April 2011-2016) for Rs. 20.0 lakhs (on-going).
- viii. **Cell and tissue engineering of *in vitro* cultures of *Bacopa monnieri* (L.) to enhance biomass and bacoside production**, Sponsored by UGC (Major Projects), Govt. of India, (**Principal Investigator**, April 2012-2015) for Rs. 13.708 Lakhs (on-going).

❖ Honors & Recognition

- **Sessional Rappoter** in Section XIV Plant Sciences during *93rd Indian Science Congress*; held at Acharya N.G. Ranga Agricultural University, Hyderabad; Jan. 3-7, 2006.
- **Best Poster Award** for poster on “Homology based 3D structure modeling of P27^{SJ}, A novel protein in St. John’s Wort suppresses expression of HIV-1 genome” presented at *National Symposium on Plant Propagation, Conservation, Modification and Characterization*, Institute of Himalayan Bioresource Technology, Palampur, Himachal Pradesh; Apr. 3-4, 2009.
- **Best Poster Award** for poster on “Comparative modelling of 3-D structure for Hemagglutinin (Influenza A) and *InSilico* drug designing for H1N1 Influenza (2009) and toxicity check” presented at UGC sponsored *National Seminar on “Scaling New Zeniths in Biosciences”*, Hans Raj Mahila Maha Vidyalaya, Jalandhar; Nov. 26, 2009.
- **Organizing Secretary** of *National Conference on Metabolomics, Transcriptomics and Proteomics*”, Shruti Auditorium, SGPGIMS, Lucknow; Jan. 29-30, 2011.
- **Third prize for Best Oral Presentation** on “Accumulation of solasodine in cell cultures, proliferative shoots and *in vitro* regenerated plants of *Solanum nigrum* (L.)” presented at *National Conference on Metabolomics, Transcriptomics and Proteomics*”, Shruti Auditorium, SGPGIMS, Lucknow; Jan. 29-30, 2011.
- **Organizer for “Special Tree Talk”** at Shri Mata Vaishno Devi University, Katra; Mar. 12, 2011.
- **Fellow Award 2011** in recognition for outstanding achievements and contributions in the field of Plant biotechnology, Society for Applied Biotechnology.
- **Second Prize for Best Oral Presentation** on “Influence of support matrix on *in vitro* shoot proliferation of *Bacopa monnieri* (L.) Wettst. enriched with bacoside accumulation” *Biologix* (edt.) Neetu Singh & Ajay Kumar, ISBN No.: 81-88919-13-6, *One-day National Seminar on Emerging Trends in Biotechnological Research (ETBR)-2012* organized by Department of Biotechnology, Mewar Institute of Management (affiliated to CCS University, Meerut), Ghaziabad, UP; Oct. 28, 2012.
- **Young Scientist Award** in recognition for research activity and paper presentation on “*Bacopa monnieri*: A suitable phytoremediant for Copper Contaminated soils” at the National Conference on Energy, Environment and Biotechnology Research (NCEEER-2013), Department of Biotechnology, Mewar Institute, Ghaziabad, UP; Oct. 5-6, 2013.
- **Councilor** for The Orchid Society of India, Punjab University, Chandigarh; 2013.
- **Best Poster Presentation Award** for Poster Presentation on “Effect of plant growth regulators on regeneration in five accessions of *Bacopa monnieri* (L.) Wettst” at the 101st Indian Science Congress 2014, University of Jammu, Jammu; Feb. 3-7, 2014.

- **National Organizing Committee Member** for National Conference on Orchids - Conservation, Improvement and Sustainable Development, organized by TOSI jointly with and at Kerala Agriculture University, Vellanikkara, Thrissur (Kerala); Mar. 13-15, 2014.
- **Faculty Coordinator** for Organization of Training Programme on “College to Corporate Training on Soft Skills” for students of SMVDU by Soft Skills Training Experts, Noble Institute for Premier Studies & Technologies (NIPSTec) Limited, New Delhi under NSDC Star Scheme (an Initiative of Govt. of India) at SMVDU, Katra; Apr. 12-27, 2014.
- **Resource Person** for “Advanced Techniques in Botanical Sciences” at One day Workshop at PG Dept of Botany, Hans Raj Mahila Mahavidyalaya, Jalandhar; Nov. 10, 2014.
- **Best Paper Presenter Award** for paper on “Medicinal Plant Biotechnology” at Two Day UGC Sponsored National Workshop ABC of Fitness Holistic approach through Diet, Exercise And Stress Management, St. Francis College for Women, Hyderabad; Jan. 16-17, 2015.
- **Local Organizing Secretary** for National Conference on “Orchids Science and Commerce: Integration of Medicinal Orchids, Sustainable Development and Societal Benefits” at School of Biotechnology, SMVDU in collaboration with The Orchid Society of India, Punjab University, Chandigarh; Feb. 13-15, 2015.
- **Best Poster Award Poster Presentation** for 103rd Indian Science Congress 2016 on “*In vitro* regeneration, biochemical screening and synthesis of bioactive nanoparticles from shoot-tip explants of *Kickxia ramosissima* (Wall.) Janch” at University of Mysuru, Mysore; Jan. 3-7, 2016.
- **International Plant Scientist Award 2016** in appreciation of outstanding contribution and research in the field of Plant Tissue Culture and Genetic Engineering by Academy of Plant Scientists, India (APSI) at 26th APSI Meet and National Conference on Emerging Trends in Biotechnology for Agriculture, Medicine and Environment at Mahila P. G. Mahavidyalaya, Jodhpur, Rajasthan; Nov.18-19, 2016.
- **Best Presentation Award for Paper Presentation** for National Conference on Emerging Trends in Biotechnology for Agriculture, Medicine and Environment on “Modulation Of Secondary Metabolite Production Through Cell Manipulative Approaches In Selected Medicinal Plants” at Mahila P. G. Mahavidyalaya, Jodhpur, Rajasthan; Nov.18-19, 2016.
- **Organizing Secretary** for 470th Tree Talk and 6th Tree Talk Foundation Day Celebrations at SMVD University; Dec. 19, 2016.
- **Organizing Secretary** for National Science Day Celebrations 2017 Faculty of Sciences, SMVD University; Feb. 28, 2017.
- **Third Prize for Best poster Presentation** for National Conference cum Workshop on “Biology, Culture, Conservation, Commercialization & Sustainable Utilization of Medicinally & Floriculturally Important Orchids on “Biology, Culture, Conservation, Commercialization & Sustainable

utilization of Medicinally & Floriculturally Important orchids” organized by The Orchid Society of India (TOSI) Punjab University, Chandigarh at Graphic Era University, Dehradun; 24-26 Mar., 2017, pp: 22.

