# *Curriculum Vitae*


# Devinder Kaur

E-Mail: dev_auqa@yahoo.co.in
devkaur@gmail.com

Mobile: +91 8872341466


## Objective

Utilize my technical skills along with a dedicated desire of learning, to benefit my organization and attain consistent professional growth.

## Executive Summary

- Offering around 7 years experience in research work
- Awarded CSIR-Senior Research Fellowship of total three years
- Well versed with MS office and internet applications

## Scholastics

### Ph. D. Biotechnology 2013

CSIR-Institute of Himalayan Biorecourse Technology, Palampur, H.P. - 176 061
Guru Nanak Dev University, Amirtsar, Punjab - 143 005

**Thesis Title:**

"Development of *In Vitro* Strategies for Conservation of *Dendrocalamus hamiltonii* Nees et Arn. Ex Munro"

### M.Sc. Biotechnology 2003

S.B.S PG Institute of Biomedical Sciences & Research Balawala, Dheradun - 248 161
HNB Garhwal University, Srinagar, Uttranchal – 246 174

**Dissertation Title:**

"Partial Characterization of Bacterial Proteases"

### B.Sc. (ZBC) 2001

Govt. PG College, Dharamshala, H.P. - 176 215
HP University, Shimla, H.P. – 171 005

### Intermediate 1998

Kendriya Vidyalaya Dharamshala Cantt, H.P. – 176 213
CBSE

### Matriculation 1996

Kendriya Vidyalaya Dharamshala Cantt, H.P. – 176 213
CBSE

## Computer Proficiency

**Post Graduate Diploma in Computer Applications (PGDCA)** **2004**

CATS Institute, Dharamshala, H.P. - 176 215
MCRP University, Bhopal, M.P. - 462 016

## Career Recital

- Assistant Professor, Department of Biotechnology, Sri Guru Granth Sahib World University, Fatehgarh Sahib, Punjab (14 July 2014 – till date)
- Assistant Professor, Department of Biotechnology, Sri Guru Granth Sahib World University, Fatehgarh Sahib, Punjab (15 Jan' 2014 – 30 May 2014)
- Senior Research Fellow, Division of Biotechnology, CSIR-IHBT, Palampur, H.P. (1 Oct' 2008 - 30 Sep' 2011)
- Project Assistant, Division of Biotechnology, CSIR-IHBT, Palampur, H.P. in DBT Project "Molecular Characterization of bamboo germplasm and conservation of *Dendrocalamus hamiltonii* " (4 Aug' 2006 - 30 Sept' 2008)
- Project Assistant, Plant Tissue Culture Unit, RRL (now CSIR-IIIM), Jammu, J&K in NMITLI Project "Pharmacological and genomic investigations on *Withania somnifera*: An Indian model plant for drug development and gene discovery" (6 Dec' 2004 - 3 Aug' 2006)
- M. Sc. Dissertation, S.B.S PG Institute of Biomedical Sciences and Research, Balawala Dheradun (6 months)

## Publications

Pooja Thapa, **Devinder Kaur**, Priyanka Sood, Rupali Mehta, Jasmine Brar, Harleen Kaur Nadha, R. K. Ogra, Om Prakash, Amita Bhattacharya, Anil Sood (2016). Biotechnology of Bamboos. In: Kaushik, S., Singh, Y. P., Kumar, D., Thapliyal, M., Barthwal, S. (Eds.), *Bamboos in India* (pp. 147-163, Chapter 7). ENVIS Centre on Forestry.

Jaspreet Kaur, Navjot Singh, C. Rajesh and **Devinder Kaur** (2016). Investigating the role of crude extract from leaves of *Withania somnifera* on cytotoxicity and metastasis. International Conference on Recent advances in Emerging Technologies. Sri Guru Granth Sahib World University, Fatehgarh Sahib, February 23-24, pp 139.

**Devinder Kaur**, Vivek Dogra, Pooja Thapa, Amita Bhattacharya, Anil Sood, Yelam Sreenivasulu (2015). *In vitro* flowering associated protein changes in *Dendrocalamus hamiltonii*. *Proteomics* **15**(7): 1291-1306. ISSN: 1615-9861 (Online) IF: 3.973.

**Devinder Kaur**, Pooja Thapa, Madhu Sharma, Amita Bhattacharya, Anil Sood (2014). *In vitro* flowering – A system for tracking floral organ development in *Dendrocalamus hamiltonii* Nees et Arn. ex Munro. *Indian Journal of Experimental Biology* **52**(8): 825–834. ISSN: 0019-5189 (Print) 0975-1009 (Online) IF: 0.753.

