

## BIO-DATA

## Dr. HEMANT SOOD



Name of the applicant: Hemant Sood  
Designation: Professor  
Address for Correspondence: Deptt. of Biotechnology & Bioinformatics,  
Jaypee University of Information Technology, Wagnaghat,  
Domehar Bani, Teh. Kandaghat, Distt. Solan  
Office Telephone: 01792-239226 FAX: 01792-245362  
E-mail: [hemant6sood@gmail.com](mailto:hemant6sood@gmail.com), [hemant.sood@juit.ac.in](mailto:hemant.sood@juit.ac.in)  
Education: Ph.D. (Biotechnology), JUIT, Wagnaghat, Solan; 2009; PG  
Diploma in IPR jointly from IGNOU and WIPO, Geneva  
(2012)

### Biography

My research is focused on various aspects of plant tissue culture, be it development of micropropagation technologies for different plant species, selection of genetically superior cell lines for various traits, optimization of tissue culture protocols for use in genetic transformation, development of cell culture technologies for production of phytopharmaceuticals in high value medicinal plants. I was conferred with **Indian Science Congress Young Scientist Award** in 2011 for my PhD research work. I have developed successful micropropagation technology in my lab for 16 different plant species and others are in progress. I am presently focusing on sharing these developed technologies for endangered plants with farmers for improving their socio economic status. I was awarded with International Scholarship by the **Israel's Agency for International Development Cooperation (MASHAV) Israel's Ministry of Foreign Affairs which was availed at** The Hebrew University of Jerusalem. I have 04 Granted Patents as lead inventor from Govt. of India. **CII nominated me among 125 women luminaries in STEM** and showcased my scientific contributions and achievements along with 125 women luminaries including academicians, researchers, policymakers, business strategists, tech leaders, entrepreneurs, innovators and pioneers with technology and skills necessary for a better future and who have made a significant mark in the arena of Science, Technology, Engineering and Mathematics. **Dr. Sarvepalli Radhakrishnan Distinguished Associate Professor & Researcher Award 2023 in Plant Biotechnology** which was given to me by the Center for Professional Advancement Executive Council and the National Teachers Day Awards 2023

Committee at the Center for Professional Advancement International Campus, India on September 5th 2023.

### **A. Details of Educational Qualification**

Degree	Subjects	Year of Passing	Name of Institution/ University
Post Graduate diploma IPR	Intellectual Property Rights	2012	IGNOU and WIPO Geneva
Ph.D. (Biotechnology)	Biotechnology & Bioinformatics	2009	Jaypee University of Information Technology, Wagnaghat, Solan H.P
M.Sc. (Biotechnology)	Plant Biotechnology	2001	University of Horticulture & Forestry, Nauni, Solan, H.P
B.Sc. (Biotechnology)	General Biotechnology	1999	H.P. University, Shimla

### **B. Professional Experience : 18 years and 10 months**

Name & Address of the Employer	Nature of Work	Period	
		From	To
Jaypee University of Information Technology, Wagnaghat, Solan H.P	Professor	Ist July, 2024	Till Date
Jaypee University of Information Technology, Wagnaghat, Solan H.P	Associate Professor	30 <sup>th</sup> September, 2017	30 <sup>th</sup> June2024
Jaypee University of Information Technology, Wagnaghat, Solan H.P	Assistant Professor (Senior Grade)	1 <sup>st</sup> August, 2013	29 <sup>th</sup> September2017
Jaypee University of Information Technology, Wagnaghat, Solan H.P	Assistant Professor (Grade-II)	1 <sup>st</sup> Sept, 2011	31 <sup>st</sup> July, 2013
Jaypee University of Information Technology, Wagnaghat, Solan H.P	Lecturer	27 August, 2009	31 <sup>st</sup> August, 2011
Jaypee University of Information Technology, Wagnaghat, Solan H.P	Research Scholar (Teaching and Research on Plant Tissue Culture)	July, 2006	May, 2009
HP University, Govt. College, Mandi, (H.P)	Guest Faculty in Biotechnology to teach UG students	August, 2001	Dec. 2004

### **C. Awards and Honours**

1. INDIAN SCIENCE CONGRESS ASSOCIATION **YOUNG SCIENTIST AWARD FOR THE YEAR 2010-11(Plant Sciences)** was conferred by Dr.Venkataraman Ramakrishnan, 2009 Nobel Laureate in Chemistry, Cambridge.

2. Awarded International Scholarship by the **Israel's Agency for International Development Cooperation (MASHAV) Israel's Ministry of Foreign Affairs** availed at The Hebrew University of Jerusalem (August 28 to Sept. 20, 2017)
3. **Providing consultancy to Stevia Biotech Pvt. Ltd.,Baddi and received Rs10,000 consultancy honorarium March 2019.**
4. Awarded with **Silver medal in NPTEL online course and FDP on Managing Intellectual property in University** scheduled from September 2020 to October 2020 conducted by NPTEL, IIT Madras and SWAYAM, Funded by the Ministry of HRD, Govt of India
5. CII nominated **Dr Hemant Sood** among 125 women luminaries in STEM and showcased her success stories and achievements along with 125 women luminaries including academicians, researchers, policymakers, business strategists, tech leaders, entrepreneurs, innovators and pioneers with technology and skills necessary for a better future and who have made a significant mark in the arena of Science, Technology, Engineering and Mathematics and released compendium **Women in STEM: Vanguard of India@75** on **22nd July 2022**, at **Women in STEM Summit** organized by Confederation of Indian Industry (CII) N.Delhi with Govt. partners. <https://www.vivifymedia.in/women-in-stem/>
6. **Dr. Hemant Sood**, Associate Professor, Department of BT and BI has been selected for Dr. Sarvepalli Radhakrishnan Distinguished Associate Professor & Researcher Award 2023 in Plant Biotechnology which was given by the Center for Professional Advancement Executive Council and the National Teachers Day Awards 2023 Committee at the Center for Professional Advancement International Campus, India on September 5th 2023 .
7. **Dr Hemant Sood** is nominated as Advisor and Editorial & Reviewer Team member of The Progress Journals, a peer reviewed quarterly Journal, ISSN :2584-0517. A multidisciplinary Journal exclusively covering 17 UNDP SDGs on 24<sup>th</sup> Feb2024

#### **D. Granted Patent: 04**

1. **Hemant Sood** and RS Chauhan . Patent Application No. 163/DEL/2009 filed in India on “A process of enriching the amount of medicinal compound, Picroside-I in shoots of medicinal herb, *Picrorhiza kurroa*”. Publication Date: (06/08/2010). Journal No.-32/2010 granted by Govt. of India with Patent No. 295996 on **23<sup>rd</sup> April,2018**
2. **Hemant Sood**, Varun Kumar and RS Chauhan .Patent Application No. 551/DEL/2012 filed in India on “Isolation and purification of Picroside-I and Picroside-II”. Publication Date: 14/02/2014. Journal No. - 07/2014 granted by Govt. of India with Patent No. 327618 on **18<sup>th</sup> Dec,2019.**
3. **Hemant Sood**, S Gulati, S Bakshi, BS Sandhu,V Kumar and RS Chauhan .Patent application No.362/DEL/2013. “A process of preparation of nutrient medium useful in enriching medicinal constituents in shoot culture of Swertia chirayita” Publication Date: 29/08/2014. Granted by Govt. of India with Patent No.339128 on **23<sup>rd</sup> June 2020.**
4. **Hemant Sood and RS Chauhan** International Patent No. 2023/02615 has been granted on A Media Composition and A Method of Developing a Micropropagation Technology for

Picrorhiza kurroa Herb”by the Republic of South Africa on May 31, 2023 and was filed on 27<sup>th</sup> February 2023.

### **Design Granted**

1. Shivam Sharma, **Hemant Sood**, and Jaypee University of Information Technology filed for the Design application for “Phytoreactor” on 22May,2024 with Application no. 417682-001 a granted by The Patent Office, Govt. of India on 4th July 2024.

### **E. Published Patent Application : 02**

1. Sirina Kalia, Naina Puri, Khushboo Pandey, **Hemant Sood** and Udayabanu M. Aromatic Herbal Formulation For Dementia Management through Olfactory Induction. Application No. 202411004565 (Filling date :January23,2024 ) Feb09,2024 published
2. Rolika Gupta and **Hemant Sood** (2024). A method for producing tissue-grown Swertia Chirayita-based formulation for curing diabetes and cancer.Application No.202411019524 (Filling date:16-03-24),Published on 12-04-2024 .

### **F. NBPGR Submissions**

Generated tissue cultures of high value endangered medicinal herbs and deposited with the National Bureau of Plant Genetic Resources (NBPGR), New Delhi. The following accession numbers were allotted by the NBPGR, New Delhi. These cultures have been deposited for the time in India as a result are a permanent resource for any R&D activity across India or even abroad.

1. *Swertia chirayita* Acc. No. IC-594053
2. *Picrorhiza kurroa* Acc. No. IC-0597952
3. *Gentiana kurroo* Acc. No. IC -0612563
4. *Hypericum perforatum* Acc. No. IC -0612564

### **G. NCBI GenBank submission**

1. **KP299959** - MYB Family transcription factor (PhMYB) mRNA, partial cds
2. **KP299960**- bZIP Family transcription factor (PhbZIP) mRNA, partial cds
3. **KP299961**- WRKY Family transcription factor (PhWRKY) mRNA, partial cds

### **H. Best research Paper Awards in the International Conferences**

1. **Hemant Sood H** and RS Chauhan (2008). Optimization of tissue culture conditions for conservation of an endangered medicinal herb (*Picrorhiza kurroa*) of North–Western Himalayas. International Society of BioTechnology Conference (ISBT-2008) at Sikkim Manipal Institute of Technology (SMIT), Majitar,Gangtok, SIKKIM, India, Dec. 28-30, 2008.

2. **Hemant Sood** and Rajinder Singh Chauhan (2008). Callus induction and regeneration from different explants of a medicinal herb (*Picrorhiza kurroa*), for utilization in cell line selection. International Conference on Novel Approaches for Food and Health Security in High Altitudes , September 7-10, DIHAR, DRDO, Leh-Ladakh, India.
3. Pawan Kumar, Tarun Pal, Varun Jaiswal, **Hemant Sood** and Rajinder S. Chauhan (2014). Computational mining of transcriptomes for transcription factors controlling various biological processes in *Podophyllum* spp. 2<sup>nd</sup> International Conference on Agricultural and Horticultural Sciences (Omics Group), Hyderabad, India February 03-05, 2014
4. Ankush Verma,Utkarsha Shrivastva and **Hemant Sood**“Effect of different culture conditions for propagation and organic components on hardening of medicinal herb *Valeriana jatamansi*” got **Best Presentation Award** in International (Online) Conference Agriculture, Biological and Life Sciences (ICABLS-2021) Organized by Vidya Kutir Foundation, New Delhi, India on 25 th -26 th September, 2021. Pp61 ISBN:978-93-92403-01-9 <https://vidyakutirfoundation.org/books.html>
5. Ipshita Dutta and **Hemant Sood** 2022.Screening of Phytochemicals in Shoot Cultures of Endangered Herb- *Gentiana kurroo* Royle” has been awarded as the “Best Paper Award “ by 23rd AAACU Biennial Conference with International Forum on Agricultural Innovation, Sustainability, Entrepreneurship and Networking (i-FAISEN) held at Chiang Mai, Thailand from 4th-8th July 2022.

### **I. Best Poster Presentation Award in the National Conference**

1. Sanya Bakshi, Sneha Gulati, Bhupinder Singh Sandhu , Pooja Tandon, Varun Kumar, Rajinder Chauhan and **Hemant Sood** 2012. Large-scale *invitro* multiplication of critically endangered herb *Swertia chirayita* in suspension cultures. National Seminar on Plant Cell Tissue and Organ Culture: Emerging Trends, Deptt. Of Botany, Aligarh Muslim University, Aligarh, India, March10-11, 2012.
2. Devanshi popli and **Hemant Sood**. 2016. Optimization of liquid media for enrichment of shoot biomass of critically endangered herb of Trans Himalayan region *Dactylorhiza hatagyeria*. 3<sup>rd</sup> prize in IEEE project presentation. 14<sup>th</sup> May, 2016. JUIT Waknaghat.Solan
3. Rhythem Sharma, Satyam Singh and Hemant Sood. 2018 Effect of Polychromatic LED’s on growth and development of Micropropagated Shoots of *Picrorhiza kurroa*.2<sup>nd</sup> prize in poster competition in Student Research Convention organized by TIED cell and ACM JUIT on 9<sup>th</sup>-10<sup>th</sup> February,2018 at JUIT Waknaghat,Solan

### **J. Session Chair**

1. Chaired a session in **International Conference “ICBBB 2012: International Conference on Bioscience, Biotechnology, and Biochemistry” Venice, Italy on 12 April, 2012**

2. Chaired a session in **International Conference on Recent Trends in Biotechnology and Bioinformatics” organized at Jaypee University of Information Technology, Wagnaghat 1-3 August, 2019**
3. Chaired a session in virtual **International conference on “Technologies for Environmental Sustainability and Smart Agriculture”** organized by Centre of Excellence in Sustainable Technologies for Rural Development [CESTRD], Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology during September 18 & 19, 2020
4. Chaired a session in **6<sup>th</sup> International Conference on signal processing, computing and control (ISPCC2K21)”** the Electronics & Communication Engineering department of Jaypee University of Information Technology (JUIT), Wagnaghat, Himachal Pradesh, India on Oct (7-9), 2021 in Online Mode.
5. Chaired a session in **Virtual International Conference on Technological Intervention in Renewable Energy for Sustainable Environment (RESE-2021)** on 24th and 25th November 2021 organized by TIEDC and CESTRD at the Department of BT&BI Jaypee University of Information Technology Wagnaghat, Solan - INDIA (173234).
6. Chaired a session in **2<sup>nd</sup> Emergent Converging Technologies and Biomedical Systems (ETBS2022))” organized by the Department of** Electronics & Communication Engineering and Department of Physics and Material Sciences Jaypee University of Information Technology (JUIT), Wagnaghat, Himachal Pradesh, India on Sept (23-24), 2022
7. Chaired a session and Moderator in **7th Edition of Global Congress on Plant Biology and Biotechnology** on 16th March, 2023 organized by **Magnus group ,USA** on virtual mode from 16-17th March 2023.
8. Chaired a session in **“3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2023)”** organized by The Department of Electronics and Communication Engineering and Department of Computer Sciences and Engineering & Information Technology, Jaypee University of Information Technology, Solan, Himachal Pradesh in collaboration with DST iHub-AWaDH and Indian Institute of Technology Ropar at Jaypee University of Information Technology (JUIT), Wagnaghat from May 15-17, 2023.
9. Chaired a session in **“2rd International Conference on Biotechnology and Bioinformatics (ICBAB-2023)”** organized by The Department of Btand BI, Jaypee University of Information Technology, Solan, Himachal Pradesh supported by DST-SERB at Jaypee University of Information Technology (JUIT), Wagnaghat from 11-13 July, 2023.