❖ **Referee for scientific journals**

- Industrial Crops and Products; ISSN No.: 0926-6690
- Natural Product Research; ISSN No.: 1478-6419
- African Journal of Food Science; ISSN No.: 1996-0794
- Biological Forum; ISSN No.: 0975-1130
- Biotechnology Progress; ISSN No.: 8756-7938
- Australian Journal of Crop Science; ISSN No.: 1835-2707
- Journal of Agricultural Science and Technology: ISSN No.: 2345-3737(Online)

❖ **Research Publications – 19**

❖ **Books Authored – 02**

❖ **Book chapters/Conference Proceedings – 07**

❖ **Protein Model Submissions – 05**

❖ **Conference Publications – 52**

❖ **Invited Lectures – 24**

Research publications (Dr Sharada M. Potukuchi)

1. **M. Sharada**, A. Ahuja and M.K. Kaul. **(2003)** Regeneration of plantlets *via* callus cultures in *Celastrus paniculatus* Willd. – A Rare Endangered Medicinal Plant, *J. Plant Biochem & Biotech*; 12: 1-5.
2. *In vitro* regeneration in *Celastrus paniculatus* Willd. **(2003)** CSIR News; 53 (2): 19-20.
3. P.K. Khanna, A. Ahuja, **M. Sharada**, G. Ram, K. Koul and M.K. Kaul. **(2006)** Regeneration *via* organogenesis in callus cultures of *Argyrolobium roseum* Jaub and Spach – an important antidiabetic legume. *Biologia Plantarum*; 50 (3): 417-420.
4. **M. Sharada**, A. Ahuja, K.A. Suri, S.P. Vij, R.K. Khajuria, V. Verma and A. Kumar. **(2007)** Withanolide production by *in vitro* cultures of *Withania somnifera* (L) Dunal and its association with differentiation. *Biologia Plantarum*; 51 (1): 161–164.
5. Ashok Ahuja, Devinder Kaur, **Mallubhotla Sharada**, Arun Kumar, Krishan Avtar Suri and Prabhu Dutt. **(2009)** Glycowithanolides accumulation in *in vitro* shoot cultures of Indian Ginseng (*Withania somnifera* Dunal). *Natural Product Communications*; 4 (4): 479-482.
6. Ashish Gupta, Santosh Kumar Pal, Jitendra Narayan and **Sharada M. Potukuchi**. **(2009)** InSilico structure prediction of P27^{SJ}, a novel protein in St. John’s Wort, that suppresses expression of HIV-1 genome. *Bioinformatics* 1(1): 47-51.
7. Nisha Singh, **Sharada M. Potukuchi** and Francis Oluwole Shode. **(2009)** Evaluation of important triterpenes in field and *in vitro* plants of

- Syzygium cordatum*. *Journal of Environmental Research and Development*, 3(3): 6-9.
8. Barneet Singh, Ashish Gupta and **Sharada M. Potukuchi**. (2009) Comparative modeling and analysis of 3-D structure of Hsp 70, in *Cancer irroratus*. *Biological Forum – An International Journal* ISSN No.: 0975-1130; 1(2): 1-4.
 9. **Sharada Mallubhotla**, A. Ahuja, Arun Kumar, R.D. Sharma, V. Verma, K.A. Suri and S.P. Vij. (2010) Field performance, RAPD analysis and withanolide profiling in micropropagated plants of WSR - An elite cultivar of Indian Ginseng (*Withania somnifera* L. Dunal). *Acta Horticulture* (ISHS) 865: 199-207.
 10. Ashish Kumar, Prakhar Bisht, Ashish Gupta, **Sharada M Potukuchi** and A K Srivastava. (2011) Comparative Modeling Study of RNA Polymerase C of *Hypericum perforatum*. *Journal of Computational Intelligence in Bioinformatics (special issue)*, 4(1): 47-54.
 11. Munish Sharma, Himani Raina, Vijeshwar Verma, **Sharada Mallubhotla** and Ashok Ahuja (2012) Synthetic seeds a viable approach for conservation and propagation of phytoremediant herb: *Bacopa monnieri* (L.) Wettst. *Journal of Environmental Research and Development*, 7(1A): 399-404.
 12. Munish Sharma, Ravi Kant Khajuria and **Sharada Mallubhotla** (2013) Annual Variation in Bacoside Content of *Bacopa Monnieri* (L.) Wettst plants. *International Journal of Pharma and Bio Sciences*, 4(4): 266-271.
 13. Anuja Koul, Arti Sharma, Sofia Gupta and **Sharada Mallubhotla** (2014) Cost effective protocol for micropropagation of *Bacopa monnieri* using leaf explants. *International Journal of Science and Research*, 3(4): 210-212.
 14. Munish Sharma, Ashok Ahuja, Rajinder Gupta and **Sharada Mallubhotla** (2014) Bacoside production under the influence of abiotic elicitors in shoot cultures of *Bacopa monnieri* (L.). *Natural Product Research*, DOI:10.1080/14786419.2014.986657.
 15. Abijeet Singh Mehta, Kirti Snigdha, **M. Sharada Potukuchi** and Panagiotis A Tsonis (2015) Comparative sequence- and structure-inspired drug design for PilF protein of *Neisseria meningitides*. *Human Genomics*, 9(5): DOI 10.1186/s40246-015-0027-1.
 16. Koul Anuja, Kushwaha Manoj, Gupta Ajai and **Mallubhotla Sharada** (2015) Regenerative potential and phytochemical diversity among five accessions of *Bacopa monnieri* (L.) Wettst. *International Journal of Pharma and Bio Sciences*, 6(3): 746-756.
 17. Sharma Munish, Gupta Rajinder, Khajuria Ravi Kant, **Mallubhotla Sharada** and Ahuja Ashok. (2015) Bacoside biosynthesis during *in vitro* shoot multiplication in *Bacopa monnieri* (L.) grown in Growtek and Air Lift Bioreactor. *Indian Journal of Biotechnology*, 14(4): 547-551.

18. Sonia Chowdhary, Gurleen Kour, Rajinder Gupta, Deepika Slathia and **Sharada Mallubhotla**. (2016) Evaluation of *Bacopa monnieri* as a suitable hyperaccumulator for copper contaminated soil using *in vitro* techniques. *International Journal for Scientific Research and Development*, 3(11): 624-628 (Impact factor: 2.39).
19. Saima Khan, Meenu Katoch, **Sharada Mallubhotla**, Suphla Gupta, Manju Sambyal and Ashok Ahuja. (2016) Assessment of acid phosphatase production by *in vitro* cultures of *Atropa acuminata*. *Plant Tissue Culture & Biotechnology*, 26(1):

Book Publication

1. **Sharada Mallubhotla**, Ashok Ahuja and Suraj Prakash Vij. (2012) Indian Ginseng *Withania somnifera* (L.): Biology & Biotechnology", LAP Lambert Academic Publishers, OmniScriptum GmbH & Co. KG, Germany; 213 pages, Project number 59900; ISBN No. 978-3-659-18427-7.
2. Rajesh Sharma, JP Sharma and **Sharada M. Potukuchi**. (04.09.2014) "Endophytes - Source of novel Bioactive molecules", LAP Lambert Academic Publishers, OmniScriptum GmbH & Co. KG, Germany; 56 pages; ISBN No. 978-3-659-22367-9.