Amita Bhattacharya, Uksha Saini, Robin Joshi, **Devinder Kaur**, Awadhesh Kumar Pal, Nitish Kumar, Ashu Gulati, Prashant Mohonpuria, Sudesh Kumar Yadav, Sanjay Kumar and Paramvir Singh Ahuja (2013). Osmotin-expressing transgenic tea plants have improved stress tolerance and are of higher quality. *Transgenic Research* **23**: 211–223. doi:10.1007/s11248-013-9740-5. ISSN: 0962-8819 (Print) 1573-9368 (Online) IF: 2.75.

Anil Sood, Amita Bhattacharya, Madhu Sharma, Ram Kumar Sharma, Harleen Kaur Nadha, Priyanka Sood, Rupali Mehta, **Devinder Kaur**, Jasmine Brar and Paramvir Singh Ahuja (2013). Somatic embryogenesis and Agrobacterium mediated genetic transformation in bamboos. In: Aslam, J., Srivastava, P. S. and Sharma, M. P. (Eds.), *Somatic Embryogenesis and Genetic Transformation in Plants* (pp. 166-178). Narosa Publishing House, New Delhi. ISBN: 978-81-8487-227-9.

Uksha Saini, **Devinder Kaur**, Amita Bhattacharya, Sanjay Kumar, R. D. Singh, P. S. Ahuja, (2012). Optimising parameters for biolistic gun-mediated genetic transformation of tea [*Camellia sinensis* (L.) O.Kuntze]. *Journal of Horticultural Science and Biotechnology* **87**(6): 605–612. ISSN: 1462-0316. IF: 0.64.

Uksha Saini, **Devinder Kaur**, Sanjoy Chanda, Amita Bhattacharya, Paramvir Singh Ahuja (2012). Application of betaine improves solution uptake and *in vitro* shoot multiplication in tea. *Plant Growth Regulation* **67**(1): 65-72. ISSN: 1435-8107. IF: 2.86.

**Devinder Kaur**, Ram Krishan Ogra, Amita Bhattacharya and Anil Sood (2012). Changes in sugar levels during slow growth of *Dendrocalamus hamiltonii* somatic embryos due to liquid paraffin overlay. *In Vitro Cellular and Developmental Biology-Plant* **48**(1): 120-126. ISSN: 1054-5476. IF: 1.5.

Indra Sandal, Amita Bhattacharya, Uksha Saini, **Devinder Kaur**, Shveta Sharma, Ashu Gulati, Jonnala K Kumar, Neeraj Kumar, Jyotsna Dayma, Pralay Das, Bikram Singh and Paramvir S Ahuja (2011). Chemical modification of L-glutamine to alpha-amino glutarimide on autoclaving facilitates Agrobacterium infection of host and non-host plants: A new use of a known compound. *BMC Chemical Biology* **11**: 1-13. ISSN: 1472-6769. IF: 1.6.

**Devinder Kaur**, Priyanka Sood, Rupali Mehta, Jasmine Brar, Harleen Kaur Nadha, Amita Bhattacharya, Anil Sood (2011). Biotechnological approaches to conservation and improvement of bamboos- 'The Green gold of Asia'. In: Arya, I. D., Arya, S., Rathore, T. S. and Kant, T. (eds). *Proceeding of Advances in Bamboo Plantation, Management and Utilization*. pp 79-93. Arid Forest Research Institute, Jodhpur, India. ISSN:

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. ISSN: 1555-9475. IF: 1.24.

**Devinder Kaur**, Abhay Kumar Pandy (2009). Partial characterization of bacterial proteases. *International Journal of Pharma Recent Research* **1**(1): 12-17. ISSN: 0975-783X.

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## Presentations

Anil Sood, Priyanka Sood, Rupali Mehta, **Devinder Kaur**, Jasmine Brar, Harleen Kaur Nadha, Vikas Sharma, Amita Bhattacharya and Ram Kumar (2012). Biotechnological approaches for propagation, conservation and improvement of important bamboos. 9th World bamboo congress proceedings, Belgium, April 10-15, Vol. 1-2(2). ISSN: 2150-1165 (CD-ROM).

Amita Bhattahacharya, Uksha Saini, Robin Joshi, **Devinder Kaur**, Madhu Sharma, Ashu Gulati and Paramvir Singh Ahuja (2012). Osmotic adjustments by increased accumulation of total catechins and compatible solutes impart stress tolerance in transgenic tea plants. National symposium on impact of plant tissue culture on advances in plant biology and XXXIII PTCA (I) annual meet, Ahmedabad, January 19-21, pp 80.

Anil Sood, Madhu Sharma, Amita Bhattacharya, R. K. Sharma, Priyanka Sood, Rupali Metha, Vikas Sharma, **Devinder Kaur**, P. S. Ahuja (2011). Bamboo propagation and improvement using biotechnological tools. National symposium on recent advances in ptc and biotecnology, Bikaner, February 4-6, pp 18.