## **K. Books published**

1. **Hemant Sood and R S Chauhan 2016.** Cell Culture Technologies in a medicinal Herb, *Picrorhiza kurroa*. LAP LABERT Academic Publishing ,OmniScriptum GmbH& Co. KG, Germany ISBN(978-3-659-93498-8) <https://www.morebooks.de/store/gb/book/cell-culture-technologies-in-a-medicinal-herb,-picrorhiza-kurroa/isbn/978-3-659-93498-8>
2. **Shivam Sharma and Hemant Sood 2019** Analysis of Diosgenin Content and Pharmacological Explorations (Endangered medicinal herb *Trillium govanianum*) LAP LABERT Academic Publishing, member of Omniscriptum, Singapore **ISBN 978-620-0-30926-6.** Sep.2019 <https://www.lap-publishing.com/catalog/details/store/gb/book/978-620-0-30926-6/analysis-of-diosgenin-content-and-pharmacological-exploration>



## **L. Book chapter**

1. Anshu Alok, Shivam Sharma, Jitesh Kumar, Subodh Verma and **Hemant Sood**. 2017. **Engineering in Plant Genome Using Agrobacterium:Progress and Future** .Metabolic Engineering from Bioactive compounds: Strategies and Process. Springer Singapore.pp91-112 ISBN 978-981-10-5511-9 .
2. **Hemant Sood** (2020).Production of Medicinal Compounds from Endangered and Commercially Important Medicinal Plants Through Cell and Tissue Culture Technology for Herbal Industry. Kavita Sharma Corina Denciu. *Bioactive Compounds in nutraceuticals and food for good human health* , Intechopen, London, UK. ebook (ISBN 978-1-83880-887-7 ).
3. Utkarsha Srivastva and **Hemant Sood** (2020). Propagation of *Podophyllum hexandrum* Royle to enhance production of podophyllotoxin. Sangeet Kumar, *Endangered Plants Intechopen Limited*, London, UK,DOI: 10.5772/intechopen.93704 ISBN :978-1--83962-894-8, ebook ISBN:978-1-83962-899-3.
4. Archit Pundir, Anaida Kad and **Hemant Sood** (2021).Rhodiola imbricata. Nikhil Malthora and Mohar Singh, *Himalayan Medicinal Plants: Advances in botany, production and research* (International, pp. 151-167). Elsevier, Academic Publisher (ISBN: 978-0-12-823151-7, eBook ISBN: 9780128234303).
5. Neha Sharma and **Hemant Sood** (2021).Plant-microbe interaction and recent trends in biotechnology for secondary metabolites production in medicinal plants. Swati Tyagi, Robin Kumar, Baljeet Saharan and Ashok K. Nadda, *Plant-Microbial Interactions and Smart Agricultural Biotechnology*(International, pp 199-216).: CRC press Taylor and Francis USA.(ISBN 9781032100418)
6. Neha Sharma and **Hemant Sood**(2022). In Vitro Production of Medicinal Compounds from Endangered and Commercially Important Medicinal Plants. Dinesh K. Srivastava, Ajay K. Thakur and Pankaj Kumar, *Agricultural Biotechnology: Latest Research and Trends* (international, pp53-74). Springer Nature India. ( ISBN : 978-981-16-2339-4 )
7. Rolika Gupta and **Hemant Sood** (2022) Trillium: An unexplored medicinal herb of Himalayan Region.Rajesh Panwar and Alok P.Jain, *Recent Advances in Pharmaceutical Sciences (National, pp 47-58 .)* Innovare Academic Sciences.(ISBN 978-81-952065-7-5).

## **M. International and National Publications (Accepted & Communicated, Read Hemant Gautam as Hemant Sood)**

1. Parul Katoch, Rolika Gupta, Ashish Jaiswal,Shriyanshu Thakur, and **Hemant Sood**,“Effect of LEDs in phytochemical accumulation and biomass production in callus cultures of *Podophyllum hexandrum*”*Journal of Chemical Health Risks*, vol.14(1),pp.1681-1690 Jan2024 (ISSN:2251-6727) (Scopus, IF :0.1) <https://jchr.org/index.php/JCHR/article/view/2685>

2. Rolika Gupta and **Hemant Sood**, “Emerging Technologies for the Production of In Vitro Raised Quality Rich *Swertia chirayita* by Using LED Lights,” *Sustainability*, vol. 15 (2), pp. 1-14, Jan 2023 1714; <https://doi.org/10.3390/su15021714>. (ISSN 2071-1050 [IF:3.88] (SCOPUS, SCIE)).
3. Sunainy Ajrawat , Chhavi Thakur and **Hemant Sood** 2023"An integrated in silico approach to identify bioactive Phytochemicals in *Bauhinia variegata* plant as potential lead candidates against SARS-CoV-2 transmission targets", *European Journal of Molecular and Clinical Medicine* 10(1)pp 570-580 Jan 2023 ISSN: 2515-8260 (WOS/ESCI) <https://ejmcm.com/uploads/paper/3288d0f2b8c8df13ba79daaf730e3f58.pdf>
4. Rolika Gupta and **Hemant Sood**.2022. “Artificial seed production and cryopreservation by encapsulation dehydration for medicinal herb of Himalayan region, *Swertia chirayita* ”, *Cryoletters*, 43(5)pp295-302. Scopus and SCI DOI : <https://doi.org/10.54680/fr22510110612> ISSN [0143-2044](https://doi.org/10.54680/fr22510110612) (Print); ISSN [1742-0644](https://doi.org/10.54680/fr22510110612) (Online), Q2 IF(1.01/0.89)
5. Rolika Gupta and Hemant Sood.2022. Optimizing nutrient media conditions for continuous production of shoot biomass enriched in major medicinal constituents, amarogentin and mangiferin of endangered medicinal herb, *Swertia chirayita*. *Vegetos*. DOI :10.1007/s42535-022-00464-6. Scopus /WOS Aug2022 ISSN: 2229-4473, Q4 IF
6. Pandey Roma, Ashish Sharma, **Hemant Sood**, Rajinder Singh Chauhan. 2022. ABC Transporters Mined Through Comparative Transcriptomics Associate With Organ-Specific Accumulation of Picosides in a Medicinal Herb, *Picrorhiza kurroa*. *Protoplasma*,260(2)pp453-466 DOI : 10.1007/s00709-022-01786-7 (IF: 3.36) **SCI&Q2** .
7. Utkarsha Srivastva and **Hemant Sood**.2022 Computational analysis for regulation of Podophyllotoxin biosynthesis pathways in *Podophyllum hexandrum* with potential substitute species. **Defence Life Science Journal** .7(2) 97-102 (June 2022) **Scopus &Q4** (IF0.3) DOI : 10.14429/dlsj.7.17445
8. Sharma Ashish, Shilpa Sharma, **Hemant Sood**, Rajinder Singh Chauhan. 2022. Comparative coexpression networks pinpoint acyltransferases decorating structures of major iridoid glycosides in a medicinal herb, *Picrorhiza kurroa*. **Plant Gene**. 31: 10366 DOI.org/10.1016/j.plgene.2022.100366 (IF: 2.57) (**SCImago and Q2**) June
9. Nikhil Malhotra,Paras Sharma,**Hemant Sood**,Rahul Chandora,Mamta Arya,Jai Chand Rana,and Mohar Singh .2022 Agro-morphological characterization and nutritional profiling of traditional Himalayan crop landraces for their promotion towards mainstream agriculture. **Frontiers in Plant Science**. 31: doi: 10.3389/fpls.2022.898220 (22<sup>nd</sup> june 2022) **SCI** (IF6.62) Q1
10. Sahil Kapoor, **Hemant Sood**, Shweta Saxena and Om Prakash Chaurasia.2022 Green synthesis of silver nanoparticles using *Rhodiola imbricate* and *Withania somnifera* root extract and their potential catalytic, antioxidant, cytotoxic and growth-promoting activities.**Bioprocess and Biosystems Engineering**.45(2):365-380. DOI : 10.1007/s00449-021-02666-9 <https://link.springer.com/content/pdf/10.1007/s00449-021-02666-9.pdf> IF(3.2) (Jan2022) SCImago and Scopus Q2
11. Rolika Gupta, Deepak Sharma and **Hemant Sood**.2021. Micropropagation of critically endangered herb of Himlayan region: *Trillium govanianum* for in vitro shoot proliferation and production of Diosgenin. **Research Journal of biotechnology**.16(2):173-178. Scopus



- /WOS /SCI impact factor:0.23  
<https://worldresearchersassociations.com/biotechcurrissue/23.pdf> ISSN: E-ISSN: 2278-4535 Print ISSN: 0973-6263 (Word researcher organization) Feb Q4
12. Archit Pundir, Anaida Kad and Hemant Sood (2019) Elicitation of salidroside under tissue culture conditions in the Trans-Himalayan plant *Rhodiola imbricate*. WSCAS Transaction on Biology and Biomedicine. 16:75-89. **Print ISSN: 1109-9518 E-ISSN: 2224-2902** <http://wseas.org/wseas/cms.action?id=20235> Scopus Q4
  13. Satyam Singh and Rhythem Sharma and **Hemant Sood** (2019). Effect of LEDs on micropropagated shoots of *Picrorhiza kurroa* vis-a-vis biosynthesis of Picroside-1. WSCAS Transaction on Biology and Biomedicine. **Print ISSN: 1109-9518 E-ISSN: 2224-2902** 16 (1):90-96 (O) Scopus Q4
  14. Saveena Solanki, Anubhavi Singh, and **Hemant Sood**. 2018. GC Analysis of Invitro Developed Shoots of *Stevia Rebaudiana* Through Rapid Tissue Culture. International Conference on New Horizons in Green Chemistry & Technology (ICGCT) 2018. Available at SSRN: <https://ssrn.com/abstract=3298672> or <http://dx.doi.org/10.2139/ssrn.3298672> (Dec, 102018) **27-28 November 2018, Vol. 1 No. 3 03/06/2019 (e- journal) Elsevier**
  15. Sahil Kapoor, Amita Sharma, Pusphender Bharadwaj, **Hemant Sood**, Shweta Saxena, Om Prakash Chaurasia. 2019 Enhanced production of phenolic compounds in compact callus (aggregate suspension cultures of *Rhodiola imbricata* Edgew. Applied biochemistry and biotechnology .187(3) 817-837 DOI: 10.1007/s12010-018-2851-y IF(1.797) (march) SCI and Scopus Q2
  16. Shivam Sharma, Vineet Mehta, Parul Sharma, Kritika Jaggi, Udayabanu Malairaman and **Hemant Sood**. 2018 .Anti- fertility activity and contraceptive potential of the hydroalcoholic rhizome extract of *Trillium govanianum* in female wistar rats. Asian Journal of Pharmaceutical and clinical research. 11(11):329-332 .DOI10.22159/ajpcr.2017.v11i11.27420 IF (0.42) Scopus (July) Q4
  17. Sahil Kapoor, Rinky Raghuvanshi, Pushpender Bhardwaj, **Hemant Sood**, Sheweta Saxena, and Om prakesh Chaurasia. 2018 Influence of light quality on growth, secondary metabolites production and antioxidant activity in callus cultures of *Rhodiola imbricate* Edgew. Journal of Photochemistry and Photobiology. 183:258-265 <https://doi.org/10.1016/j.jphotobiol.2018.04.018> IF(3.1625) Scopus and SCI Q1 **ISSN: 1010-6030 April**
  18. Arun Sharma, Ankita Rajata, Udayabanu Malairaman and **Hemant Sood**. 2018 Hydroalcoholic extraction of shoot cultures from *Nothapodyte nimmoniana* and its anti-proliferative analysis. International journal of Pharmacy and Pharmaceutical sciences. 10(6): 32-37. IF(0.51) Scopus Index
  19. Jibesh Kumar Padhan, Tarun Pal, Pawan Kumar, **Hemant Sood**, Rajinder S. Chauhan. 2018 Comparative Transcriptomics Uncovers Differences in Photoautotrophic versus Photoheterotrophic Modes of Nutrition in relation to Secondary Metabolites Biosynthesis in *Swertia chirayita*. Molecular Biology Reports. 45 (2) : 77-98. DOI: [10.1007/s11033-017-4135-y](https://doi.org/10.1007/s11033-017-4135-y) (IF: 1.82) SCI and Scopus .ISSN 03014851 Q3

20. Payal Kotvi, Rhythem Sharma, Satyam Singh and Hemant Sood\*2017 Gentipicroside Elicitation in Shoot Cultures of *Gentiana kurroo* and *Swertia chirayita* with Molecular Authentication. Proceedings for the International Conference on Biotechnology And Biomedicine organized by National Institute for Engineering and Research Hyderabad.13August 2017 .DOI 01.1617/vol4iss7pid47186 ISBN:9788192958012
21. **Hemant Sood** (2017). Cultured cambial meristematic cells - a sustainable route towards in vitro production of phytochemicals. *Adv Cell Sci Tissue Cult.*1(1):1-2 DOI: [10.35841/cell-science.1.1.3-4](https://doi.org/10.35841/cell-science.1.1.3-4) 12 Jan, 2017
22. Ankita Rajata, Devanshi Popli Payal Kotvi and **Hemant Sood** (2017). Optimization of culture conditions for the production and germination of artificial seed in an important medicinal plant *Nothapodytes nimoniana*. *International Journal Of Innovative Research in Science and Engineering.*3(1):70-77.ISSN(O) 2454-9665 ISSN(P) 2454-0663.Google citation [www.ijirse.com](http://www.ijirse.com)
23. Anaida Kad, Archit Pundir Shubham Sharma, and **Hemant Sood** (2017). Development of suspension cultures and ex-vitro rooting in *Rauwolfia serpentina* for rapid and large scale multiplication. *International Journal Of Innovative Research in Science and Engineering.*3(1):135-143.ISSN(O) 2454-9665 ISSN(P) 2454-0663.Google citation [www.ijirse.com](http://www.ijirse.com)
24. Shubham Sharma, Devanshi Popli Neha Sharma, O P Chaurasia and **Hemant Sood** (2016). Effect of temperature on *in vitro* organogenesis of *Rhodiola imbricate* Edgew-a medicinal herb. *World Journal of Pharmacy and Pharmaceutical Sciences.* 5(12) :1228-43. ISSN 2278-4357DOI:10.20959/wjpps201612-8266 SJIF (IF:6.041 Dec.)Google citation
25. Shivam Sharma, Nikhil Malthora and Hemant Sood (2016) Expression analysis of steroid pathway genes revealed positive correlation with diosgenin biosynthesis in *T. govaniatum*. *Acta Physiologiae Plantarum.* 38(11):1-8 DOI: 10.1007/s11738-016-2289-1 IF(1.62 ) Print ISSN 0137-5881 (SCI & Q1)
26. Jibesh K. Padhan, Pawan Kumar, **Hemant Sood**, Rajinder S. Chauhan (2016). Prospecting NGS-transcriptomes to assess regulation of miRNA –mediated secondary metabolites biosynthesis in *Swertia chirayita*, a medicinal herb of the N-W Himalayas biosynthesis. **Medicinal Plants- International Journal of Phytomedicines and related Industries.**8(3)219-228 . Doi : 10.5958/0975-6892.2016.00029 (IF-0.8) Scopus and Q4
27. Ira Vashisht, Tarun pal, **Hemant Sood** and Rajinder Chauhan (2016) Comparative transcriptome analysis in different tissues of a medicinal herb, *Picrorhiza kurroa* pinpoints transcription factors regulating picrosides biosynthesis. **Mol Bio Reports** .43 (12):1395-1409.DOI 10.1007/s11033-016-4073-0 (IF:1.6) (Scopus and SCI ) Q3
28. Devanshi Popli, Shubham Sharma and **Hemant Sood** (2016). Optimization of liquid MS medium for enriching biomass of *Dactylorhiza hatagirea*. **International Journal of Tropical Agriculture.** 34(5):1271-1276 ISSN0254-8755 (NAAS:3.03) (UGC approved) Q4
29. Payal Kotvi, Enesh Vashist, Shivam Sharma and **Hemant Sood** (2016). Optimization of culture conditions for the production and germination of artificial seed in an important

medicinal plant *Gentian kurroo*. Innovare Journal Of Agricultural Sciences 4(4):1-4.ISSN 2321-6832 DOI: <http://innovareacademics.in/journals/index.php/ijags/article/view/14575> (Google scholar)