Book Chapters/Conference Proceedings

1. A. Ahuja, K.K. Gupta, R.K. Khajuria, Aradhana Sharma, Arun Kumar, **M. Sharada** and M.K. Kaul. (2005) Production of Bacoside by multiple shoot cultures and *in vitro* regenerated plantlets of selected cultivar of *Bacopa monnieri* (L) Wettst. *Plant Biotechnology & its Applications in Tissue Culture, Vol 1*. Chapter 17: pp. 160-167. (Eds. Ashwini Kumar, Shikha Roy and Sudhir K. Sopory), I.K. International Pvt. Ltd., New Delhi, India.
2. **Mallubhotla Sharada**, A. Ahuja and S.P. Vij. (2008) Application of Biotechnology in Indian Ginseng (Ashwagandha): Progress and prospects. *Recent Advances in Plant Tissue Culture and its Applications*. Chapter 41: pp 645-667. (Eds. Ashwini Kumar and Sudhir K. Sopory) I.K. International Publishers Pvt. Ltd., New Delhi, India.
3. R.K. Sharma, A. Ahuja, **M. Sharada** and C.M. Govil. (2009) Biochemical changes associated with morphogenesis in Saffron (*Crocus sativus* L.). *Plant Tissue Culture and Molecular Markers: Their role in Improving Crop Productivity*. Chapter 37: pp. 531-547. (Eds. Ashwini Kumar and N.S. Shekhawat) I.K. International Publishers Pvt. Ltd., New Delhi, India.
4. **Sharada Mallubhotla** and Ankita Gupta. (2009) Status report on conservation and cultivation of Indian Bamboo through tissue culture. *Proceedings of Stake holder's one day Workshop on National Bamboo Mission* (Jammu & Kashmir); pp: 43-52, SMVD University, Kakryal, J&K.

5. **Sharada M. Potukuchi**, Surbhi Dubey, Imteyaz Ahmed, Munish Sharma and Ashok Ahuja. (2009) Modulation of plant metabolite production through elicitation: production of bacosides from *Bacopa monnieri*. *Proceedings of International Colloquium on Biotechnology*; pp: 16-31, DAV College, Jalandhar, India.
6. Ashish Gupta, Anshika Malaviya, **Sharada M. Potukuchi** and Jitendra Narayan. (2010) Three Dimensional structure modeling and analysis of Ribulose 1,5-bis phosphate carboxylase of *Hypericum perforatum*. *Conference Proceeding of International Conference on Bioinformatics and Computational Biology (BIOCOMP'10)*: Vol 2: 807-810; Las Vegas, Nevada, USA.
7. **Potukuchi, SM.** (2012) Chapter "Protoplast Isolation" in the Training Manual under the Plant Tissue Culture Section, during *Short-Term Course on "Cytogenetics, Plant Molecular Genetics and Tissue Culture"* conducted by the Department of Botany at P.G. College of Science, Osmania University, Saifabad, Hyderabad from 2-13 Jan. 2012: pp 57-58.

Submission of structures to Protein Model Data Base (PMDB)

1. Ashish Gupta and **M. Sharada Potukuchi**. 30/12/2008. Predicted and submitted structure of Cytochrome b protein of *Procellaria parkinsoni* to Protein Model Data Base (<http://mi.caspur.it/PMDB/>) PMDB ID- PM0075595.
2. Ashish Gupta, Varsha Gupta, Santosh Pal, J. Narayan, **Sharada Potukuchi** and V. Verma. 30/12/2008. Predicted and submitted structure of ATP synthase Beta subunit protein of *Hypericum perforatum* to Protein Model Data Base (<http://mi.caspur.it/PMDB/>) PMDB ID- PM0075596.
3. Ashish Gupta, Varsha Gupta, J. Narayan, Santosh Pal, **Sharada Potukuchi** and V. Verma. 30/12/2008. Predicted and submitted structure of ribulose 1,5-bisphosphate carboxylase protein of *Hypericum perforatum* to Protein Model Data Base (<http://mi.caspur.it/PMDB/>) PMDB ID- PM0075597.
4. Ashish Gupta, Ankur Mohan, Varsha Gupta, J. Narayan, Santosh Pal, **Sharada Potukuchi** and V. Verma. 31/12/2008. Predicted and submitted structure of Putative Histone 2A protein of *Hypericum perforatum* to Protein Model Data Base (<http://mi.caspur.it/PMDB/>) PMDB ID- PM0075598.
5. Sharma, M., **Potukuchi, S.M.** and Ahuja, A. 30/11/2016. *Achromobacter xylosoxidans* strain SMVDU-PTC-01 16S ribosomal RNA gene, partial sequence, to NCBI (www.ncbi.nlm.nih.gov/nucleotide) GenBank submission ID- KY268293.

Presentations in National & International Symposiums/Conferences

1. **M. Sharada**, A. Ahuja, K.A Suri, N.K. Satti, R.D. Sharma, Arun Kumar and V. Verma. 2003. Pattern of Morphogenesis and Production of

Withanolides in *Withania somnifera* (Linn) Dunal *in vitro*. **Presented at:** *National Symposium on Plant Biotechnology: Role in sustainable development & 25th Meeting of Plant Tissue Culture Association (India)* Department of Botany, University of Rajasthan, Jaipur. February 17-19: pp. 118.