Anil Sood, Ripali Metha, Priyanka Sood, **Devinder Kaur**, Harleen Kaur Nadha, Jasmine Brar, Amita Bhattahacharya, Madhu Sharama. (2010). Biotechnological approaches for the conservation and improvement of bamboos. National symposium on plant cell tissue and organ culture; the present scenario and XXXI annual meeting of plant tissue culture association (India), Kolkata, 3-5 March, pp **57.**

**Devinder Kaur**, Amita Bhattacharya, Ram Krishan Ogra and Anil Sood (2009). A protocol for storage of *Dendrocalamus hamiltonii* somatic embryos. National symposium on plant propagation, conservation, modification and characterization and 30th annual meet of plant tissue culture association, Palampur, April 3-4, pp 44.

Mallubhotla Sharada**, Devinder Kaur,** V. Verma, Arun Kumar and Ashok Ahuja (2009). Protoplast isolation in ashwagandha [*Withania somnifera* (L.) Dunal] 'AGB002': optimization of isolation conditions. National symposium on plant propagation, conservation, modification and characterization and 30th annual meet of plant tissue culture association, Palampur, April 3-4, pp 21.

Rupali Metha**,** Priyanka Sood, **Devinder Kaur**, Jasmine Brar, Harleen Kaur, Amita Bhattacharya, Madhu Sharma and Anil Sood (2009). Micropropagation of economically important bamboo species. National Symposium on Plant Propagation, Conservation, Modification and Characterization and 30th annual meet of plant tissue culture association, Palampur, 3-4 April, pp 45.

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**Devinder Kaur,** Rupali Mehta, Amita Bhattacharya and Anil Sood (2009). Slow growth of bamboos- A strategy for conservation. National seminar on bamboo "plantation, management and its utilization", Arid Forest Research Institute (ICFRE), Jodhpur, March 17-19, pp 36.

Priyanka Sood, Amita Bhattacharya, **Devinder Kaur** and Anil Sood (2009). Genetic manipulation studies in *Dendrocalamus hamiltonii*. National seminar on bamboo "plantation, management and its utilization", Arid Forest Research Institute (ICFRE), Jodhpur, March 17-19, pp 29.

Rupali Mehta, Priyanka Sood, **Devinder Kaur**, Om Prakash, Amita Bhattacharya, Madhu Sharma and Anil Sood (2008). Conservation and improvements of bamboos- An *in-vitro* approach. International conference on biodiversity conservation and management, Cochin, 3-6 Feb. pp 187-188.

Ashok Ahuja, **Devinder Kaur**, M. Sharada, K. A. Suri and P. Dutt (2008). Glycowithanolides isolation and identification from *Withania somnifera* tissue cultures. Plant Biotechnology for Conservation, Characterization and Crop Improvement and 29th Annual Meeting of Plant Tissue Culture Association (India), Udaipur, 8-10 Feb.

## Books Edited

Recent advances in emerging technologies.

## Technical Work Experience

- Plant tissue culture (Micropropagation, *in vitro* flowering, embryo culture, hardening of *in vitro* regenerates)
- Protoplast isolation from medicinal plants
- *Agrobacterium* mediated plant transformation
- DNA isolation (Bacteria, Plasmid, Plants)
- Spectrophotometry
- Electrophoresis
- SDS PAGE, 2-DE
- MALDI-TOF mass spectrometry
- Enzyme characterization
- Southern hybridization
- PCR

## Personal Dossier

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| Date of Birth | 21 January 1980 |
| Nationality | Indian |
| Sex | Female |
| Marital Status | Married |

## Present Address

15B, Shiva Enclave
GBM Apartments
Kharar, Distt. Mohali
Punjab - 140 301

## REFERENCES

**Dr. Amita Bhattacharya**
Principal Scientist
Biotechnology Division
CSIR-Institute of Himalayan Bioresource Technology, Palampur - 176 061, H.P.
amitabhatta@yahoo.co.uk

**Dr. P. S. Ahuja**
Director
CSIR-Institute of Himalayan Bioresource Technology, Palampur - 176 061, H.P.
psahuja@ihbt.res.in

**Dr. Anil Sood**
Chief Scientist
Head, Biotechnology Division
CSIR-Institute of Himalayan Bioresource Technology, Palampur - 176 061, H.P.
asood@ihbt.res.in

**Dr. Ashok Ahuja**
Senior Principal Scientist
Plant Tissue Culture Unit
CSIR-IIIM, Canal Road
Jammu Tawi - 180 001, J&K
ashoksahuja@rediffmail.com

**Dated:**

**(Devinder Kaur)**