30. Varun Kumar, Neha Sharma , **Hemant Sood** , Rajinder S.Chauhan (2016) Exogenous feeding of immediate precursors reveals synergistic effect on picroside-I biosynthesis in shoot cultures of *Picrorhiza kurroa* Royle ex Benth. **Sci. Rep.** 6: 29750. DOI: **10.1038/srep29750 (IF 5.22) SCI Q1**
31. Nikhil Malhotra, **Hemant Sood** , Rajinder S.Chauhan (2016) Transcriptome-wide mining suggests conglomerate of genes associated with tuberous root growth and development in *Aconitum heterophyllum* Wall. **3 Biotech** (2016) 6(2):152 ISSN **2190-5738** ( Impact Factor **0.99**) DOI 10.1007/s13205-016-0466-y. Scopus and Science Citation Index(SCI) Q2
32. Shivam Sharma, Arun Sharma, Vineet Mehta, Rajinder Singh Chauhan, Udayabanu malairaman, **Hemant Sood** (2016) Efficient hydroalcoholic extraction for highest diosgenin content from *Trillium govanianum* (nag chhatri) and it's *in vitro* anticancerous activity. Asian journal of pharmaceutical and clinical research. 9(4):386-392 .IF(0.5 ) Scopus Indexed
33. Neha Sharma, Rajinder Singh Chauhan and **Hemant Sood** (2016) Discerning picroside-I biosynthesis via molecular dissection of *in vitro* shoot regeneration in *Picrorhiza kurroa*. Plant Cell Reports. 35(8)1601-1615 doi: 10.1007/s00299-016-1976-0 (IF-3.07)Scopus and SCI Q1
34. Neha Sharma, Varun Kumar, Rajinder Singh Chauhan and **Hemant Sood** (2016) Modulation of picroside-I biosynthesis in *in vitro* grown elicited shoots of *Picrorhiza kurroa* . Journal of Plant Growth Regulation 35(4): 965-973 doi:10.1007/s00344-016-9594-1 (IF-2.23) Scopus and SCI Q1
35. Varun Kumar, Kirti Shitiz, **Hemant Sood**, Rajinder Singh Chauhan and Chandardeep Tandon (2016). Tracking dynamics of enzyme activities and their gene expression in *Picrorhiza kurroa* with respect to picroside accumulation. Journal of Plant Biochemistry and Biotechnology. 25(2):125:132 (IF-1.09) Scopus and SCI Q3
36. Manali Gangwar, **Hemant Sood** and Rajinder Singh Chauhan (2016). Genomics and relative expression analysis identifies key genes associated with high female to male flower ratio in *Jatropha curcas* L. Molecular Biology Reports. 43(4)305-322 doi: 0.1007/s11033-016-3953-7 (IF- 2.024) Scopus and SCI Q3
37. Kirti Shitiz, Neha Sharma, Tarun Pal, **Hemant Sood** and Rajinder Singh Chauhan (2015). Mining Simple Sequence Repeats in *Picrorhiza Kurroa* Transcriptomes for Assessing Genetic Diversity among Accessions Varying for Picrosides Contents. Plant genetic Resources15(1): 79-88 (IF-0.44) Scopus and SCI
38. Kirti Shitiz, Neha Sharma, Tarun Pal, **Hemant Sood** and Rajinder Singh Chauhan (2015). NGS Transcriptomes and Enzyme Inhibitors Unravel Complexity of Picrosides Biosynthesis in *Picrorhiza kurroa* Royle ex. Benth. PLoS ONE 10(12): e0144546 (IF-3.23) Scopus and SCI
39. Varun Kumar, **Hemant Sood** and Rajinder Singh Chauhan (2015). Optimization of a preparative RP-HPLC method for isolation and purification of picrosides in *Picrorhiza*

*kurroa*. Journal of Plant Biochemistry and Biotechnology 25(2):205-214 (IF-1.09) **Scopus and SCI**

40. Manali Gangwar, Swati Sharma, Rajinder Singh Chauhan and **Hemant Sood** (2015). Indirect shoot organogenesis in *Jatropha curcus* (L) for in vitro propagation. Indian Journal of Research-pariplex. 4(12):56-58 (ISSN No. 2250-1991, Google Scholar)
41. **Hemant Sood**, Kirti Shitiz and Neha Sharma (2015). Rapid method for *in vitro* multiplication of hypericin rich shoots of *Hypericum perforatum*. Journal of plant Sciences 3(5): 279-284 (ISSN: 2331-0731) **Scopus Index (0.24)**
42. Varun Kumar, **Hemant Sood**, Rajinder S. Chauhan (2015). Detection of intermediates through high resolution mass spectrometry for constructing biosynthetic pathways for major chemical constituents in a medicinally important herb, *Swertia chirayita*. Natural product Research .29 (15):1449-55 (IF-1.05) **Scopus and SCI**
43. Varun Kumar, Neha Sharma, Kirti Shitiz, Tiratha Raj Singh, Chandardeep Tandon, **Hemant Sood**, Rajinder S. Chauhan (2015). An insight into conflux of metabolic traffic leading to picroside-I biosynthesis by tracking molecular time course changes in a medicinal herb, *Picrorhiza kurroa*. Plant Cell, Tissue and Organ Culture.123(2):435-441 (IF-2.12) **Scopus and SCI**
44. Jibesh Kumar Padhan, Varun Kumar, **Hemant Sood**, Tiratha Raj Singh, Rajinder S. Chauhan (2015). Contents of therapeutic metabolites in *Swertia chirayita* correlate with the expression profiles of multiple genes in corresponding biosynthesis pathways. Phytochemistry, 116, 38-47 (IF-2.54) **Scopus and SCI**
45. Neha Sharma, Rajinder Singh Chauhan and **Hemant Sood** (2015). Seaweed extract as a novel elicitor and medium for mass propagation and picroside -1 production in an endangered medicinal herb *Picrorhiza kurroa*. Plant Cell Tissue and Organ Culture. 122(1) :57-65 (IF-2.12) **Scopus and SCI**
46. Neha Sharma, Kirti Shitiz, Disha Kalia, Jasleen Kaur Ahuja, Rajinder Singh Chauhan, **Hemant Sood** (2014). Expression analysis of key genes for Picroside-I production in in vitro grown shoots of different genotypes and species of endangered herb *Picrorhiza*. International Journal of Basic and Applied Biology. 2 (1): 36-39 (Google Index)
47. Varun Kumar, **Hemant Sood** and Rajinder Singh Chauhan (2015) Detection of intermediates through high-resolution mass spectrometry for constructing biosynthetic pathways for major chemical constituents in a medicinally important herb, *Swertia chirayita*, Natural Product Research: Formerly Natural Product Letters. 29(15):1449-55 DOI: 10.1080/14786419.2015.1004175 (IF-1.6) **Scopus and SCI**
48. Pawan Kumar, Tarun Pal, Neha Sharma, Varun Kumar, **Hemant Sood**, Rajinder S. Chauhan (2014) Expression analysis of biosynthetic pathway genes vis-à-vis podophyllotoxin content in *Podophyllum hexandrum* Royle. Protoplasma.252(5):1253-62 DOI:10.1007/s00709-015-0757-x (IF- 2.65) **Scopus and SCI**
49. Chaynika Kapoor, Shrutkirti, Rajinder Singh Chauhan and **Hemant. Sood** (2014) Seaweed Extract for Micropropagation and Production of Secondary Metabolites in an Endangered Herb *Swertia chirayita*. International Journal of Agriculture and Food Science Technology. 5(7): 801-810801-810 (ISSN 2249-3050)
50. Nikhil Malhotra, Varun Kumar, **Hemant Sood**, Tiratha Raj Singh and Rajinder Singh Chauhan (2014). Multiple Genes of Mevalonate and Non-mevalonate Pathways Contribute to

- High Aconites Content in an Endangered Medicinal Herb, *Aconitum heterophyllum* Wall. Phytochemistry 108:26-34 (2.54) **Scopus and SCI**
51. Varun Kumar, Varun Kumar, Rajinder Singh Chauhan, **Hemant Sood** and Chanderdeep Tandon (2014) Cost effective quantification of picrosides in *Picrorhiza kurroa* by employing response surface methodology using HPLC-UV. Journal of Plant Biochemistry and Biotechnology. 24(4):376-384.DOI 10.1007/s13562-014-0285-3 (IF-1.09) **Scopus and SCI**
  52. Anil Kumar, Shiwani Kaushal, Shivam Sharma, **Hemant Sood** (2014). In vitro callus induction and plantlet regeneration of *Swertia Chirayita*: A critically endangered medicinal plant. International Journal of Pharmaceutical Sciences Review and Research. 27(1): 94-96. (ISSN: 0976-044X ) **Scopus Index0.65**
  53. Ashish R. Warghat, Prabodh K. Bajpai, O.P. Chaurasia, Ravi B. Srivastava, Rajinder Singh Chauhan and **Hemant Sood** (2014). In vitro protocorm development and mass multiplication of an endangered orchid *Dactylorhiza hatagirea*. Turkish Journal of Botany, 38:737-746 (IF 1.61) **Scopus and SCI**
  54. Kirti Shitiz, Saurabh Pandit, Rajinder Singh Chauhan and **Hemant Sood** and (2013). Picroside content in the rhizome of *Picrorhiza kurroa* Royle ex Benth traded for herbal drugs in the markets of North India. **Int.J.Med. Arom. Plants** 3(2): 226-233 ISSN 2249-4340 4546 .
  55. Ashish R. Warghat, Prabodh K. Bajpai, Ravi B. Srivastava and **Hemant Sood** (2013). Population genetic structure and conservation of small fragmented locations of *Dactylorhiza hatagirea* in Ladakh region of India. Scientia Horticulturae. 164:448-454 (IF-1.5) **Scopus**
  56. Varun Kumar, Rajinder Singh Chauhan and **Hemant Sood** (2013) In vitro production and efficient quantification of major phytopharmaceuticals in an endangered medicinal herb, *Swertia chirata*. International Journal of Biotechnology and Bioengineering Research. 4(5).495-506 (ISSN 2231-1238)
  57. Kumar Varun, **Hemant Sood** and Rajinder Singh Chauhan (2013). A Proposed Biosynthetic Pathway of Picrosides Linked through the Detection of Biochemical Intermediates in the Endangered Medicinal Herb *Picrorhiza kurroa*. Phytochemical Analysis. 24(6):598-602 doi: 10.1002/pca.2437. (IF-2.45) Scopus
  58. Anil kumar, Shiwani Kaushal, Shivam Sharma, **Hemant Sood**, D. R. Sharma (2013) Novel method of bioreactor to propagate *Swertia Chirayita*: A critically endangered medicinal plant, Weekly Science, 1(4) (ISSN: 2321-7871)
  59. Saurabh Pandit, **Hemant Sood** and Rajinder Singh Chauhan (2013) Expression Pattern of Fifteen Genes of Non-mevalonate (MEP) and Mevalonate (MVA) Pathways in Different Tissues of Endangered Medicinal Herb *Picrorhiza kurroa* with respect to Picrosides Content, Molecular Biology Reports, 40:1053-1063, (IF-1.9) **Scopus and SCI**
  60. Saurabh Pandit, **HemantSood** and Rajinder S. Chauhan (2012). Differential Biosynthesis and Accumulation of Picrosides in an Endangered Medicinal Herb *Picrorhiza kurroa*, Journal of Plant Biochemistry and Biotechnology, 21:1-8 (IF-1.09) **Scopus and SCI**
  61. Bhupinder Singh Sandhu, **Hemant Sood**, Sneha Gulati and RS Chauhan (2012). *In vitro* multiplication and production of picrosides by using elicitors in endangered medicinal herb *Picrorhiza scrophulariiflora*. Crop Improvement. 91-92 (ISSN 0256-0933)
  62. Bhatt Anu, Shubi Kansal, RS Chuahan and **Hemant Sood** (2012). Modified tissue culture procedure for micropropagation of apple root stocks. International Journal of Plant Developmental Biology. 6(1) 67-72 (ISSN: 1749-4753)

63. Ashish R. Warghat, Prabodh K. Bajpai, Ashutosh A. Murkute, **Hemant Sood**, Om P. Chaurasia and Ravi B. Srivastava (2012). Genetic diversity and population structure of *Dactylorhiza hatagirea* (Orchidaceae) in cold desert Ladakh region of India. Journal of Medicinal Plants Research 6(12): 2388-2395. (IF-0.87) **SCImago and Scopus**)
64. Taru Prasad, Zain Taha, R.S. Chauhan and **Hemant Sood** (2011). Improvising procedures of micropropagation of *Gerbera jamesonii* for cost effectiveness and their commercial production. International Journal for Applied Engineering and Research. 6(5):1135-1140 (ISSN 0973-4562)Scopus
65. **Hemant Sood** and Rajinder Singh Chauhan (2011). Different Tissue Culture Parameters used for Increased Shoot Biomass and its Enrichment for a Medicinal Compound, Picroside-1 in an Endangered Herb, *Picrorhiza kurroa* Royle ex Benth. Research Bioscientia. 2(4):13-22. (ISSN 2230-9446)
66. **Hemant Sood** and Rajinder Singh Chauhan (2010). Biosynthesis and Accumulation of a Medicinal Compound, Picroside-1 in Cultures of *Picrorhiza kurroa* Royle ex Benth. Plant Cell Tissue Organ Culture Plant Cell Tissue Organ Culture 100:113-117. (IF-2.12) **Scopus and SCI**
67. **Hemant Sood** and RS Chauhan (2009). Development of a low cost micropropagation technology for an endangered medicinal herb (*Picrorhiza kurroa*) of north-western Himalayas. Journal of Plant Sciences 4(2):21-31 (IF-1.69) **Scopus**
68. Kaur, R., **Gautam, H.** and Sharma, D.R. (2005). Simple and low cost strategy for micropropagation of strawberry. Acta Horticulturae. 696: 129-133. , (IF-1.5) **Scopus**
69. **Gautam, H.**, Kaur, R., Sharma, D.R. and Thakur, N. (2001). A comparative study on *in vitro* and *ex vitro* rooting of micropropagated shoots of strawberry (*Fragaria x ananassa*). J. Plant Cell Biotech. and Mol. Biol. 3:149-152.
70. Thakur, N., Kaur, R., **Gautam, H.** and Sharma, D.R. (2001). Effect of chemicals on enhancement of *in vitro* bulblet size of lilum.. J. Plant Cell Biotech. and Mol. Biol. 3:69-72.
71. **Gautam, H.**, Kaur, R., Sharma, D.R. and Thakur, N. (2001). *Bacillus thuringiensis*: recombinant pesticide. Science and Culture. 67:362-364.

## **N. International/National Conference Papers**

1. Naina Puri, Karishma Mahajan, **Hemant Sood** and Poonam Sharma. 2024 Effects of Acoustical waves and Surface Wetting Characteristics on Phytochemical production of medicinal plant Gentiana kurroo in Indian Analytical Congress (IAC-2024) held on 5-7 June, 2024 at CSIR-IIP, Dehradun.
2. Deepika B. Prashar, **Hemant Sood** and Munish Sharma. Pharmacological Exploration and Chemical Profiling of Arisaema propinquum Extracts from Himachal Pradesh: A Liquid Chromatography-Mass Spectrometry (LC-MS) Study. International Conference on INNOVATION & TECHNOLOGIES in Medicine and Healthcare (ICMH - 2024), Chennai, India May 10-11, 2024.
3. Hemant Sood. 2023. Production of medicinal compounds from endangered and commercially important medicinal plants of Himalayas through cell and tissue culture technology for Herbal Industry (case study of Picrosides) in **International Conference on Synergetic**



**Innovations & Biotechnological Advancement for Sustainable Development (Plant, Food & Chemical Sciences) organized by School of Applied Science, Uttranchal University, Dehradun from 29th – 30th September 2023.**