- A. Ahuja, K.K. Gupta, R.K. Khajuria, Aradhana Sharma, Arun Kumar, **M. Sharada** and M.K. Kaul. 2003. Production of Bacosides from multiple shoot cultures and *in vitro* regenerated plantlets of selected cultivar of *Bacopa monnieri* (L) Wettst. **Presented at:** *National Symposium on Plant Biotechnology: Role in sustainable development & 25th Meeting of Plant Tissue Culture Association (India)* Department of Botany, University of Rajasthan, Jaipur. February 17-19: pp. 117.
2. **M. Sharada**, A. Ahuja, K.A. Suri, V. Verma, Arun Kumar, M.K. Kaul and G.N. Qazi. 2004. Withanolide production in callus and cell suspension cultures of Ashwagandha [*Withania somnifera* (L.) Dunal]. **Poster presentation at:** *CBISNF – International Conference on Chemistry Biology Interface: Synergistic new Frontiers*; Vigyan Bhawan, New Delhi; November 21-26: pp. P25-24.
3. **M. Sharada**, A. Ahuja, S.P. Vij, K.A. Suri, R.K. Khajuria, V. Verma and G.N. Qazi. 2005. An application of TLC and LC-MS for identification of selected withanolides in tissue cultures of *Withania somnifera* (L.) Dunal. **Presented at:** *First J&K State Science Congress*; University of Jammu, Jammu; February 7-9: pp. 72.
4. **M. Sharada**, S.P. Vij and A. Ahuja. 2006. Excised root cultures as an approach for propagation of Indian Ginseng [*Withania somnifera* (L.) Dunal]. **Presented at:** *93rd Indian Science Congress*; Acharya N.G. Ranga Agricultural University, Hyderabad; January 3-7: pp. 95.
5. **M. Sharada**, S.P. Vij and A. Ahuja. 2006. Studies on callus induction and factors controlling organogenesis in Ashwagandha [*Withania somnifera* (L.) Dunal]. **Poster Presentation at:** *93rd Indian Science Congress*; Acharya N.G. Ranga Agricultural University, Hyderabad; January 3-7: pp. 94.
6. **M. Sharada**, A. Ahuja, S.P. Vij, R.D. Sharma and V. Verma. 2006. Randomly amplified polymorphic DNA (RAPD) analysis of micropropagated plants of *Withania somnifera* (L.) Dunal. **Poster Presentation at:** *International Symposium on Frontiers in Genetics – Retrospect and Prospect*; Department of Genetics, Osmania University, Hyderabad; January 8-10: pp. 99.
7. **M. Sharada**, A. Ahuja, K.A. Suri, S.P. Vij and R.K. Khajuria. 2006. Cell culture approaches for withanolide production in Ashwagandha [*Withania somnifera* (L.) Dunal]. **Poster Presentation at:** *International Symposium on Frontiers in Genetics – Retrospect and Prospect*; Department of Genetics, Osmania University, Hyderabad; January 8-10: pp. 154.
8. Nisha Singh and Sharada M. Potukuchi. 2006. Phytocompound production and evaluation in *in vitro* culture systems. **Poster Presentation at:** *International Congress of Plant Tissue Culture &*

- Biotechnology*, International Convention Center (BICC) Beijing, China; August 13-18: pp. P1449.
9. Ashok Ahuja, Devinder Kaur, **M. Sharada**, KA Suri and P. Dutt. 2008. Glycowithanolides Isolation and Identification from *Withania somnifera* tissue cultures. **Presented at National Symposium on Plant Biotechnology for Conservation, Characterization & Crop Improvement**, Dept. of Biotechnology, MS University, Udaipur, Rajasthan; 08 - 10 Feb.: pp. 25.
 10. **Mallubhotla Sharada**, Khursheed Alam Rather, K.K. Gupta, R.K. Khajuria and Ashok Ahuja. 2008. Isolation & Characterization of Bioactive Tinosporaside & Columbin from callus cultures of Giloe [*Tinospora cordifolia* (Wild. Miers ex. Hook)]. **Poster Presentation at National Symposium on Plant Biotechnology for Conservation, Characterization & Crop Improvement**, Dept. of Biotechnology, MS University, Udaipur, Rajasthan; 08 - 10 Feb.: pp.67.
 11. **Sharada Mallubhotla** and Ankita Gupta. 2008. Status report on conservation and cultivation of Indian Bamboo through tissue culture. **Presented at Stake Holder's One Day Workshop on the National Bamboo Mission**, Department of Biotechnology, Shri Mata Vaishno Devi University, Katra; 8 Dec.
 12. **Mallubhotla Sharada**, Ashok Ahuja, V. Verma and K.A. Suri. 2008. Field performance, RAPD and withanolide profiling in micropropagated plants of WSR - An elite variety of Indian Ginseng (*Withania somnifera* L. Dunal). **Presented at IV International Symposium on Acclimatization and Establishment of Micropropagated Plants**, (ISHS), In Vitro International (P) Ltd., Bangalore, Karnataka, India; 8 - 12 Dec.: pp. 68.
 13. Ashish Gupta, Varsha Gupta, Santosh Kumar Pal, Jitendra Narayan, M. Sharada Potukuchi and V. Verma. 2009. Structure prediction of plant protein and it's use in drug designing. **Poster Presentation at National Conference on Drug Discovery & Development**, held at Sri Venkateswara College, University Of Delhi, Delhi; 21 – 23 Jan.: pp. 45.
 14. Ashish Gupta, Varsha Gupta, Santosh Kumar Pal, Jitendra Narayan, Sharada Mallubhotla and V. Verma. 2009. Prediction of three dimensional structure of a novel protein that suppresses expression of HIV-1 genome – P27^{SJ} from *Hypericum perforatum*. **Presented at International Conference on Open Source for computer aided Drug Discovery**, Institute of Microbial Technology, Chandigarh, India; 22 - 26 March: pp.42.
 15. **M. Sharada**, Devinder Kaur, V. Verma, Arun Kumar and Ashok Ahuja. 2009. Protoplast isolation in Ashwagandha [*Withania somnifera* (L.) Dunal] 'AGB002': Optimization of isolation conditions. **Presented at National Symposium on Plant Propagation, Conservation, Modification and Characterization**, Institute of Himalayan Bioresource Technology, Palampur, Himachal Pradesh; 03 - 04 Apr.: pp. 21.
 16. Meenu Katoch, Manju Sambyal, M. Sharada, Shabeer Ahmed, Irshad Ahmad and Ashok Ahuja. 2009. Assessment of genetic fidelity of micropropagated *Withania coagulans* plantlets by RAPD marker assay. **Poster presentation at National Symposium on Plant Propagation**,