4. Parul Katoch, Rolika Gupta and Hemant Sood.2023. Effect of LEDs in phytochemical accumulation and biomass production in callus cultures of *Podophyllum hexandrum* in **International Conference on Synergetic Innovations & Biotechnological Advancement for Sustainable Development (Plant, Food & Chemical Sciences) organized by School of Applied Science, Uttranchal University, Dehradun from 29th – 30th September 2023.**
5. Ragini Mishra ,Swetam and Hemant Sood .2023. Organic potting mixtures enriched with treated cigarette buds: An eco-friendly and alternate solution for growing in-vitro raised plants of *Picrorhiza kurroa* in **International Conference on Synergetic Innovations & Biotechnological Advancement for Sustainable Development (Plant, Food & Chemical Sciences) organized by School of Applied Science, Uttranchal University, Dehradun from 29th – 30th September 2023.**
6. Deepika Bhandral, **Hemant Sood**, and Munish Sharma 2023. Ethnopharmacological exploration, phytochemical profiling, and commercial perspective of *Zingiber roseum*. **International Conference on Strategies and Challenges on Agricultural & Life Science for Food Security and Sustainable Environment (SCALFE 2023)**, organized by at Himachal Pradesh University, Shimla, India. April 28 to 30, 2023.
7. Hemant Sood.2023 Production of bioactive compounds from shoot cultures of endangered and commercially important medicinal plants of Himalayas in **7th Edition of Global Congress on Plant Biology and Biotechnology** virtual event organised by Magnus group, USA on 16th March 16-18, 2023
8. Sirina Kalia, Vrinda, Naina Puri, Khushboo Pandey and **Hemant Sood** . 2023 Evaluation of a herbal formulation prepared as a possible treatment for Dementia.- A Review. **6th International Conference on Advances in Biosciences and Biotechnology (ICABB2023)** organized by Departemnt of Biotechnology, IIIT Noida from 18-20 Jan 2023 (Ref NO ICABB\_F338\_SRI ) pp133 (oral paper ppt)
9. Nikunj Sharma, Chirag Abrol, Rolika Gupta and **Hemant Sood**. 2023 Qualitative and Quantitative Phytochemical analysis of *Bahunia varigeta* . **Sustainable India International Conference on Future Innovation and sustainable development for asian Countries** organized Sri Aurobindo Yoga & Knowledge Foundation, India in association with by Dhonburi Rajbhat University Thailand and Navvikon and International Women in Tech, Dublin, Ireland on 14<sup>th</sup> Jan, 2023 ( oral paper ppt virual mode)
10. Yogesh Joshi, Divyam, Rolika Gupta and Hemant Sood 2022. Phytochemical profiling of *Bunium persicum*: a traditional and underutilized plant of the north-western Himalayas. 3rd International Modern Scientific Research Congress organized by Istanbul Gedik University, **Istanbul, Turkey** on 6-7 May 2022 (oral ppt)

11. Ramneek Khuranna and Hemant Sood 2022. Pine needles and agricultural wastes: A cost-effective alternate to produce pulp or paper. 4th International Conference on “Challenges in Chemical and Biochemical Engineering for Sustainable Development (CBSD)” at Annamalai University Tamilnadu on 23<sup>rd</sup> and 24<sup>th</sup> March 2022 (oral ppt)
12. Ramneek Khurana and Hemant Sood presented in Shodh Shikhar 2022 with project title Brown Gold: An alternative and cost effective solution to pulp and paper production organized by United Nations Development Programme with Rabindranath Tagore University Bhopal, pp198 from 25-26 March 2022 (Oral Presentation)
13. Sunainy Ajrawat , Chhavi Thakur and Hemant Sood. 2022. An Integrated In-Silico Approach to Identify Bioactive Phytochemicals in *Bauhinia variegata* plant as potential lead candidates against SARS-CoV-2 transmission targets. International Symposium on Deliberations on Rethinking the Environment: Sustainability in the Modern Era organized by DME law School Noida with University of Santiago de Compostela, Spain and United Nations Environment Programme (UNEP) from 25<sup>th</sup> and 26<sup>th</sup> March, 2022 (Oral Ppt) (conference paper) ISSN:
14. Hemant Sood. 2022. Production of Medicinal Compounds from Endangered and Commercially Important Medicinal Plants of Himalayas Through Cell and Tissue Culture Technology in *Picrorhiza kurroa* for Herbal Industry. **2<sup>nd</sup> Global Conference on Plant Science and Agricultural Research organized by Iris Scientific Group in Rome, Italy** from 24-26<sup>th</sup> March, 2022
15. Ramneek Khuranna and Hemant Sood 2021. Pine needles and agricultural wastes: A sustainable alternate for pulp or paper. A virtual International Conference on **Technological Intervention in Renewable Energy for Sustainable Environment (RESE-2021)** organized by TIEDC and CESTRD at the Department of BT&BI Jaypee University of Information Technology Waknaghat, pp43 on 24<sup>th</sup> and 25<sup>th</sup> November 2021.
16. Ankush Verma, Utkarsha Shrivastava and **Hemant Sood** 2021. Effect of different culture conditions for propagation and organic components on hardening of medicinal herb *Valeriana jatamansi*” .Multi-Disciplinary Approaches for Development of Agriculture and Allied Sectors in Global Scenario in International (Online) Conference Agriculture, Biological and Life Sciences (ICABLS-2021) Organized by Vidya Kutir Foundation, New Delhi, India chp 14 ISBN: 978-93-92403-14-9 pp 132-137 on 25<sup>th</sup> -26<sup>th</sup> September, 2021.
17. Sunainy Ajrawat , Chhavi Thakur and **Hemant Sood**. 2021. In Silico Exploration of Medicinal Compounds of *Bauhinia variegata* presented in Research and Innovation Showcase (RAISE) organized by IPR Cell, Jaypee University of Information Technology, Solan in collaboration with Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE) from March 20 - 25, 2021.
18. Sunainy Ajrawat , Chhavi Thakur and **Hemant Sood**. 2021 In silico profiling of bioactive compounds of *Bauhinia variegata* and exploring its pharmacological properties. **International Conference Sustainable Asia's Problems & Prospects** on March 15<sup>th</sup> 2021, 2021 organized by SSIMPT, Raipur and The Progress: Sri Aurobindo Yoga & Knowledge Foundation, India **REF NO : TPIC-21-001**: oral paper ppt pp 9

19. Divyam and **Hemant Sood**.2021 .Traditional underutilized plants of Himachal Pradesh.5th **International Conference Sustainable Asia's Problems & Prospects** on March 15th 2021, 2021 organized by SSIMPT, Raipur and The Progress:Sri Aurobindo Yoga & Knowledge Foundation, India . oral paper ppt PP 6
20. Utkarsha Shrivastva and **Hemant Sood**.2021 Molecular screening for phytochemical significance of *Podophyllum hexandrum* Royale and *Podophyllum peltatum* 5th International Conference on Bioenergy, Environment and Sustainable Technologies (BEST2021 ICON)January 29-30, 2021 organized Arunai Engineering College, Tiruvannamalai, Tamilnadu, India BIO9:oral paper ppt <https://arunai.org/best2021/>
21. Yukti ,Khushi Maheshwari and **Hemant Sood**.2021 Optimizing components of biocompost and bioenzyme for growing exotic vegetables. 5th International Conference on Bioenergy, Environment and Sustainable Technologies (BEST2021)January 29-30, 2021 organized Arunai Engineering College, Tiruvannamalai, Tamilnadu, India ENO8:oral paper ppt
22. Rolika Gupta and **Hemant Sood**.2021 Biosynthesis and accumulation of mangiferin and amarogentin in different developmental phases of in vitro grown *Swertia chirayita*. 5th International Conference on Bioenergy, Environment and Sustainable Technologies (BEST2021&ICONBIO)January 29-30, 2021, Arunai Engineering College, Tiruvannamalai, Tamilnadu, India LS26:oral paper ppt <https://arunai.org/best2021/>
23. Khushi Maheshwari, Yukti and **Hemant Sood**.2020 Effect of homemade biocompost and bioenzyme on exotic vegetables. International Conference of innovations in Biotechnology and Life Sciences(ICIBLS2020) hosted by Department of Biotechnology, Delhi Technical University,18-20 December, 2020 pp107 (oral ppt)AB-065 ISBN (Print): 978-93-88647-32-8 ISBN (Online): 978-93-88647-33-5 DOI: 10.6084/m9.figshare.13947833 <https://www.biotechnika.org/2020/11/international-conference-on-innovations-in-biotechnology-and-life-sciences-icibls-2020/>
24. Rolika Gupta and Hemant Sood.2020 Optimization of culture conditions for the production and germination of artificial seed in an important medicinal plant, *Swertia chirayita*. **International conference on “Technologies for Environmental Sustainability and Smart Agriculture” organized by Centre of Excellence in Sustainable Technologies for Rural Development [CESTRD], Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology during September 18 & 19, 2020 pp39**
25. Utkarsha Shrivastva and Hemant Sood.2020. Pine oil biofuel blends: An upcoming strategy to develop sustainable biofuels. **International conference on “Technologies for Environmental Sustainability and Smart Agriculture” organized by Centre of Excellence in Sustainable Technologies for Rural Development [CESTRD], Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology during September 18 & 19, 2020 pp66**
26. Rolika Gupta, Deepak Sharma and Hemant Sood.2020. Micropropagation of critically endangered herb of Himlayan region: *Trillium govaniatum* for in vitro shoot proliferation and production of Diosgenin. **International Conference on Integrated Interdisciplinary Innovations in Engineering (ICIIE 2020)** organized by University Institute of

Engineering & Technology (UIET), Panjab University, Chandigarh from 28th – 30th August ,2020. ID-12 pp146 .

27. B Soumya, Arush ,Rolika and Hemant Sood.2020. Propagation and Hardening of Ornamental and Commercially Important Plants via Hydroponic System. **International E-Conference on Frontiers in Industrial Biotechnology** organized by Department of Biotechnology at St Joseph's College of Engineering, Chennai and sponsored by AICTE, All India Council for Technical Education and BRSI, India from 27<sup>th</sup> – 29<sup>th</sup> July ,2020. ID (oral PPT) pg 34.
28. Dhruvika, Rimjhim, Rolika and **Hemant Sood**.2020.Cryopreservation and regeneration of *Picrorhiza kurroa*. **International Conference on Advances in Biosciences and Biotechnology(ICABB-2020)** organized by Department of Biotechnology,JIIT,Noida,30<sup>th</sup> January-1st Feb,2020. ISSN:2471-5689 ID OP-22 , (Poster PPT)
29. Utkarsha Shrivastva and **Hemant Sood**.2020.Evaluation of plant extracts as possible phytotherapeutics for the treatment of asthma-Areview. **International Conference on Advances in Biosciences and Biotechnology(ICABB-2020)** organized by Department of Biotechnology,JIIT,Noida,30<sup>th</sup> January-1st Feb,2020 ISSN:2471-5689 **ID PP-47id**.(-Poster PPT)
30. **Hemant Sood**, Satyam Singh, Rhythm Sharma and Rolika Gupta 2019. Effect of Polychromatic Light Emitting Diodes on micropropagated shoots and metabolite production in *Swertia chirayita*.2<sup>nd</sup> Global Conference on Plant Science and Microbiology Ecology organized by SCIENT GLOBAL CONFERENCES, at Dubai ,UAE from 14<sup>th</sup> October -16<sup>th</sup> Oct.,2019 pg 43 [https://sciononline.org/plant-science-conferences/Plant\\_Science-2019\\_Book\\_.pdf](https://sciononline.org/plant-science-conferences/Plant_Science-2019_Book_.pdf)
31. Kiritka Thakur,Payal Thakur, Rolika Gupta and **Hemant Sood** 2019 Optimization of Culture Conditions in Different Hydroponic Systems for Propagating and Hardening of in vitro grown medicinal plants. **National Seminar** on Strategies for Conservation & Sustained utilization for Biodiversity organized by Department of BT, School of Applied and Life sciences,Uttaranchal Univ.,Dehradun and Utrakhnad Science Education and Research Centre, DST( Government Of Uttarakhand)18<sup>th</sup> -19<sup>th</sup> Oct,2019. Pp43
32. Rolika Gupta and **Hemant Sood** 2019. Biosynthesis and accumulation of medicinal compounds in different development stages of *Swertia chirayita* – the endangered medicinal herb of Himalyas “International Conference on Recent Trends in Biotechnology and Bioinformatics” organized at Jaypee University of Information Technology, Waknaghat 1-3 August, 2019(oral) pp 49
33. Sahil Kapoor, Shweta Saxena, Om Prakash Chaurasia and **Hemant Sood**. Selection of elite chemotypes of *Rhodiola imbricata* by rapid and validated reverse phase high performance liquid chromatographic method. International conference on new age opportunities and challenges for quality, safety and GMPs in herbal drug development. 23<sup>rd</sup> national convention of society of pharmacogony, CSIR-NBRI, Lucknow, India, 22-23 February 2019.(Abstract and poster ppt)
34. Kritika Thakur ,Payal Thakur and **Hemant Sood**. 2018. Hardening of Tissue Cultured Plants via Hydroponics System : An Alternative and Rapid Methodology “International Conference on New Horizons in Green Chemistry & Technology organized at Uttaranchal college of

- Applied and Life Sciences, Uttarakhand University, Dehradun 27-28 November, 2018 (poster) published in Elsevier (pp19)
35. Saveena, Rolika Gupta, Anubhavi Singh and **Hemant Sood**. 2018. Effect of growth hormones on in vitro propagation and secondary metabolite production in *Stevia rebusiana* “International Conference on New Horizons in Green Chemistry & Technology organized at Uttarakhand college of Applied and Life Sciences, Uttarakhand University, Dehradun 27-28 November, 2018(oral) pp22(Elsevier)
  36. Archit Pundir, Anaida Kad, Himanshi Mehta and **Hemant Sood** 2018. Effect of electricity on the morphological aspects and metabolite production in *Rhodiola imbricata*. BIOCAMP 2018 National Symposium on Current Trends and future prospects in Biotechnology organized by Department of Biotechnology, Panjab University, Chandigarh. 1<sup>st</sup> and 2<sup>nd</sup> November. 2018 (poster)
  37. Saveena, Rolika Gupta and **Hemant Sood**. 2018. Direct organogenesis for rapid in vitro propagation of *Stevia rebusiana* “3<sup>rd</sup> Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi, 22-23<sup>rd</sup> October 2018. (poster)
  38. Sahil Kapoor, Ajay Sharma, **Hemant Sood**, Shweta Saxena, Om Prakash Chaurasia (2018). Phytochemical profiling of callus extracts of *Rhodiola imbricata* by gas chromatography-mass spectrometric technique. National Seminar on "Science & Technology for Sustainable Future" (NSD-2018). Rayat Bahra University, Punjab, India: 27th Feb 2018.
  39. Devanshi Popli, Arun Sharma and **Hemant Sood** (2018) Elicitation of dactylorhizin E and studying anti-cancerous potential of Dactylorhiza hatagieria D Don.. International Conference on Bio and Nano Technologies for Sustainable Agriculture, Food, Health, Energy and Industry organized by Department of Bio and Nano Technology, Guru Jambheshwar University of Science and Technology, Hisar, Haryana in collaboration with Society for Sustainable Agriculture and Resource Management on 21-23 February, 2018. Abstract Published ISSN: **2471-5689** (Poster Presentation) pp149 (Abstract)
  40. Shubham Sharma, Devanshi Popli and **Hemant Sood** (2018) Optimization of growth hormones and culture conditions for salidroside production in *Rhodiola imbricata*. International Conference on Bio and Nano Technologies for Sustainable Agriculture, Food, Health, Energy and Industry organized by Department of Bio and Nano Technology, Guru Jambheshwar University of Science and Technology, Hisar, Haryana in collaboration with Society for Sustainable Agriculture and Resource Management on 21-23 February, 2018. Abstract Published ISSN: **2471-5689** (Poster Presentation) pp197
  41. Archit Pundir, Anaida Kad, Shubham Sharma and **Hemant Sood** (2018). Effect of different lights on the growth and development of endangered medicinal herb *Rhodiola imbricata* International Conference on Advances in Biosciences and Biotechnology organized by JIIT, Noida. 1-3<sup>rd</sup> February 2018. Abstract published in Journal of Proteins and Proteomics 9: 110. ISSN-0975-8151 and NASS(4.55)

42. Payal Kotvi, Rhythem Sharma, Satyam Singh and **Hemant Sood** (2017) Gentipicroside Elicitation in Shoot Cultures of *Gentiana kurroo* and *Swertia chirayita* with Molecular Authentication. International Conference on Biotechnology And Biomedicine organized by National Institute for Engineering and Research Hyderabad.13August 2017 .DOI 01.1617/vol4iss7pid47186 ISBN 9788192958012
43. Sahil Kapoor, Pushpender Bhardwaj, Raj Kumar, **Hemant Sood**, Shweta Saxena. O P Chaurasia (2017). Qualitative and Quantitative estimation Of Phenol Glycosides of *Rhodiola imbricate* by RPLC-DAD. International Conference on Advances in Plant and Microbial Biotechnology 2017 (PMB-2017).2-4 Feb, 2017 IIIT, Noida, India. Indo Global Journal Of Pharmaceutical Sciences .7(1):83 ISSN2249-1023.(Abstract )
44. Ankita Rajata, Devanshi Popli Payal Kotvi and **Hemant Sood** (2017)Optimization of culture conditions for the production and germination of artificial seeds of *Nothapodytes nimmoniana* in **6<sup>th</sup> International Conference on Recent Trends in Engineering, Science & Management**, National Institute of Technical teachers Training & Research,Chandigarh,8<sup>th</sup> Janauray,2017(ISBN:978-93-86171-21-4)
45. Anaida Kad, Archit Pundir Shubham Sharma, and **Hemant Sood** (2017) Development of suspension cultures and *ex vitro* rooting in *Rauwolfia serpentina* for rapid and large scale multiplication **3rd International Conference on Innovative Trends in Science,Engineering & Management**, YMCA Connaught Place, New Delhi,7<sup>th</sup> Janauray, 2017 ISBN:978-93-86171-27-6)
46. **Hemant Sood** (2016). Molecular Analysis and Cell Culture Technology For the Conservation & Sustainable Utilization of High Value Medicinal Herbs Of N-W Himalayas. International Conference on Biodiversity: Current Scenario and Future Strategies. St Bede's College Shimla Sponsored by State council for S&T and environment, 6-8<sup>th</sup> OCT, HP, India(oral PPT)
47. Devanshi Popli and **Hemant Sood** (2016). Optimization of liquid MS medium for enriching biomass of *Dactylorhiza hatagirea*. 3<sup>rd</sup> International Conference on Agriculture, Horticulture & Plant Sciences, 25-26 June, New Delhi, India.
48. Shubham Sharma, Sahil Kapoor, Neha Sharma, Rajinder Singh Chauhan, O P Chaurasia and **Hemant Sood** (2016). Callus induction and shoot regeneration for conservation of high value medicinal plant *Rhodiola imbricata*. 3rd International Conference on Biotechnology and Bioinformatics (ICBB-2016).5-7 Feb, 2016 Pune, India
49. Payal Kotvi, Enesh, Shivam Sharma and **Hemant Sood** (2015). Artificial seed production of *Gentiana kurroo* Royle (IPPC1013). Challenges and Strategies in plant Biology Research. 3<sup>rd</sup> international plant Physiology Congress. Convention Centre JNU, New Delhi, India, Dec.11-14, pp298
50. **Hemant Sood** (2015). *In vitro* production of hypericin rich shoots of *Hypericum perforatum*. Proceedings of 6<sup>th</sup> World Congress of Biotechnology. Journal of Biotechnology and Biomaterials October 05-07, New Delhi, India. 5(6):193 ISSN:2155-952X. (oral ppt)
51. Rajinder Singh Chauhan, Kirti Shitz and **Hemant Sood** (2015). Quality parameters to regulate herbal raw material of a pharmacologically important medicinal herb *Picrorhiza kurroa*. Proceedings of 6<sup>th</sup> World Congress of Biotechnology. Journal of Biotechnology and Biomaterials October 05-07,New Delhi, India . 5 (6):192 ISSN:2155-952X (Abstract)



52. Neha Sharma, Rajinder S. Chauhan, **Hemant Sood** (2014). Seaweed extract an effective alternative of growth hormones for mass propagation and enhanced secondary metabolite production in *Picrorhiza* spp. Proceedings of International Conference on Emerging Trends in Biotechnology [Jawaharlal Nehru University, New Delhi, India: 6th Nov-9th Nov. 2014]
53. Paras Pirta, Enesh Vashist, Shivam Sharma, Chaynika Kapoor, Rajinder Singh Chauhan and **Hemant Sood** (2014). Production and Elicitation of medicinal compounds in in vitro grown plants of *Gentiana kurroo*: An Endangered Herb. International Conference on agriculture, forestry, horticulture, aquaculture, animal science, food technology, biodiversity and climate change: Sustainable approaches. Jawaharlal Nehru University, New Delhi. August 30 -31st 2014
54. Kumar Pawan, Tarun Pal, Varun Jaiswal, **Hemant Sood**, Rajinder S. Chauhan (2014). Computational mining of transcriptomes for transcription factors controlling various biological processes in *Podophyllum* spp. Proceedings of the International Conference on Agricultural & Horticultural Sciences, Hyderabad, February 03-05, 2014
55. Malhotra Nikhil, **Hemant Sood**, Rajinder S. Chauhan (2014). Aconites biosynthesis recruits both MVA and MEP pathways of isoprenogenesis in *Aconitum heterophyllum* Wall. Proceedings of the National Symposium on Advances in Biotechnology for Crop Improvement [Baru Sahib, HP, 12 July, 2014]
56. Shitiz Kirti, **Hemant Sood**, Rajinder S. Chauhan (2014). Mining simple sequence repeats (SSRs) in *Picrorhiza kurroa* transcriptomes and assessment of genetic diversity vis-à-vis picrosides content. Proceedings of the National Symposium on Advances in Biotechnology for Crop Improvement [Badu Sahib, HP, 12 July, 2014]
57. Jibesh Kumar Padhan, Varun Kumar, **Hemant Sood**, Rajinder S. Chauhan (2014). Expression profiling of swertiamarin and amarogentin biosynthetic pathway genes in an endangered medicinal herb, *Swertia chirayita* (Roxb. Ex Fleming) H. Karst. Proceedings of the National Symposium on Advances in Biotechnology for Crop Improvement [Baru Sahib, HP, 12 July, 2014]
58. Neha Sharma, Pawan Kumar, Tarun Pal, **Hemant Sood** and Rajinder S. Chauhan (2014) *In vitro* conservation and SSR fingerprinting in *Podophyllum hexandrum* Royle accession from North-Western Himalayas” National Symposium on Advances in Biotechnology for Crop Improvement, Eternal University, Baru Sahib, Himachal Pradesh, India July 12, 2014
59. Shivam Sharma, Rajinder Singh Chauhan and **Hemant Sood** (2013) Inditech bioreactor- An indigenous and novel approach towards plant cell and tissue culture, International conference on Advances in Biotechnology and Patenting, Bhartidasan University, Tiruchirappalli, 18-21 February, Elsevier Publications 2014
60. Jasleen kaur Ahuja, Disha Kalia, Paras Pirta, Rajinder Chauhan and **Hemant Sood** (2013) Optimization of culture conditions and metabolite production from superior strains of *Picrorhiza kurroa* Royle ex Benth. International conference on environment, health and industrial biotechnology. (Biosangam-2013).MNNIT, Allahabad. Nov.21-23, 2013
61. Anamika Chatterjee, Shivani Verma, Rajinder Chauhan and **Hemant Sood** (2013). Dynamism of Picroside-1 production in *in vitro* grown developmental stages of *Picrorhiza scrophulariiflora* International conference on environment, health and industrial biotechnology . (Biosangam-2013).MNNIT, Allahabad. Nov.21-23, 2013.
62. Pooja Tandon, Rajinder Chauhan and **Hemant Sood** (2013) *In vitro* propagation and microtuberization of commercially important cultivar (Kufri Jyoti) of *Solanum tuberosum*

- International conference on environment, health and industrial biotechnology. (Biosangam-2013).MNNIT, Allahabad.Nov.21-23,2013.
63. Paras Pirta, Disha Kalia, Jasleen Kaur, Rajinder Chauhan and **Hemant Sood** (2013) Micropropagation of *Betula utilis* for large –scale multiplication and conservation through seed cultures. National Symposium on Plant Tissue Culture and Biotechnology for Food and Nutritional Security,XXXIV Annual Meeting of Plant Tissue Culture Association (India), CFTRI Mysore .March 11-12, 2013
  64. Preeti Kaura, Leena Chopra, Rajinder Chauhan and **Hemant Sood** (2013) Rapid micropropagation strategy of medicinally important and endangered herb *Gentiana kurroo*. National Symposium on Plant Tissue Culture and Biotechnology for Food and Nutritional Security,XXXIV Annual Meeting of Plant Tissue Culture Association (India), CFTRI Mysore March 11-12, 2013
  65. Shivam Sharma, Rajinder Singh Chauhan and **Hemant Sood** (2013) Inditech bioreactor- An indigenous and novel approach towards plant cell and tissue culture, International Conference on advances in Biotechnology and Patenting 2013 By Bhartidasan University, School of Biotechnology and School of Chemistry, Tiruchirappalli (Tamil Nadu) Feb 18 - 21, 2013
  66. Bhupinder Singh Sandhu, **Hemant Sood**, Sneha Gulati and RS Chauhan (2012). *In vitro* multiplication and production of picrosides by using elicitors in endangered medicinal herb *Picrorhiza scrophulariiflora*. International conference on Sustainable Agriculture for Food and Livelihood Security. The Crop Improvement Society of India. PAU Ludhiana. Nov.27-29, 2012
  67. Saurabh Pandit, Kirti Shitiz, Rajinder S. Chauhan and **Hemant Sood** (2012) Growth and Developmental Status of an Endangered Medicinal Herb (*Picrorhiza kurroa*) Influences Differential Biosynthesis and Accumulation of Major Chemical Constituents (Picroside-I and Picroside-II). International conference in biochemistry, biosciences and biotechnology: 2012 By World Academy of Science Engineering and Technology .Venice (Italy) April 11 - 13, 2012
  68. Saurabh Pandit, **Hemant Sood** and Rajinder S. Chauhan (2011) Biology of biosynthesis and accumulation of major chemical constituents in an endangered medicinal herb, *Picrorhiza kurroa* Royle ex Benth'. International conference on emerging trends on food and health security in cold desert. Dihar Leh, Sep 23-25, 2011
  69. Taru Prasad, Zain Taha, R.S. Chauhan and **Hemant Sood** (2011). Improvising procedures of micropropagation of *Gerbera jamesonii* for cost effectiveness and their commercial production. National Conference on Converging Technologies beyond 2020, April 6-7, 2011. Kurukshetra University
  70. Ashish R Warghat, Prabodh K Bajpai, , Ashutosh A Murkute **Hemant Sood** and R B Srivastva (2011) Morphological and Molecular differentiation among populations of *Dactylorhiza hatagirea* (orchidaceae),a critically endangered orchid in trans Himalaya. International Symposium on Genomics and Biodiversity, 23-24, February, 2011. 15<sup>th</sup> Adnat Convention CCMB ,Hyderabad
  71. Ashish R Warghat, Prabodh K Bajpai, Ashutosh A Murkute **Hemant Sood** and R B Srivastva (2011) Morphometric and genetic divergence among populations of *Dactylorhiza hatagirea* (Orchidaceae),a terrestrial orchid in the Himalayan regions of India. 20<sup>th</sup> World Orchid Conference, Singapore,13-20<sup>th</sup> Nov,2011.

72. Sandhu B Singh, Taru Prasad, Sanya Bakshi, Sneha Gulati, RS Chuahan and **Hemant Sood** (2011) Use of biotic and abiotic elicitors for the *in vitro* production of picrosides in *Picrorhiza kurroa*. International conference on New Horizons In Biotechnology & 8<sup>th</sup> Convention Of The Biotech Research Society, India (NHBT-2011). Nov. 21-24, 2011. NIIST, CSIR, Trivandrum.
73. Bhatt Anu, Shubi Kansal, RS Chuahan and **Hemant Sood** (2011) Cost-effective procedure for micropropagation of commercially important apple root stocks. NHBT-2011. Nov. 21-24, 2011. NIIST, CSIR, Trivandrum.
74. **Hemant Sood**, Pooja Tandon, Eva Ahuja, Shalki Shabnam, and RS. Chauhan (2011). Optimization of *in vitro* liquid cultures for large scale production of commercially important *Cymbidium* species. National Conference on Orchids in India: Diversity, Characterization and Resource Development for Community Livelihood & Orchid Show. December, 21-23, 2011, National Academy of Sciences, Allahabad.
75. Sharma S, **Sood H.**, Mathur A and Chauhan RS. 2010 Optimization of bioreactor parameters for *in vitro* production of medicinal compounds in shoot cultures of an endangered medicinal herb, *Picrorhiza kurroa* Royle ex Benth. **National Symposium on Plant Cell Tissue and Organ Culture: The Present Scenario & XXXI Annual Meeting of Plant Tissue Culture Association**, March 3-5 2010 CAS, Dept of Botany, University of Kolkata, India
76. Ashish R Warghat, Prabodh K Bajpai, **Hemant Sood**, Ashutosh A Murkute and SB Singh (2010) Exploring genetic diversity in *Dactylorhiza hatagirea* (D. Don) a critically endangered orchid in Trans-Himalayan region. Nov. 2010. Indian Horticulture Congress. New Delhi.
77. **Sood H.** and RS Chauhan 2009 Comparative genomics of terpenoid pathway genes for understanding molecular biology of picrosides biosynthesis in an endangered medicinal herb, *P. kurroa*. **Plant and Animal Genomes XVII, Town and Country Convention Centre San Diego, CA**
78. **Sood H.** and RS Chauhan. **2008**. Development of cost-effective micropropagation technology for an endangered herb (*Picrorhiza kurroa*) of North-Western Himalayas. **International Conference on Novel Approaches for Food and Health Security in High Altitudes, September 7-10, DIHAR, DRDO, Leh-Ladak, India.**
79. **Sood H.** and RS Chauhan. **2008**. Optimization of conditions for upscaling tissue culture production process for an endangered medicinal, *Picrorhiza kurroa*. **International Conference on Molecular Biology and Biotechnology, Oct. 19-21, Dept. of Biosciences and Biotechnology, Banasthali University, Rajasthan, India.**

## **O. Expert Lecture in the Workshop/Webinars**

1. **Hemant Sood** was an Expert for 2 Days Workshop on IPR and PATENT and took sessions on IPR and Commercialization on 15th June and Patent process overview on 16th June, 2024 organized by The Progress Research and Publication An initiative of Sri Aurobindo Yoga and Knowledge Foundation and Research Centre : Sri Aurobindo Yoga and Knowledge Foundation, Chattisgarh on 15-16<sup>th</sup> June 2024.

2. **Hemant Sood** delivered expert lecture in The Progress Research and Publication Workshop on “Ethical considerations in Research IPR organised An initiative of Sri Aurobindo Yoga and Knowledge Foundation (Powered by IIT, Bhilai) and Research Centre : Sri Aurobindo Yoga and Knowledge Foundation, Village Funda, Chattisgarh on 20th May, 2024.
3. **Hemant Sood** delivered expert lecture on “IPR management and Commercialization nt in Training–cum-workshop on IPR organised by RKMVShimla in collabotation with HIMCOSTE from March 21-28, 2024 at RKMV,Shimla on 22<sup>nd</sup> March 2024.
4. **Hemant Sood** delivered expert lecture on “IPR management and Commercialization in a one-week Faculty Development Program on "Women in Innovation and Entrepreneur Development (WIED) organised by Intellectual Property Rights (IPR) cell and Institution's Innovation Council (IIC) JUIT from March 11-15, 2024 in online mode at JUIT Waknaghat on 14<sup>th</sup> March2024.
5. **Hemant Sood** delivered expert lecture on “Intellectual property Rights &Building Knoweldge economy ” for In-service Teaching Training Programm for lectuers and PGTorganised by SCERT,Solan HP 2<sup>nd</sup> March2024
6. **Hemant Sood** delivered expert lecture on “Entrepreneur unleashed - A journey from ideas to impact" at IIC, JUIT Waknaghat ” at JUIT Waknagaht on 1<sup>st</sup> March,2024
7. **Hemant Sood** delivered expert lecture on Trends and Prospects in Plant Biotechnology in webinar organized for providing counseling and future insight to students during admission times by Department of BT and BI at JUIT Waknagaht on 19<sup>th</sup> June 2023.
8. **Hemant Sood** delivered expert lecture on “Intellectual property Rights &Building Knoweldge economy ” for faculty and PG students in FDP on Teaching and Research Practices organized by Department of BT and BI, at JUIT Waknagaht from 05-10<sup>th</sup> June 2023
9. **Hemant Sood** delivered expert lecture on “Intellectual property Rights” for faculty and PG students of HPU organized by Department of education & UGC-Human Resource development Centre HPU, Shimla on 31<sup>st</sup> March, 2023.
10. **Hemant Sood** delivered expert lecture on “IPR for building knowledge economy " in 2week refresher course (13<sup>th</sup>Feb to 25<sup>th</sup> Feb2023) for College /University faculties” organized by UGC-Human Resource development Centre HPU,Shimla on 16<sup>th</sup> Feb2023.
11. **Hemant Sood** delivered expert lecture on “Production of medicinal compounds from medicinal plants by using tissue culture technologies " in DST STUTI ICT 7days workshop on Approaches for Screening and Characterization of Pre-Clinical Drug Candidates” organized by The Institute of Chemical Technology, Mumbai in collaboration with "JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, Waknagaht from December 8-14,2022
12. **Hemant Sood** delivered expert lecture on “Effects of UV Radiation in Crops”on the occasion of World Ozone Day organized by Himachal Pradesh Council for Science,