- Conservation, Modification and Characterization*, Institute of Himalayan Bioresource Technology, Palampur, Himachal Pradesh; 03 - 04 Apr.: pp. 66.
17. Ashish Gupta, Santosh Kumar Pal, Jitendra Narayan, **M. Sharada Potukuchi** and V. Verma. 2009. Homology based 3D structure modeling of P27^{SJ}, A novel protein in St. John's Wort suppresses expression of HIV-1 genome. **Poster presentation at National Symposium on Plant Propagation, Conservation, Modification and Characterization**, Institute of Himalayan Bioresource Technology, Palampur, Himachal Pradesh; 03 - 04 Apr.: pp. 72.
 18. Barneet Singh, Sharada M. Potukuchi and Rajnikant Namdeo. 2009. Comparative modelling of 3-D structure for Hemagglutinin (Influenza A) and *InSilico* drug designing for H1N1 Influenza (2009) and toxicity check **Poster presentation at International Colloquium on Biotechnology**, Department of Biotechnology, DAV College, Jalandhar; from 27-28 Nov.: pp. 113.
 19. Swati Trisal, Ankita Magotra and Sharada M. Potukuchi. 2009. Carbon sequestration - A method to combat global warming and climate change. **Poster presentation at International Colloquium on Biotechnology**, Department of Biotechnology, DAV College, Jalandhar; from 27-28 Nov.: pp. 117.
 20. Ashish Gupta, Jitendra Narayan, M. Sharada Potukuchi. 2010. Three Dimensional Structure Modelling and Analysis of Ribulose 1,5 Bisphosphate Carboxylase of *Hypericum perforatum*. **Poster presentation at The Eighth Asia Pacific Bioinformatics Conference (APBC 2010)**, Indian Institute of Science (IISc), Bangalore, Karnataka, 18-21 Jan. **(Poster ID 9)**.
 21. Ashish Gupta, Anshika Malaviya, **Sharada M. Potukuchi** and Jitendra Narayan. 2010. Three Dimensional structure modeling and analysis of Ribulose 1,5-bis phosphate carboxylase of *Hypericum perforatum*. **Presented at International Conference on Bioinformatics and Computational Biology (BIOCOMP'10); Monte Carlo Convention Center, Las Vegas, USA, 12-15 July (Paper ID BIC 3150)**.
 22. Payal Dhar, Munish Sharma, Vijeshwar Verma, Ashok Ahuja and Sharada Mallubhotla. 2011. Accumulation of solasodine in cell cultures, proliferative shoots and *in vitro* regenerated plants of *Solanum nigrum* (L.)” **Presented at National Conference on Metabolomics, Transcriptomics and Proteomics (NCMTP-2011)**”, Shruti Auditorium, SGPGIMS, Lucknow, 29-30 Jan.
 23. Ashish Kumar, Prakhar Bisht, Ashish Gupta, Sharada M Potukuchi and A K Srivastava. 2011. “Comparative Modeling Study of RNA Polymerase C of *Hypericum perforatum*” **Poster presentation at National Conference on Metabolomics, Transcriptomics and Proteomics (NCMTP-2011)**, Shruti Auditorium, SGPGIMS, Lucknow, 29-30 Jan.
 24. Sharma M., Raina H., Ahuja A., Verma V. and Mallubhotla S. 2011. Synthetic seeds a viable approach for conservation and propagation of phytoremediant herb - *Bacopa monnieri* (L.) Wettst. **4th International**

Congress of Environmental Research (ICER-11), SVNIT, Surat, Gujarat, 15-17 Dec.

25. Sharma M., Ahuja A., Khajuria R.K., **Mallubhotla S.** 2012 Influence of support matrix on *in vitro* shoot proliferation of *Bacopa monnieri* (L.) Wettst. enriched with bacoside accumulation. **Presented at** *Biologix Proceedings of One-day National Seminar on Emerging Trends in Biotechnological Research (ETBR)-2012*, organized by Department of Biotechnology, Mewar Institute of Management (affiliated to CCS University, Meerut), Ghaziabad, UP, 28 Oct. (edt. Neetu Singh & Ajay Kumar): pp. 217. ISBN No.: 81-88919-13-6.
26. Kamana Jha, Ravikant Khajuria, Ashok Ahuja, Munish Sharma, Vijeshwar Verma and Sharada Mallubhotla. 2012. Fungal extracts as elicitors for bacoside production in *in vitro* cultures of *Bacopa monnieri*. **Poster Presentation at** *International Conference on Industrial Biotechnology (ICIB-2012)*, organized by Department of Biotechnology Punjabi University, Patiala Department of Biotechnology Punjabi University Patiala, 21-23 Nov. 2012.
27. Munish Sharma, R.K. Jolly, Ravi Kant Khajuria, Ashok Ahuja, **Sharada Mallubhotla**. 2013. Bacoside production from multiple shoot cultures of *Bacopa monnieri* L. using air lift bioreactor. **Presented at** *First International and Third National Conference on Biotechnology, Bioinformatics and Bioengineering*, organized by Society for Applied Biotechnology at Hotel Udayee International, Tirupati, Andhra Pradesh, 28-29 June: pp. 143.
28. Chowdhary Sonia, Kour Gurleen, Sharma Munish, Gupta Rajinder, Slathia Deepika and **Mallubhotla Sharada**. 2013. *Bacopa monnieri*: A suitable phytoremediant for Copper contaminated soils. **Presented at** *National Conference on Energy, Environment and Biotechnology Research (NCEEER)-2013*, organized by Department of Biotechnology, Mewar Institute of Management, Ghaziabad (U.P.). 5-6 Oct.: pp. 297. ISBN No. 81-88919-16-0.
29. Koul Anuja, Sharma Arti, Gupta Sofia and Mallubhotla Sharada. Cost effective protocol for micropropagation of *Bacopa monnieri* using leaf explants. **Poster Presentation at** *National Conference on Energy, Environment and Biotechnology Research (NCEEER)-2013*, organized by Department of Biotechnology, Mewar Institute of Management, Ghaziabad (U.P.). 5-6 Oct. 2013: pp. 293, ISBN No. 81-88919-16-0.
30. Koul Anuja and Mallubhotla Sharada. Effect of plant growth regulators on regeneration in five accessions of *Bacopa monnieri* (L.) Wettst. **Poster Presentation at** the *101st Indian Science Congress 2014*, University of Jammu, Jammu; 3-7 Feb. 2014: pp. 29.
31. **Mallubhotla Sharada** and Sharma Munish. Improved bacoside production using abiotic elicitors in shoot cultures of *Bacopa monnieri* (L.). **Presented at** the *101st Indian Science Congress 2014*, University of Jammu, Jammu; 3-7 Feb. 2014: pp. 430.
32. Koul Meenakshi, Koul Anuja, Laxmi Vijay, Saini Nisha, Verma Vijeshwar and Mallubhotla Sharada. Establishment of *in vitro* culture lines and biochemical analysis of *Withania somnifera*. **Poster**

- Presentation** at 102nd Indian Science Congress 2015, University of Mumbai, Mumbai; 3-7 Jan. 2015; pp. 346.
33. **Mallubhotla Sharada** Medicinal Plant Biotechnology. **Presented at Two Day UGC Sponsored National Workshop ABC of Fitness Holistic approach through Diet, Exercise And Stress Management**, St. Francis College for Women, Hyderabad; 16-17 Jan. 2015.
 34. Koul Anuja, Sharma Jyotsna, Shankarayan Raju and **Mallubhotla Sharada**. Germplasm Conservation and *in vitro* regeneration in medicinally important plants of family Solanaceae. Poster Presentation at *National Conference on Advances in Agricultural Sciences & Biotechnology* organized by DAV College Jalandhar; 28 Feb 2015, pp.28.
 35. Sharma Jyotsna, Koul Anuja, Shankarayan Raju and Mallubhotla Sharada. *In vitro* flowering and plantlet regeneration in *Kickxia ramosissima*- A medicinally important plant. Poster Presentation at *National Conference on Advances in Agricultural Sciences & Biotechnology* organized by DAV College Jalandhar; 28 Feb 2015, pp.27-28.
 36. Savita Sharma and Mallubhotla Sharada. Medicinal Orchid Biotechnology: Progress and Prospects. Poster Presentation at *National Conference on "Orchids Science and Commerce: Integration of Medicinal Orchids, Sustainable Development and Societal Benefits"* organized by School of Biotechnology, SMVDU along with The Orchid Society of India, Punjab University, Chandigarh; 13-15 Feb. 2015, pp. 77.
 37. Saima Khan, Meenu Katoch, Suphla Gupta, Sharada Mallubhotla, Manju Sambyal and Ashok Ahuja. Identification of Acid Phosphatase and its Production Response to Phosphorous Availability in *Atropa acuminata* Tissue Cultures. **Presented at 10th J&K Science Congress**, organized by University of Jammu, Jammu; 14-16 Mar. 2015, pp. 21, BIO 024.
 38. Ashok Ahuja, Sharada M., Munish Sharma. Microbial elicitors application in plant secondary metabolites production using *in vitro* plant tissue culture system; 2 case studies. **Presented at National Conference on Recent Trends in Applied Microbiology, Human Health & Environment**, Department of Microbiology Bundelkhand University, Jhansi; Mar. 2015, pp. 128.
 39. **Mallubhotla S.**, Sharma M. and Ahuja A. Production of Bacosides from Shoot Cultures of *Bacopa monnieri* (L.) Cultured in Growtek and Air Lift Bioreactor. **Poster Presentation at Gordon Research Conference - Plant Metabolic Engineering 2015** at Waterville Valley, USA; 19-24 July 2015, Poster No. 49.
 40. Vidushi Abrol, Sharada Mallubhotla and Sandeep Jaglan. Breast Cancer Treatments: Hormonal Therapy & Alternative Medicine. **Poster Presentation at CRAB-E-CON 2015 One Day Conference on Breast Cancer Update**, organized jointly by North Zone Association of Radiation Oncologists of India, Maharishi Dayanand Hospital, Jammu

and Shri Mata Vaishno Devi University, Katra; at Hotel Fortune Rivera, Jammu; 24 Oct. 2015.

41. Savita Sharma and Mallubhotla Sharada. Optimization of culture media for Micropropagation and production of boeravinones in *Boerhavia diffusa*. **Poster Presentation at 103rd Indian Science Congress 2016**, University of Mysuru, Mysore; 3-7 Jan. 2016, pp. 268.
42. Jyotsna Sharma and Mallubhotla Sharada. *In vitro* regeneration, biochemical screening and synthesis of bioactive nanoparticles from shoot-tip explants of *Kickxia ramosissima* (Wall.) Janch. Best Poster Award Presentation at 103rd Indian Science Congress 2016, University of Mysuru, Mysore; 3-7 Jan. 2016, pp. 53.
43. Savita Sharma, Neha Rani, Anuja Koul, Jyotsna Sharma and Sharada Mallubhotla. "Development of Protocol for Efficient Micropropagation of *Boerhaavia diffusa* L. Using Shoot tip Explants". **Oral Presentation at 4th J&K Women Science Congress (JKWSC)**, Govt. College for Women, Gandhinagar, Jammu; 1-3 Sept. 2016, pp: 36.
44. Anuja Koul, Shagun Sharma, Jyotsna Sharma, Vijeshwar Verma and Sharada Mallubhotla. "Computational propensity of Bacoside A3 a key metabolite of *Bacopa monnieri*: Potential therapeutic target in Alzheimer's disease". **Oral Presentation at 4th J&K Women Science Congress (JKWSC)**, Govt. College for Women, Gandhinagar, Jammu; from 1-3 Sept. 2016, pp: 37.
45. Jyotsna Sharma, Sourabh Sharma, Anuja Koul, Savita Sharma, Raju Shankarayan and Sharada Mallubhotla. "Effect of Nutrient Supplements on *in-vitro* Regeneration in *Kickxia ramosissima* (Wall.) Janch". **Oral Presentation at 4th J&K Women Science Congress (JKWSC)**, Govt. College for Women, Gandhinagar, Jammu; from 1-3 Sept. 2016, pp: 19.
46. Anuja Koul and Sharada Mallubhotla. "Studies on Optimization of Conditions for Maximizing Biomass and Bacoside Production in Suspension Cultures of *Bacopa monnieri* (L.) Wettst". **Oral Presentation at National Conference on Emerging Trends in Biotechnology for Agriculture, Medicine and Environment** organized by Mahila P. G. Mahavidyalaya, Jodhpur, Rajasthan; 18-19 Nov., 2016, pp: 48.
47. Savita Sharma and Sharada Mallubhotla. "Influence of Nutrient Supplements on *in vitro* Shoot Regeneration of Medicinally Important Plant *Boerhaavia diffusa* L". **Oral Presentation at National Conference on Emerging Trends in Biotechnology for Agriculture, Medicine and Environment** organized by Mahila P. G. Mahavidyalaya, Jodhpur, Rajasthan; 18-19 Nov., 2016, pp: 52.
48. Jyotsna Sharma, Raju Shankarayan, and Sharada Mallubhotla. "High Frequency *in vitro* Regeneration System for Conservation of *Kickxia ramosissima* (Wall) Janch: A Medicinally Important Herb". **Oral Presentation at National Conference on Emerging Trends in Biotechnology for Agriculture, Medicine and Environment** organized by Mahila P. G. Mahavidyalaya, Jodhpur, Rajasthan; 18-19 Nov., 2016, pp: 50.

49. Jyotsna Sharma, Manoj Kumar, Sourabh Sharma, Anuja Koul, Savita Sharma, Raju Shankarayan, Mohita Sharma, Vinay Dhiman and Sharada Mallubhotla. "Characterization and Antimicrobial Activity Analysis of Silver Nanoparticles Synthesized from Field Grown and *In Vitro* Regenerated Shoots Of *Kickxia ramosissima*". **Poster Presentation at** National Conference on Recent Advances in Materials Science and Spectroscopy NCRAMSS-2017, Department of Physics, SMVDU; 15-17 Feb. 2017. PP: 53, pp: 72-73.
50. Anuja Koul, Manoj Kumar, Jyotsna Sharma, Savita Sharma, Mohita Sharma, Vinay Dhiman and Sharada Mallubhotla. "Biogenic Synthesis, Characterization and Evaluation of Antimicrobial Efficiency of Plant Mediated Silver Nanoparticles of *Bacopa monnieri*". **Poster Presentation at** National Conference on Recent Advances in Materials Science and Spectroscopy NCRAMSS-2017, Department of Physics, SMVDU; 15-17 Feb., 2017, PP: 66, pp: 83-84.
51. Savita Sharma, Shaveta Chauhan, Sanjay Sharma and Sharada Mallubhotla. "Biology, Culture, Conservation, Commercialization & Sustainable utilization of Medicinally & Floriculturally Important orchids". **Poster Presentation at** National Conference cum Workshop on "Biology, Culture, Conservation, Commercialization & Sustainable Utilization of Medicinally & Floriculturally Important Orchids" organized by The Orchid Society of India (TOSI) Punjab University, Chandigarh at Graphic Era University, Dehradun; 24-26 Mar., 2017, pp: 22.
52. Rajni Sharma, Fidrah Batool, Chahat Gupta, Anuja Koul, Jyotsna Sharma, Savita Sharma, and Sharada Mallubhotla. "Studies on exploration and mapping of medicinal plant species of Shri Mata Vaishno Devi University Campus, Kakryal, Katra, J&K". **Poster Presentation at** UGC sponsored and SMVDU supported Two Days National Symposium on "Recent Trends in Biotechnology and Drug Discovery" organized by Department of Biotechnology, SMVDU, Kakryal, from 30-31Mar., 2017, pp: 79.