- Technology and Environment (HIMCOSTE)" in collaboration with Jaypee University of Information Technology (JUIT) Waknaghat on 16th Sep,2022
13. **Hemant Sood organized a webinar on Scopes of BT and BI** to 12<sup>th</sup> class school students of Paradise Public School in Sundernagar, Mandi on 12<sup>th</sup> March, 2022.
  14. **Hemant Sood as a resource person in collaborative** Workshop organized on National science Day 2022 by Department of Biotechnology at Khalsa College, Patiala with Department of BT and BI, JUIT, Waknaghat on 28<sup>th</sup> Feb, 2022 .
  15. **Hemant Sood** organized a virtual Workshop of Plant Tissue Culture Techniques and their applications **to B Sc final yr students (250) of Vallabh Govt College ,Mandi on 18<sup>th</sup> Nov 2021 at JUIT Waknaghat**
  16. **Hemant Sood** as Speaker in Departmental Webinar Series on topic “ Trends and scope of Plant Biotechnology” organized by Department of BT and BI, JUIT Waknaghat on 21 September, 2021.
  17. **Hemant Sood** as Speaker on Different techniques of Plant tissue culture and their application for the participants of Skill Vigyan Project Feb 2021 to May 2021
  18. **Hemant Sood** as Speaker on issue of Women Equality organized by ICC of JUIT for celebrating Women Equality day on 26th August 2021.
  19. **Hemant Sood (2021). Production of secondary metabolites.** College Of Horticulture and Forestry, DR. Y.S. PARMAR UNIVERSITY OF HORTICULTURE AND FORESTRY NERI, Hamirpur (HP) on 05th July, 2021(online)
  20. **Hemant Sood (2020). Scopes of applied biology in biotechnology and bioinformatics.** Govt College Solan on the eve of National Science Day 28<sup>th</sup> Feb, 2020, Solan
  21. **Hemant Sood (2019).** Production of medicinal compounds for Commercial and Endangered Medicinal Plants through Cell and Tissue Culture Technology for Herbal Industry on 29<sup>th</sup> August, 2019 as **Resource person for Refresher Training Course for Indian Forest Services Officers (IFS) officers at HFRI, Panthaghati, Shimla**
  22. **Hemant Sood (2018).** Production of medicinal compounds for Commercial and Endangered Medicinal Plants through Cell and Tissue Culture Technology for Herbal Industry on 13th September, 2018 as **Resource person for Refresher Training Course for Indian Forest Services Officers (IFS) officers at HFRI, Panthaghati, Shimla**
  23. **Hemant Sood (2017).** Plant tissue Culture Technology and Its applications IPR for Developing Knowledge Economy. Expert Lectures in the In-service Training Programme for Lectures/PGT of Biology 10 July 11 July 2017 .**State Council Of Education Research and Training, Solan HP**
  24. **Hemant Sood (2016).** IPR for Developing Knowledge Economy. Expert Lecture in the Workshop on “IPR Literacy: Patent Drafting and Filing”, OCT. 3<sup>rd</sup>-4<sup>th</sup> , 2016, Department of Biotechnology, Himachal Pradesh University, Summer Hill, Shimla H.P.

25. **Hemant Sood** (2008). Plant Cell Cultures in the Production of Phytopharmaceuticals. Expert Lecture in the AICTE sponsored National Workshop on “Fermentation Technology”, Feb. 20-March 1, 2008, JUIT, Wagnaghat, H.P
26. **Hemant Sood** and Rajinder Singh Chauhan (2010). Biotech Interventions Towards Rapid Multiplication and Production of a Medicinal Compound (Picroside-1) in an Endangered Herb, *Picrorhiza kurroa* Royle ex Benth 18<sup>th</sup> -19<sup>th</sup> March 2010. Workshop on challenges and opportunities for growth of medicinal plant sectors in North-West Himalayas HFRI (ICFRI) Shimla.

## **P. Research and Development projects**

### **R&D Project (Completed)**

<b>Project Title</b>	<b>Status and Sanction no. with date</b>	<b>Funding Agency and amount Rs in lakhs</b>	<b>Duration</b>
<p>1. Programme support on elucidation of biosynthetic pathways and development of gene markers for high value endangered medicinal herb of N-W Himalayas.(Phase-1)</p> <p>a. Identification of elite chemotypes and optimization of differential accumulation conditions for major and desired chemical constituents of three medicinal plant (<i>P. kurroa</i>, <i>A. hetrophyllum</i> and <i>S. chirayita</i>)</p>	<p>PI (BT/01/CEIB/09/V/02) 8<sup>th</sup> Sep,2010</p>	<p>DBT (COE) Rs 398.75 Laks) a. 60.00 lakhs</p>	<p>2010-15  <b>U/C-7th Sep 2015</b></p>
<p>2. Identification of genetically superior strains of medicinal plants, <i>Picrorhiza kurroa</i></p>	<p>Co-PI  (No.Z 18017/187/Pr. GO/HP-03/2009</p>	<p>National Medicinal Plants Board, Deptt. of AYUSH, Ministry of</p>	<p>2009-2013(U/C 31/3/2013)</p>



and <i>Valeriana jatamansi</i> by screening different populations from North-Western Himalayas		Health and Family Welfare, Govt. of India.(16.50 lakhs)	
3. Molecular Dissection of Biosynthesis of Pharmacologically Important Phenol Glycosides in a High Value Medicinal Plant ( <i>Rhodiola imbricata</i> ) from Trans- Himalayan Region of Ladakh	PI (1186/6/JUIT-15/DIHAR) 13 <sup>th</sup> Feb 2015	DRDO, Ministry of Defense, Govt of India (9.8lakhs)	2015-17 U/C- 26/4/2018
4. Socio Economic upliftment of high altitude farmers of Himachal Pradesh through transfer of micro-propagation technologies for high value medicinal herbs	PI (No. SP/YO/017/2015) 24 <sup>th</sup> July 2015	Science for Equity, Empowerment and Development (SEED) Division DST, Ministry of Science & Technology, Govt. of India (14.5 lakh)	2015-2019 U/C - 15/5/2019
5. Programme support on elucidation of biosynthetic pathways and development of gene markers for high value endangered medicinal herbof N-W	Co-PI (BT/COE/34/SP15268/2015) 16 <sup>th</sup> Nov.2015	DBT, Ministry of Science & Technology, Govt. of India (99.9Lakhs) (349.82(Total))	2015-2020 UCID: 18179244 and 18179246

Himalayas.(Phase-2) (Functional Validation of Picosides Biosynthetic Pathway and Development of Gene Markers for Elite Chemotypes of <i>Picrorhiza kurroa</i> )			
6. Herbal formulation for the treatment and prevention of Dementia	Mentor DRID/IIP/06/2023	Directorate of Research, Innovation and Development, JUS,JIIT Nodia(50,000)	3 <sup>rd</sup> March 2023-2024
7. Developing Nutrient-Enrichment Technologies & Products of Commercial Value in a Nutraceutical Food Crop, Buckwheat ( <i>Fagopyrum spp.</i> )	Collaborator BT/PR45197/NER/95/1928/2022	Department of Biotechnology ,Delhi	6 <sup>th</sup> Nov.2023-Oct 2026

**Q. Professional Development Through International/National Courses/Trainings/Workshops:**

1. Hemant Sood participated in 3R's Research and Progress International Conference Series - 4th International Conference on Patient Derived Tumouroids and Humanized Mice on 4th May,2024
2. Hemant Sood participated one week Short Term Course titled "Sustainable Construction Practices for Sustainable Environment " organized by The Department of Civil engineering , JUIT from April 22-27, 2024.
3. Hemant Sood participated in IPR awareness/training program organized by “National Intellectual Property Awareness Mission (NIPAM) and National IP Awareness Mission Office of Controller General of Patents, Designs and Trade Marks, at JUIT on 14<sup>th</sup> March 2024.
4. Hemant Sood participated in faculty Development program on Women in innovation and Entrepreneur Development (WIED) organized by IPR Cell and IIC of JUIT, at JUIT from 11-15<sup>th</sup> March,2024.
5. Hemant Sood participated in Online FDP on the theme NEP2020 orientation and sensitization Program by Malaviya Mission Teacher Training Programme(MM-TTP) of

- UGC organized by Malviya Mission Training Centre, HPU, Shimla from 2<sup>3rd</sup> January-<sup>2nd</sup> Feb 2024.
6. Hemant Sood participated in Online FDP on the theme “ "Role of Intellectual Property Rights in Higher Education organized by Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore under the aegis of AIU-AADC ” from 20th November 2023 to 24 November 2023.
  7. Hemant Sood member of Advisory Committee of **International Conference on Synergetic Innovations & Biotechnological Advancement for Sustainable Development (Plant, Food and Chemical sciences)(SIBA\_SD-2023) organized by School of Applied and Life sciences, Uttarakhand Univ., Dehradun. 29-30<sup>th</sup> Sep, 2023.**
  8. Hemant Sood participated in IP Training Program organized India Patent Office by JUIT Waknaghat on 16<sup>th</sup> March, 2023
  9. Hemant Sood participated in FDP on Utkarsh-Take Flight, a two-day Faculty Development Program (FDP) organized by JUIT Waknaghat from 22-23<sup>rd</sup> Dec, 2022.
  10. Hemant Sood Organized a webinar on Ethics in Science by Prof. Om P Sharma as a member of Ethics Committee JUIT on November 19, 2022
  11. Hemant Sood selected **for the online training program on RESEARCH TRAINING** Organized by MSME-Technology Development Centre, PPDC Agra, Ministry of MSME, Govt. of India Society Nov 7-18<sup>th</sup>, 2022 (evening session from 7 to 8:30 pm)
  12. Hemant Sood Judged judging The Three Minute Thesis competition organised by TIEDC and Civil engineering department, JUIT on 24 September, 2022
  13. Hemant Sood coordinated the signing of MoU with Directorate Technical Education Sundernagar at JUIT on 24 September, 2022
  14. Hemant Sood participated in FDP on Innovations in Drug Delivery Technologies. organized by Dept. of Biotechnology, JIIT, Noida from 25-30<sup>th</sup> July, 2022
  15. Hemant Sood participated in Two week Course on Entrepreneurship organized by Turnip Innovations, Kolkata from 20<sup>th</sup> July to 02 August, 2022.
  16. Hemant Sood participated in a one week FDP on Computer Diligence in Civil Engineering and Applications for Sustainable Development organized by Dept. of Civil Engineering, JUIT, Waknaghat on 11-15<sup>th</sup> July 2022 (Online Mode)
  17. Hemant Sood participated in a one day Workshop on "**Environment and Sustainability**" organized by Dept. of Biotechnology, JIIT, in collaboration with Dept. of Biotechnology & Bioinformatics, JUIT, Waknaghat on June 9, 2022
  18. Hemant Sood attended one-week online FDP on “NEP 2020 Implementation in Higher Education Institutes” organized by the Department of Curriculum Development Centre, National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh from May 9-13, 2022.
  19. Hemant Sood presented **Production of Medicinal Compounds from Endangered and Commercially Important Medicinal Plants of Himalayas Through Cell and Tissue Culture Technology for Herbal Industry** in Plant Virtual Summit 2022 “Webinar on Plant Science and Agricultural Research” organized by Irish Scientific Group on March 24, 2022

20. Hemant Sood participated in Shodh Shikhar 2022 with project title Brown Gold: An alternative and cost effective solution to pulp and paper production organized by United Nations Development Programme with Rabindranath Tagore University Bhopal, 25-26 March 2022
21. Hemant Sood participated in the International e-Conclave on Women Scientist in Science and Technology with Special Reference to Biotechnology organized by Nano & Biomaterials Association, School of Life Sciences, B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai in association with the Biotech Research Society, India (BRSI) held on March 08-10, 2022
22. Hemant Sood organized **webinar** on “Conscious Transformation Through Sustainability” “on International women day and **slogan witting competition** as member of ICC and Committee Against Caste Based Discrimination, of JUIT from 24<sup>th</sup> Feb-8<sup>th</sup> March 2022.
23. Hemant Sood participated in Plant biotechnology forum Spain –UK organized by The Society of Spanish researcher and the embassy of Spain in London on 22<sup>nd</sup> -23<sup>rd</sup> Feb 2022
24. Hemant Sood participated in 3day IPR Awareness workshop organized by PUSA KRISHI, Pusa Campus, New Delhi from 21<sup>st</sup> to 23<sup>rd</sup> Feb, 2022.
25. Hemant Sood participated in virtual session on Various Aspects of Green Building Design organized by the Department of Civil Engineering, Jaypee University of Information Technology on 25th January, 2022.
26. Hemant Sood participated in the International e-Lecture Workshop on Innovation in Biotechnology organized by School of Life Sciences, B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai and Crescent Educational Institutions, Madurai Campus in association with the Biotech Research Society, India (BRSI). on 19<sup>th</sup>-20<sup>th</sup> January, 2022.
27. Hemant Sood participated in Online Workshop for Universities and Colleges on Intellectual Property Rights (IPR) ” under 75-week long campaign 'Azadi ka Amrit Mahotsav' organised by the Ministry of Education and UGC on 17th January, 2022
28. Hemant Sood participated in Sensitization Webinar on Cybersecurity Empowerment of Higher Education Institutions (HEIs)” organised by the Ministry of Education and UGC on 13th January, 2022.
29. Hemant Sood participated WoLT 2021 - International Webinar on Women Leading Technology Organised by IEEE GUJRAT SESSION ON 13<sup>th</sup> & 14<sup>th</sup> Dec. 2021 .
30. Hemant Sood participated as mentor from TIEDC for CII Himachal Pradesh will be organising an exclusive Virtual Start up session CII Himachal Pradesh Session on Startup and Entrepreneurship 2021 on 29 November 2021.
31. Hemant as External Examiner for Ph.D and M.Sc thesis evaluation and viva- voce at UHF, Nauni on 24th November 2021
32. Hemant Sood presented **Sharing best practices** in JUIT at The Vice Chancellor’s meet called by HPPERC of all the state private universities of Himachal Pradesh organized by **Bahra University** on 27-10-2021 at Hotel Holiday Home, Shimla.
33. Hemant Sood was participated as Jury member for **Ideathon - E Summit' 21** organized by AIRMEET and E Cell of TIEDC JUIT, on 15-18<sup>th</sup> Oct 2021