* Name where am presenting author has been highlighted.

INVITED LECTURES DELIVERED

1. **M. Sharada** and A. Ahuja. Regeneration of plantlets from seed derived callus in *Celastrus paniculatus* Willd. – A rare endangered medicinal plant. *National Symposium on Plant Biotechnology & Molecular Biology & XXIV Annual Meeting of the Plant Tissue Culture Association (India)* Department of Genetics, University of Delhi, South Campus; 12-14 Oct. 2001: pp. 36. (RRL Cont No: Symp/Abs/98/2001/20).
2. **Mallubhotla Sharada** and Ashok Ahuja. Malkangini [*Celastrus paniculatus* (Willd.)] Promising medicinal woody climber: Current status on conservation and propagation through *in vitro* means. *National Seminar on Himalayan Biodiversity: Concerns & Issues*, Center for

- Biodiversity Studies, Baba Gulam Shah Badshah University, Rajori, J&K; 27-29 Oct. 2007: pp. 84.
3. **Mallubhotla Sharada**, S.P. Vij and A. Ahuja. Production of bioactive compounds from *in vitro* cultured tissues of selected medicinal plants. at *UGC Sponsored National Seminar on Trends in Modern Biosciences and Integrated workshop on Techniques in Tissue Culture*, Department of Botany, Biotechnology and Bioinformatics, Hans Raj Mahila Maha Vidyalaya, Jalandhar; 29 - 30 Sept. 2008: pp. 14.
 4. **Sharada M. Potukuchi**. Plant Tissue Culture. *UGC sponsored Lecture* at Department of Biotechnology, DAV College, Jalandhar, Punjab; 12 Sept. 2009.
 5. **Sharada M. Potukuchi**, Surbhi Dubey, Imteyaz Ahmed, Munish Sharma and Ashok Ahuja. Modulation of plant metabolite production through elicitation: production of bacosides from *Bacopa monnieri*. *International Colloquium on Biotechnology*, Department of Biotechnology, DAV College, Jalandhar; from 27-28 Nov. 2009: pp. 16-21.
 6. **Sharada M Potukuchi** and Ashok Ahuja. 2011. Cell & Tissue culture approaches for production of bioactive molecules – Medium engineering strategies. *National Conference on Metabolomics, Transcriptomics and Proteomics (NCMTP-2011)*, Shruti Auditorium, SGPGIMS, Lucknow, 29-30 Jan. 2011.
 7. **Sharada M Potukuchi**. 2011. Tissue culture as a means for secondary metabolite production in medicinal plants. *3-week Refresher Course*, 2 Lectures, Department of Botany, University of Jammu, Jammu, 19 Feb. 2011.
 8. **Sharada Mallubhotla**, Radhika Khandelwal, Barneet Singh, Himani Raina, Munish Sharma and Vijeshwar Verma. 2011. “Establishment of culture lines, protein estimation and phytochemical analysis in *Hypericum perforatum* (Linn.)” *National Conference on Emerging Trends in Medical Biotechnology & Nanotechnology (ETMBN-2011)*, Arni School of Basic Sciences, Arni University, Kangra (H.P.), 3-4 Dec. 2011: pp. 49.
 9. **Sharada Mallubhotla** “Scenario of Medicinal Plant Commercialization in India” *National Conference on Medical Biotechnology (NCMB-2013)*, Department of Biotechnology, DAV College, Jalandhar; 2 Feb. 2013: pp. 5.
 10. **Sharada Mallubhotla** “Medicinal Plant Trade In India” *National Conference on Bio Life: The Amalgamation of Multidisciplinary Life Sciences NCBL-2013*, Bio-EGICORE, Dept. of Life-Sciences, EGICORE, Lucknow, 9-10 Mar. 2013: pp. 6.
 11. **Potukuchi S.M.** “IPR Protection in Biotechnology” in Biotechnology Lecture Series, School of Biotechnology, University of Jammu, 10 May 2013.
 12. **Sharada Mallubhotla** “Production of Selected Bioactive Molecules from Plant Cell & Tissue Cultures – Nutritional & Hormonal Strategies”

- 2nd J&K Women's Science Congress, Govt. College for Women, Parade Ground, Jammu; 5-7 Nov. 2013: pp. 41.
13. **Sharada Mallubhotla** "Biological Safety of GMOs – Principles & Practices" *DST Sponsored One Day National Seminar on "Genetically Modified Foods: Issues & Concerns"*, Govt. College for Women, Parade, J&K, 30 Nov. 2013.
 14. **Potukuchi S.M.** "IPR Protection in Biotechnology - II" in Biotechnology Lecture Series, School of Biotechnology, University of Jammu, 13-14 Feb. 2014 & 30 Apr. 2014.
 15. **Sharada Mallubhotla** "Plant Tissue Culture as a Means for Propagation and Conservation of Medicinal Plant Species" *Multidisciplinary National Conference "Science Colloquium" on Emerging Trends in Basic & Applied Sciences*, DAV College, Jalandhar; 6-7 Mar. 2014.
 16. **Potukuchi S.M.** "Advanced Techniques in Botanical Sciences" at One day Workshop at PG Dept of Botany, Hans Raj Mahila Maha Vidyalaya, Jalandhar on 10 Nov. 2014.
 17. **Potukuchi S.M.** "IPR Issues in Biotechnology" Two-week DBT-sponsored *Short-Term Training Course (STTC) on "Bioprocess Engineering"*, School of Biotechnology, University of Jammu; 15 Dec. 2014.
 18. **Mallubhotla Sharada.** "Conservation of Medicinal Plants and *in vitro* Metabolite Production of Selected Plant Species" at 10th J&K Science Congress, University of Jammu, Jammu; 14-16 Mar. 2015, pp. 18 (BIO 019).
 19. **Mallubhotla Sharada.** "Scenario of Medicinal Plant Conservation & Commercialization in India" at Two Day Workshop on Conservation, Development and Commercialization of Medicinal Plants, organized by J&K State Medicinal Plants Board, J&K at SKICC, Srinagar; 12-13 Oct. 2015.
 20. **Mallubhotla Sharada.** "Intellectual Property Rights – Awareness" at Two Days Workshop on IPR Awareness supported by J&K State DST at Govt. Degree College, Akhnoor, J&K; 28 Oct. 2015.
 21. **Potukuchi S.M. Plenary Lecture** on "Career Opportunities for Women: IPR and Entrepreneurship", at 4th J&K Women Science Congress (JKWSC), organized by Govt. College for Women, Gandhinagar, Jammu; 1 Sept. 2016; pp: 37.
 22. **Mallubhotla Sharada.** "Plant Tissue Culture in Medicinal Plants: Techniques and Applications" at 10 days "National Training Programme on Plant Tissue Culture Techniques in Quality Planting Material Production and Crop Improvement", organized by Department of Biotechnology, Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST), Jammu; 6 Sept. 2016.
 23. **Mallubhotla Sharada.** "Modulation Of Secondary Metabolite Production Through Cell Manipulative Approaches In Selected Medicinal Plants" at National Conference on Emerging Trends in Biotechnology for Agriculture, Medicine and Environment organized by

Mahila P. G. Mahavidyalaya, Jodhpur, Rajasthan; Nov.18-19, 2016, pp: 23.

24. **Sharada M. Potukuchi.** "Propagation and Conservation of Medicinal Plant Species Using Plant Tissue Culture" at "Three Weeks Refresher Course, from 6-27 March, 2017, at School of Biotechnology, in collaboration with the Human Resource Development Centre, University of Jammu on Mar. 8, 2017.

❖ **Training courses/Workshops participated**

- 1 Training on "Techniques in Genetic transformation of Medicinal plants" under guidance of Dr. Sumita Jha, University of Calcutta, 26 Jun. – 05 Jul. 2002.
- 2 Wipro Mission 10X – Teachers Training Workshop, Cambridge Certification Programme, College of Engineering, Shri Mata Vaishno Devi University, Katra, 30 Nov. -04 Dec., 2009.
- 3 Wipro Mission 10X – Advanced Teachers Training Workshop, College of Engineering, Shri Mata Vaishno Devi University, Katra; 16-17 March., 2010.
- 4 Industrial Training on metabolite production from Microbial sources, Prathista Industries Limited, Hyderabad; 15-30 March. 2011.
- 5 Short-Term Course on "Nuclear Radiations & their Applications" conducted by the Applied Science Department at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh; 12-16 Sept., 2011.
- 6 DBT Sponsored "Brain Storming Meeting of Scientists working on relevant aspects of Saffron in different Institutions/Organizations" at Center of Research & Development (CORD) University of Kashmir, Srinagar; 17 Oct., 2011.
- 7 UGC Sponsored Short-Term Course on "Cytogenetics, Plant Molecular Genetics and Tissue Culture" conducted by the Department of Botany at P.G. College of Science, Osmania University, Saifabad, Hyderabad; from 2-13 Jan., 2012.
- 8 Four week UGC-Sponsored General Orientation Course with "A" Grade by UGC Academic Staff College, University of Jammu, Jammu, 17th June – 14th July, 2014.
- 9 Two Day International Workshop on Introduction to Biorisk Management for Leadership and Management organized by Indian Institute of Integrative Medicine, CSIR, Jammu in collaboration with Sandia National Laboratories, New Mexico, USA, 25th – 26th August 2014.
- 10 Stakeholders Consultation on Food Fortification "A Drive Against Malnutrition" organized by Consumer Voice, CII, FACE and Gain in collaboration with Department of Botany, University of Jammu, Jammu, 12th Sept., 2015.
- 11 Biosafety Risk Management Trainers' Training - Curriculum Development Track, held at Punjab University, Chandigarh in collaboration with Sandia National Laboratories, New Mexico, USA, 14th – 18th Dec., 2015.

12 Workshop on Bio-Entrepreneurship, Grant-Writing & IP held at Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu organized jointly with Biotechnology Industry Research Assistance Council (BIRAC), A Government of India Enterprise from 23rd – 24th June, 2016.

❖ **Education**

- **Post-Doctorate (Plant Biotechnology) 2006-07 University of KwaZulu Natal, Durban, South Africa**

- **Ph. D. Science (Botany) 2004**
Panjab University, Chandigarh
Thesis title: “Studies on regeneration and Phytochemical Potential of *Withania somnifera* (L.) Dunal Tissues Cultured *in vitro*”
Supervisors: Lt. Prof. SP Vij, Professor, Punjab University, Chandigarh
Dr. Ashok Ahuja, Chief Scientist (Retd) IIIM- CSIR, Jammu

- **M. Sc. Life Sciences (Plant Sciences) 1988**
First Division (74.0%) University of Hyderabad, Hyderabad
 - **Merit Scholarship holder:** Awarded by University of Hyderabad for obtaining first rank in M. Sc. 1st year for the year 1987-88.
 - **University Gold Medal recipient:** Awarded by University of Hyderabad for obtaining first rank in M. Sc. Plant Sciences course during 1986-88.

- **B. Sc. (BZC) 1986** First Division (75.5%)

- **Intermediate 1983** First Division (73.5%)

- **SSC 1981** First Division (72.0%)

❖ Teaching details

Subjects/Papers Taught	Level	Year/Semester	Duration
Basic Biology (UKZN, Durban)	UG	Second/Fourth	May 2006 – April 2007
Plant Tissue Culture (UKZN, Durban)	PG	First/Second	May 2006 – till date
Advanced Biochemistry	Ph. D.	First/First	Jan 2009 – till date
Plant Tissue Culture & Genetic Manipulation	Ph. D.	First/Second	Jan-May 2009
Research Methodology	Ph. D.	First/Second	Aug – Dec 2012
Biochemistry II	UG	Third/Fifth	Aug 2007 – till date
Bioprocess Engineering	UG	Second/Fourth	Aug-Dec 2012
Bioprocess Technology	UG	Second/Fourth	Aug 2008 – Dec 2009
Cell Culture (Theory & Practicals)	PG	First/Second	Jan 2010 – May 2013
Plant Cell Culture (Theory & Practicals)	PG	First/Second	Jan 2015 – till date
Chemical Engineering Thermodynamics	UG	Fifth/Third	Aug-Dec 2012
Downstream Processing	UG	Third/Sixth	Aug-Dec 2008
Immunology (Theory & Practicals)	UG	Third/Fifth	Aug 2010 – Dec 2011
Intellectual Property Rights & Biosafety	UG	Fourth/Seventh	Aug 2008 – till date
Biological Waste Treatment Lab	UG	Fourth/Seventh	Aug 2013 – till date
Intellectual Property Rights & Entrepreneurship Development	PG	Second/Third	Aug 2011 – till date
Investigational Projects (Major)	UG	Fourth/Seventh & Eighth	Aug 2007 – till date
Investigational Projects (Major)	PG	Second/Fourth	Jan 2011 – till date
Plant Biochemistry	PG	Second/Third	Aug 2012 – till date
Summer Projects (Minor)	UG PG	Third/Sixth Fourth/Eighth	Aug 2008 – till date
Tissue Culture/Cell Culture Technology (Theory & Practicals)	UG	Third/Sixth	Jan 2008 – till date