34. Hemant Sood organized webinar on “Why women needs to be empower “ as member of ICC and Committee Against Caste Based Discrimination , of JUIT on 1<sup>6th</sup> Oct,2021
35. Hemant Sood has accomplished NPTEL-AICTE **Faculty development programme** on Entrepreneurship and IP strategy scheduled from 26<sup>th</sup> July to 18<sup>th</sup> Sep 2021 conducted by NPTEL,IIT Kharagpur, **Funded by the Ministry of HRD,Govt of India on 26<sup>th</sup> Sep2021.**
36. Hemant Sood participated in the International Webinar Series-II on research and technological advancements in Bioinformatics topic Research Data Management and FAIR Principles for Healthcare Data by Dr. Gurnoor Singh, Center for Molecular and Biomolecular Informatics, Radboud UMC, Nijmegen, Netherlands organized by Centre of Excellence in Healthcare Technologies and Informatics (CEHTI), Department of Biotechnology and Bioinformatics, Jaypee University of Information technology (JUIT), Wagnaghat, Solan, H.P., INDIA on 9th Oct, 2021.
37. Hemant Sood organized e-essay contest on **My Vision of India 2025** as member of ICC and Committee Against Caste Based Discrimination , of JUIT from 6<sup>th</sup> to 16<sup>th</sup> Oct,2021
38. Hemant Sood participated in a Webinar on “Attracting grants and funds for research” by Dr. Veena Joshi organized Wiley Publishers on 14<sup>th</sup> Sep,2021
39. Hemant Sood participated in a Webinar on “Realizing potential of commercial Plant tissue culture:Challenges and way forward organized by Biotech Consortium India Ltd on 9<sup>th</sup> Sep,2021
40. Hemant Sood participated in the International Webinar Series-II on research and technological advancements in Bioinformatics topic AI platform to catalog unconventional stress proteins for deep exploration of space organized by Centre of Excellence in Healthcare Technologies and Informatics (CEHTI), Department of Biotechnology and Bioinformatics, Jaypee University of Information technology (JUIT), Wagnaghat, Solan, H.P., INDIA on 11th September 2021
41. Hemant Sood as **Research Advisor** for evaluating research project in Research Advisory Group Meeting of HFRI, Shimla on 18th August 2021
42. Hemant Sood participated in webinar Copyright protection organized by National Productivity Council (NPC) an Autonomous Organization under Department for Promotion of Industry and Internal Trade (DPIIT),Ministry of Commerce and Industry, Government of India, in collaboration with Innovation-Technology Transfer Office, an external tech transfer office at Foundation for Innovation and Technology Transfer supported by National Biopharma Mission, BIRAC 25<sup>th</sup> August 2021
43. Hemant Sood participated in Safe Campus Proframme organized by Association of Indian Universities (AIU) and Martha Farrell Foundation (MFF) on 30-31st July2021
44. Hemant Sood participated in a Webinar on “Copyright Policies for Digital Content” by Dr. K.S. Giridharan, Associate Professor, Department of Engineering Education,

NITTTTR Chennai organized by Online Education Cell, Jaypee Universities, on 7<sup>th</sup> July, 2021

45. Hemant Sood Coordinated a Webinar on “Women Safety” as a member of Internal Complaint Committee, of JUIT on 24<sup>th</sup> June ,2021
46. Hemant Sood conducted **thesis evaluation and viva-voce** of Ms Shipra Sharma, MSc student of Department of Biotechnology, COH&F, Neri, Hamirpur on 30<sup>th</sup> March 2021
47. Hemant Sood participated in **one week workshop on “Women Innovations and IPR”**, organized by IPR Cell, Jaypee University of Information Technology, from March 08 - 13, 2021
48. Hemant Sood organized e-essay contest on **Role of women in Science and Technology** as member of Committee Against Caste Based Discrimination , of JUIT from 22<sup>nd</sup> to 27<sup>th</sup> Feb,2021
49. Hemant Sood participated in the International Webinar Series on topic Multi modal data integration in medicine organized by Centre of Excellence in Healthcare Technologies and Informatics (CEHTI), Department of Biotechnology and Bioinformatics, Jaypee University of Information technology (JUIT), Wagnaghat, Solan, H.P., INDIA on 12<sup>th</sup> January, 2021
50. Hemant Sood has done NPTEL-AICTE **Faculty development programme** on Managing Intellectual property in University scheduled from September 2020 to October 2020 conducted by NPTEL, IIT Madras, **Funded by the Ministry of HRD, Govt of India**
51. Hemant Sood **organized a Webinar on “Women Empowerment ”** as member of caste Based Discrimination Committee of JUIT talk by Aushima Thakur ,CEO, Philip Netherlands on 17<sup>th</sup> Oct.2020 .
52. Hemant Sood organized a **e-Poster Contest " La Peinture** as member of caste Based Discrimination Committee of JUIT on 10<sup>th</sup> Oct.2020 .
53. Hemant Sood participated in webinar on “Webinar on " Patents, Innovations, and Startups” organized by IPR Cell, Jaypee University of Information technology (JUIT), Wagnaghat, Solan, H.P., INDIA on 17<sup>th</sup> Oct,2020
54. Hemant Sood participated in webinar on “Teaching and Learning Practices” organized by the Department of Biotechnology and Bioinformatics, Jaypee University of Information technology (JUIT), Wagnaghat, Solan, H.P., INDIA on 17 Oct,2020
55. Hemant Sood participated in webinar on “DBT Webinar: Showcasing Demonstrated Waste-To-Value Technologies organized by India Alliance with DBT and BIRAC on 1<sup>st</sup> October20
56. Hemant Sood organized a Webinar on **“She is Empowered”** as member of Internal Complaint Committee of JUIT on 17<sup>th</sup> Sep.2020 .
57. Hemant Sood participated in the International Webinar Series on topic Flexible Sensors for Biomedical Applications organized by Centre of Excellence in Healthcare Technologies and Informatics (CEHTI), Department of Biotechnology and

Bioinformatics, Jaypee University of Information technology (JUIT), Wagnaghat, Solan, H.P., INDIA on 8th September 2020

58. Hemant Sood participated in webinar on “**Saluting the Teachers – Makers of the Nation**” by **Prof. S.C. Sharma, Director, NAAC** organized by National Assessment and Accreditation Council (NAAC) Bengaluru, INDIA on 5<sup>th</sup> September 2020
59. Hemant Sood participated in webinar on “Webinar on Nutrition for general health and fitness 29 August 2020 organised by Jaypee University of Information technology (JUIT), Wagnaghat, Solan, H.P., INDIA on 29<sup>th</sup> August 2020
60. Hemant Sood participated in webinar on “Webinar on New Education Policy 2020 organised by Jaypee University of Information technology (JUIT), Wagnaghat, Solan, H.P., INDIA from 28th – 31th August 2020
61. Hemant Sood as a **resource person** in Webinar for Entrepreneurship: An opportunity for young aspirants organized by TIEDC, JUIT campus on 14<sup>th</sup> August 2020
62. Hemant Sood participated in webinar on “Open Research Publishing” Taylor and Francis Group and Delcon (DBT e Libraray consortium) on Aug 11, 2020 from USA
63. Hemant Sood participated in webinar on “Publishing Ethics” organized Taylor and Francis Group and Delcon (DBT e Libraray consortium) on Aug 5, 2020 from USA
64. Hemant Sood participated in the **International Webinar Series organized by Centre of Excellence in Healthcare Technologies and Informatics (CEHTI)**, Department of Biotechnology and Bioinformatics, Jaypee University of Information technology (JUIT), Wagnaghat, Solan, H.P., INDIA on 4th August 2020
65. Hemant Sood participated **Faculty development programme** on Strategic Planning for Entrepreneurship Promotion scheduled from 27<sup>th</sup> July 2020 to 31<sup>st</sup> July 2020 organized by **NITTTR, Chandigarh**.
66. Hemant Sood participated Webinar on ‘**Can India Solve its Framer’s Plight and become Food Bowl of the World?**’ organized by ‘**Biotechnika info labs Pvt. Ltd** on 23<sup>rd</sup> July 2020
67. Hemant Sood **coordinated** a series of webinar on topic “**JUIT is Holding Series of Admission Webinars**” organised by JUIT, Solan from 15th -17th June 2020
68. Hemant Sood attended a Webinar on ‘**Online Training on Turnitin Originality Check**’ organized by ‘Turnitin India Education Pvt. Ltd in association with Learning Resource Center (LRC) JUIT, Solan on 10th of June 2020
69. Hemant Sood participated a webinar on **Effective Use of Subscribed e-Resources**’ organized by Knimbus Digital Library Platform in association with Learning Resource Center (LRC) JUIT, Solan on **2<sup>nd</sup> June, 2020**.



70. Hemant Sood as **external expert** of selection committee framed by ICAR - NBPGR Shimla for project entitled **Integrated genomic strategy for accelerating domestication of rice bean(Vigna umbellate)** on 2<sup>nd</sup> march 2020
71. Hemant Sood **participated** in **Perception towards IPR** workshop organized by IPR cell of JUIT and Himachal Pradesh Council for Science Technology & Environment (HIMCOSTE) at JUIT Waknaghat from Feb 10- 12<sup>th</sup> 2020.
72. Hemant Sood **coordinated** interaction sessions for sustainable technologies with medical and non-medical students of **Army Public school, Ambala Cantt** in Ambala on 20<sup>th</sup> Nov, 2019
73. Hemant Sood attended a webinar on **How universities can leverage Artificial Intelligence to accelerate Innovation and Commercialization of Patents** organized by **XLPAT Labs on 14<sup>th</sup> Nov. 2019.**
74. Hemant Sood Co-coordinated in sustainable technology workshop for demonstration in glass house and plant tissue culture section for **Organizing a week on sustainable technologies for rural development** from 4<sup>th</sup> Nov 2019 to 9<sup>th</sup> Nov 2019 organized by CSTRD from Department BT&BI at JUIT
75. Hemant Sood member of Advisory Committee of **National Seminar on Strategies for Conservation & Sustained utilization for Biodiversity** organized by Department of BT, School of Applied and Life sciences, Uttarakhand Univ., Dehradun and Uttarakhand Science Education and Research Centre, DST( Government Of Uttarakhand. 18<sup>th</sup> -19<sup>th</sup> Oct, 2019
76. Hemant Sood **organized poster and model presentation** on **Swachh Bharat Mission** of school students by Department of BT & BI in JUIT campus on 1st Oct, 2019 on 150<sup>th</sup> Birth Anniversary of Mahatma Gandhi.
77. Hemant Sood participated in **Annual Entrepreneurship Summit (E-summit'19)**, organized by TIEDC, JUIT campus on **28-29 Sept. 2019**.
78. Hemant Sood **coordinated** visit of medical and non medical students of Pinegrove school, Solan to Department of BT & BI and JUIT campus on 13<sup>th</sup> September, 2019
79. Hemant Sood participated in NPTEL workshop organized by IIT Roorkee and JUIT on 15<sup>th</sup> June 2019.
80. Hemant Sood represented JUIT in **Veterans Outreach Programme-2019**, Solan Organized by Pine Divand Viajra Corps at Military Station Solan on 24<sup>th</sup> March, 2019.
81. Hemant Sood **coordinated** one day **Workshop cum Exposure Visit of 104 medical students of Govt College Solan** to JUIT, Waknaghat on 7<sup>th</sup> March, 2019.
82. Hemant Sood as a **resource person** in one day **Workshop for National Science Day at St. Bede's Shimla** for demonstrating plant tissue culture techniques. 28<sup>th</sup> Feb, 2019.
83. Hemant Sood coordinated two days **Awareness and Exposure Visit of Farmers For Their Socio-economic Improvement** to JUIT, Waknaghat. It is organised at JUIT in collaboration with DST-SYST Funded Project On "Socio-Economic Upliftment of High Altitude Farmers of Himachal Pradesh Through Transfer of Micropropagation Technologies for High Value Medicinal Herbs" On 25th and 26th December, 2018

84. Hemant Sood attended **Conclave of Chief Ministers and Parliamentarians of Himalayan** States on 5<sup>th</sup> October 2018 organized by Himachal Pradesh Council for Science Technology & Environment (HIMCOSTE) at Peterhoff Shimla,
85. Hemant Sood attended workshop on **Patent Filing procedure and GI of HP** on 30<sup>th</sup> November 2018 organized by IPR cell of JUIT and Himachal Pradesh Council for Science Technology & Environment (HIMCOSTE) at JUIT Waknaghat.
86. Hemant Sood **organized/coordinated** three day workshop Techstar Startup weekend powered by Google for Entrepreneurs from 14<sup>th</sup> - 16<sup>th</sup> September, 2018 supported by TIEDC of JUIT and HPCED Shimla at JUIT Waknaghat
87. Hemant Sood **done mentoring for the startup projects in** three day workshop Techstar Startup weekend powered by Google for Entrepreneurs from 14<sup>th</sup> - 16<sup>th</sup> September, 2018 supported by TIEDC of JUIT and HPCED Shimla at JUIT Waknaghat
88. Hemant Sood **organised** one day workshop on Cultivation of high value medicinal plants through micropropagation technology on 7<sup>th</sup> May, 2018 supported by JUIT in collaboration with DST –SYST funded project at Archhandi, Kullu, H.P.
89. Hemant Sood attended State level workshop on National Biodiversity Action Plan, National Biodiversity Targets and India's Sixth National Report To Convention On Biological Diversity, organized by Himachal Pradesh State Biodiversity Board at Regency Hall, HHH, Shimla on 19<sup>th</sup> February 2018.
90. Hemant Sood attended a National Symposium on “Medical Image Acquisition, Processing and Analysis” from 20-22<sup>nd</sup> Nov., 2017 organized by Department of Biotechnology & Bioinformatics and Department of Computer Science Engineering and Information Technology JUIT at JUIT Waknaghat, Solan
  
91. Hemant Sood attended a workshop on “Patent Drafting” on 13<sup>th</sup> Oct, 2017 organized by JUIT Waknaghat, Solan
92. International Post-Graduate Course with “Excellence” on Nutrition in a Changing Global Environment at The Hebrew University of Jerusalem The Robert S. Smith Faculty of Agriculture, Food & Environment, The International School of Agriculture Sciences, Israel, August 28 to Sept. 20, 2017
93. Hemant Sood Attended **Faculty Development programme** organized by JUIT 14<sup>th</sup> -19<sup>th</sup> July, 2015
94. Hemant Sood Attended **Faculty Development programme** Outcome-based education in Biotechnology organized by Department of Biotechnology and Bioinformatics, JUIT dated 24<sup>th</sup> to 30<sup>th</sup> December, 2014
95. Hemant Sood attended a workshop on “Essential oil perfumery and aromatherapy from 12<sup>th</sup> – 14<sup>th</sup> March 2016 organized by MSME-Technology Development Center, Fragrance and Flavor development Centre, Kannauj-209726, at New Delhi, INDIA
96. Hemant Sood attended a workshop on “Innovation and Intellectual Property Rights” on 9<sup>th</sup> December 2016 organized by TIFAC and JUIT Waknaghat Solan
97. Hemant Sood attended a workshop on “Patent Filing and Geographical Indications” on 27<sup>th</sup> February, 2017 organized by TIFAC and JUIT Waknaghat Solan
98. Hemant Sood attended a workshop on “Startups and Innovative Projects” on 16<sup>th</sup> May, 2017 organized by TIEDC, HPCED and JUIT Waknaghat Solan

## **R. Memberships**

1. Lifetime Member of The Indian Science Congress Association (India)(ISCA-L15796)
2. Life Member in Biotech Research Society of India (BRSI - LM-987)
3. Life Member of Association of Bio-Pharma Professionals (ABP/LM/136)
4. Life Membership in The Orchid Society Of India
5. IEEE membership (97797661) Sep2021 to Dec2022
6. Society for Biotechnologists (India) LM-1106 from August,2022

## **S. Students Supervised/under supervision**

**1. B. Tech Biotech-30 ( Pooja Tandon (2015) and Anaida (2018 got Vice Chancellor's and Chancellor 's Gold medal)**

**2. M.Tech/M.Sc –26/08 (Shubham Sharma Gold medal)**

**3. A) PhDs (Awarded as a Supervisor):**

- i) Mr. Ashish Warghat (25<sup>th</sup> September, 2015)
- ii) Ms. Amisha ( 26<sup>th</sup> August, 2016)
- iii) Mrs. Neha Sharma (30<sup>th</sup> Nov.2017)(Post –doc-DST SERB)
- iv) Mr. Amit Sud (29<sup>th</sup> January,2018)
- v) Mr. Shivam Sharma (22<sup>nd</sup> September 2018)
- vi) Rolika Gupta , JUIT (Awarded 04Dec.2023)

**B) PhDs(Awarded as a Co-supervisor):**

- i) Mr. Saurabh Pandit (awarded january2014)
- ii) Mr. Kirti Shitiz (awarded 3<sup>rd</sup> September 2016)
- iii) Mr. Nikhil Malhotra (awarded13<sup>th</sup> Feb,2017)
- iv) Mr. Pawan Kumar (awarded 16<sup>th</sup> Dec 2017)
- v) Mrs. Ira Vashisht (Awarded 29<sup>th</sup> march.2018) Post –doc-DST SERB-2020
- vi) Mr. Jibesh Padhan (Awarded 29<sup>th</sup> march.2018)
- vii) Mr. Sahil Kapoor DRDO(Awarded 16<sup>th</sup> September 2020)

**C ) Ph D on going**

- i) **Pankaj, CE, JUIT(Sep.2022 pursuing) as Co-guide**
- ii) **Deepika Sharma, BT,CUH ( Sep.2022pursuing) as Co-guide**
- iii) **Kritika Singh, BT, JUIT (Aug.2023 pursuing) as Supervisor**
- iv) **Faizal Firdous,CSE,JUIT ( Oct2023,Pursuing) Co-guide**

## **T. Reviewer of national and international journals**

1. Journal of Ayurveda and Integrative Medicine
2. Phytochemistry Elsevier Sep
3. Plant Physiology and Biochemistry
4. Journal of Proteome Research
5. Industrial Crops and Products
6. Plant Gene

7. Gene
8. Plant Biosystems( International Taylor and Francis online)
9. Journal of Applied Phycology ( International Springer)
10. Journal of Medicinal Plant Research ( International Academic Journals)
11. Journal of Plant Biotechnology and Biochemistry (Springer)
12. Springer Plus (Scopus index Thomson Reuters)
13. Amity Journal of Research, Innovation & Commercialization
14. BMC Biotechnology
15. BMC Genomics

## **U. Contribution in the Department Activities**

1. Hemant Sood Faculty coordinator for BTech. BT and BI admission at JUIT Waknaghat for 2024-2025
2. Hemant Sood coordinated the visit of students from DWPS, Kandaghat in the labs of BT and BI Department on 22nd May 2024
3. Hemant Sood was coordinator of Educational tour to JUIT Campus and all labs for the Students of DAV Public School Tutu, Shimla on 29<sup>th</sup> April, 2024
4. Hemant Sood was coordinator of organizing committee and resource person of PTC workshop for faculty on "Third National Science Day Symposium (NSDS) - 2024" on 28th February, 2024
5. Hemant Sood organized a Joint Workshop on Molecular and Plant Tissue Culture Techniques of Department of BT and BI, JUIT and Department of Biotechnology, GSSDSS at Giani Shivdev Singh Dewan Gurbachan Singh Khalsa College, Patiala, Punjab on 27th February, 2024
6. Hemant Sood organized a Joint Workshop on Molecular and Plant Tissue Culture Techniques of Department of BT and BI, JUIT Waknaghat and Department of Zoology, RKMV at RKMV, Shimla on 20th February, 2024
7. Coordinator for Hands on training on Plant Tissue Culture Techniques to B.Sc.(Medical) students from Govt. College Sanjauli, Shimla on 8<sup>th</sup> Dec, 2023.
8. Organized a Virtual session with the Reckitt Benckiser team on 30th Oct'23 at 02:30 PM with students of pharmacy of GCP, Rohru for placement orientation at JUIT.
9. Faculty Coordinator Incipere 2023, Biolclub annual event on 21<sup>st</sup> Sep, 2023
10. Coordinator of MOU with Govt. College of Pharmacy, Rohru, Shimla from 5<sup>th</sup> Sep 2023.
11. Organized One day Training Workshop on "Chemistry Innovations at Department of BT/BI under Scientific Social Responsibility Scheme of DST SERB sponsored project of Jaypee university of Information technology, Waknaghat (HP) on 18<sup>th</sup> August 2023
12. Organized One Week FDP on Teaching and Research Practices from 05-10 June, 2023.
13. Faculty Coordinator Incipere 2023, Biolclub annual event on 13<sup>th</sup> April 2023

14. Provide PTC training to 62UG students from RKMV in Molecular Biology& Biotechnological Techniques Workshop organized by Department of BTand BI on 24<sup>th</sup> February2023.
15. Member of committees for project evaluation and viva voice for B.Tech (BT&BI),MSc (BT&Micro) 2022
16. Co-coordinated the visit of UG and PG Biotech Students of Khalsa College, Patiala on 31st Oct,2022
17. Co-ordinated visit of students and faculty of DPS Bahadurgarh, Haryana organized by Department of BT& BI on 24 September, 2022
18. Coordinator from BT and BI for bridge course for biology 2022
19. Nominated Judge to evaluate the declamation and quiz contest in the event “Remembering Hargobind Khorana the legendary biochemist on his birth centenary” organized by Department of Bt and BI at JUIT Waknaghat on 8<sup>th</sup> August,2022
20. Coordinated visit of Dayanand Adarsh Vidyalaya Kandaghat school students on 26<sup>th</sup> April, 2022
21. Faculty Coordinator INCIPERE 2022, bioclub event on 13<sup>th</sup> April 2022
22. Coordinated visit of GSSS,Chota Shimla school students on 4<sup>th</sup> March2022.
23. Co- coordinator for bridge course for biology started from 10th September2021,.
24. Nominated as panel members for assessment of Summer Industrial Training of BTech students of Biotechnology for conducting viva in August 2021
25. Faculty Coordinator BioNera 2021, bioclub event on 15<sup>th</sup> May 2021
26. Faculty Coordinator webinar with South Dakota Students on 8<sup>th</sup> May 2021.
27. Faculty Coordinator INCIPERE 2021, bioclub event on 27<sup>th</sup> march 2021
  
28. Faculty Coordinator for providing training on Plant tissue culture and quality management in **Skill Vigyan** departmental project on 12<sup>th</sup> and 18th Jan,2020 onwards
  
29. Faculty Coordinator Biomodelling SYNAPSE 2020, bioclub event on 18<sup>th</sup> August,2020
30. Faculty Coordinator SYNAPSE Newsletter August 2020 onwards
31. Faculty Coordinator SYNAPSE WEBINAR SERIES from 14<sup>th</sup>, 28<sup>th</sup> June and 5<sup>th</sup> July2020
32. Faculty Coordinator INCIPERE 2020, bioclub event on 6<sup>th</sup> February 2020
33. Faculty incharge of Departmental website Jan 2020
34. Faculty Coordinator for bioclub SYNAPSE 2019
35. Department Faculty coordinator for Hilly Rambling-A JUIT Newsletter <http://www.juit.ac.in/lrc/hilly-ramblings.php>. from 2015 onwards
36. Conducted 4-weeks summer trainings for students from different institutes of the country and imparted hands on trainings on different techniques of Plant Tissue Culture and secondary metabolite production 2015 onwards..
37. Coordinator of Solan Outreach activities of the department where lectures on BT and BI awareness has been carried out in schools and facilitating the student visit in Department and University2017 onwards...
38. Teaching assignments: Plant Cell Culture Technology, Intellectual Property Rights and Bioethics , Industrial Plant Tissue culture, Cell Biology
39. Member of Department BT&BI Students Consultative Committee 2018-2019-2020
40. Helping in preparation of new B.Tech. Biotech Curriculum(2018)

41. Prepared laboratory manual for plant tissue culture for BTech/BTDD 2<sup>nd</sup> year students 2015 onwards.
42. Conducted summer trainings where students enrolled from all over India provided with hands on trainings on different techniques of Plant Tissue Culture and secondary metabolite production for the duration of 30days.
43. Developed successful micropropagation technology for 18 different plant species in BT lab
44. Synapse (Bio student club):coordinating industry visits and interactions for Btech and M.Tech students.
45. Coordinated 1st interdepartmental Declamation event on 26<sup>th</sup> January 2016 for UG students of JUIT.
46. Conducted outreach activities for biotech admission drives in different schools of Shimla and Solan.
47. Member, Board of Studies (BoS) for BTech Biotech & Bioinformatics programmes of the Department2015,2016
48. Academic mentor for 1<sup>st</sup> year students of BTech Biotech & Bioinformatics programmes 2017
49. Mentoring of low OGPA students of all years BTech Biotechnology and Bioinformatics January2018
50. Coordinator Departmental greenhouse for showcasing visitors and Plant Tissue Culture Lab
51. Coordinator of IQAC Academic and Research section of the Department 2017onwards
52. Coordinator of Annual Report of BT and BI 2017-2018 onwards
53. Mentoring GATE students of the department for 2018
54. Consultative Committee member of the Department 2018,2019
55. Co-ordinated educational tour of XI and XII students(75 medical and 35 non medical) of Loreto Convent Tara Hall to Departmental Labs and University on 31<sup>st</sup> May 2019

## **V. Contribution in the University Activities**

1. Nodal officer of Gender Champions Committee at JUIT from 2023-2024-2025.
2. SIGHT IEEE Counsellor of JUIT from 15<sup>th</sup> July2024 onwards.
3. Member of Internal Complaint Committee at JUIT from 2023- 2024-2025.
4. Master of the ceremony and Covenor of the Committee for VC report and Dias committee of Convocation at JUIT on 6<sup>th</sup> July,2024.
5. Member of COMMITTEE FOR HEALTHY INTERACTION FACILITATION BETWEEN SENIORS AND FRESHERS from 27<sup>th</sup> May2024
6. Organised Interactive and career counseling sessions with students of Govt. Sr. Sec. School, Domehar on 9<sup>th</sup> May 2024.

7. Organized The First Phase of “RIDE-Hack’24” and judged the start-up projects at JUIT Solan from 25th April 2024, 11 AM onwards to 27th April 2024, 11 AM The theme of the RIDE-Hack24 is Build Your Own Startup.
3. Organized Technical Interactive Workshop with Principals of Government Polytechnics of H.P. at JUIT on 5th April, 2024.
4. Organized Gender Sensitization and Legal Awareness Camp at JUIT, Wagnaghat on behalf of Gender Champions Club and ICC of JUIT where Mrs Sheetal Vyas (High Court advocate) was the expert on 6<sup>th</sup> March 2024.
5. Mentor of startup projects Buransh Bliss of Vipasha **from Department of Industries H P in TIEDC, JUIT, 1<sup>st</sup> March 2024**
6. Organised article writing competition on topic “ Challenges for women in STEM and Sociological Perspective on gender inequality” as nodal officer GCC and member ICC from 12<sup>th</sup> Feb-28<sup>th</sup> Feb 2024.
7. Reviewer of startup projects of Vipasha **from Department of Industries H P in TIEDC, JUIT, 8<sup>th</sup> Dec 2023**
8. Reviewer of startup projects of Yash Tripathi **from Department of Industries H P in TIEDC, JUIT, 8<sup>th</sup> Dec 2023.**
9. Organised UMANG—an open mic extravaganza presented by the Omega Leo Club of Wagnaghat (Leo district 321a2) in collaboration with the Gender Champions Club on 4<sup>th</sup> Dec 2023.
10. Coordinated visit of Govt. Sr. Sec. School Ghaini to the JUIT University on 1<sup>ST</sup> Dec 23
11. Organized vigilance awareness week as member of ethics Committee from 30<sup>th</sup> Oct. to 05<sup>th</sup> Nov. 2023.
12. Coordinator of Multidisciplinary & Holistic education and Equitable & Inclusive Education for undertaking transformative strategy and Action in HEI(UTSAH) Nov 2023
13. Organized Plantation drive on Gandhi and Shastri Jayanti -at Govt. Primary School, Dabrera, Kandaghat, Solan on 02 Oct, 2023.
14. NAAC 3<sup>rd</sup> cycle core team Convenor of section 6 at JUIT Oct 23.
15. Convenor of Section 6 (Governance Leadership and Management) IQAC.
16. Nominated IPR Expert in Institute Innovation Council of ABVGIET Pragatinagar, Shimla from 4<sup>th</sup> Sep, 2023
17. Organized a Donation Drive as a Faculty coordinator of Omega Leo Club Wagnaghat at JUIT Wagnaghat on 30<sup>th</sup> Sep, 2023.
18. Member of Editorial Board of Hilly Rambling for BT and BI (News letter of JUIT)
19. Nodal faculty incharge for Gender Champions Club JUIT from 9<sup>th</sup> August, 2023.



20. BoS member for Department of Civil Engineering 12<sup>th</sup> June,2023 onwards.
21. Registered as mentor under CM startup scheme, Department Industries, HP (April 2023)
22. Organized Practical sessions in Computer Science and Electronics Communication and Engineering Techniques for Students (41 no.) of Govt. Polytechnic Sundernagar on 24<sup>th</sup> March 2023.
23. Organized One Day Workshop on Practices of Engineering Techniques for Students of Govt. Polytechnic for Women Kandaghat on 17<sup>th</sup> March 2023.
24. Organized Gender Sensitization and Legal Awareness Camp at JUIT, Wagnaghat on behalf of Gender Champions Club and ICC of JUIT where Mrs Sheetal Vyas (High Court advocate) was the expert on 15th March 2023
25. Expert for providing awareness to UG and PG students on Zero discrimination day celebrated by Committee for complaint against caste based discrimination on 1<sup>st</sup> March 2023
26. Member of evaluation panel for poster competition in Second National Science Day symposium (NSDS-2023) organized by Department of Physics and Material Sciences and Department of BT and BI on 24<sup>th</sup> February2023
27. Expert in workshop on Gardening for Beginners organized by Gender Champion club and ICC JUIT on 24<sup>th</sup> Feb 2023
28. Member of IQAC of Jaypee University of Information Technology,Wagnaghat,Solan w.e.f. 1<sup>st</sup> Jan, 2023
29. Organized a Blood Donation Camp as a Faculty coordinator with Lions Club Solan at JUIT Wagnaghat on 26<sup>th</sup> Nov.2022
30. Organized webinar on Ethics in Science by Prof. Om P Sharma as a member of Ethics Committee JUIT on November 19 , 2022
31. Member of Ethics Committee of JUIT,1<sup>st</sup> August 2022 onwards.
32. Coordinated the MoU signing event of JUIT with IIT Ropar on 11<sup>th</sup> Nov,2022
33. Coordinated the event Treasure hunt organized by Omega leo club 8<sup>th</sup> Nov,2022
34. Coordinated a **Digital Poster Design competition** on different topics of the **Code of Ethics as a member of** Caste Based Discrimination Committee and Ethics Committee of JUIT from 1-7<sup>th</sup> Nov,2022
35. Faculty in charge for Admission cell JUIT 2023 w.e.f 1<sup>st</sup> Nov,2022
36. Faculty Coordinator for Omega Leo Club at JUIT from 13<sup>th</sup> October, 2022 -2024.

37. Chairperson of the Committee for strengthening the activities under signed MoUs from 27<sup>th</sup> September , 2022.
38. Member of Anti-ragging Committee of JUIT w.e.f. 20<sup>th</sup> August 2022 to 2024
39. Member of Screening Committee for Empanelled Incubator at JUIT from 3<sup>rd</sup> August, 2022
40. Team coordinator for Education expo at Pragati Maidan,Delhi 2-3 July,2022
41. Admission Cell Faculty Coordinator of the JUIT from December 2021 -2022
42. NAAC core committee Convener for Governance leadership and management section 6 for 2022.
43. Coordinated departmental visit of JNV Solan girl students of classes 10 and 12 as a part of Vigyan Jyoti Programme (an initiative by the Department of Science & Technology (DST) on 7<sup>th</sup> March 2022
44. Convener for NEP Task Force -2 of JUIT, July 2022.
45. **Reviewer and Mentor of Mr Ishaan startup projects from Department of Industries H P in TIEDC,JUIT, Dec2021 till now**
46. Coordinating HPPERC Chairperson visit in department as per verbal orders from registrar sir on 6<sup>th</sup> Oct 2021.
47. Member of JYC student member selection committee 2021-2022
48. Reviewer of startup projects of Rahul Sharma **from Department of Industries H P in TIEDC,JUIT,13<sup>th</sup> Sep 2021**
49. Convener of IQAC Subcommittee(Governance Leadership& management)(2021-2022)
50. Convener of IQAC Subcommittee(Institutional Values and Best practices) (2021-2022)
51. Member of IQAC Core JUIT Sep10,2021 -2022
52. Member of International collaboration centre,JUIT,July2021 till today.
53. **Member of Research Integrity Committee of JUIT 21<sup>st</sup> June,2021.**
54. **Member of Jaypee Universities of group4 created to explore tie –ups with International Universities under and for attracting foreign students to JUs from 1<sup>st</sup> Feb2021.**
55. **Member of Covid-19 safety committee in JUIT campus 8<sup>th</sup> Feb 2021**
56. **Member of CARE (Consortium for academic research and ethics) task group as per UGC from 18<sup>th</sup> September2020**
57. **Reviewer and Mentor of Mr Shubham startup projects from Department of Industries H P in TIEDC,JUIT, 2020 -2021 Dec.**
58. **Coordinator of off-page content of all departments for University new website authority building from September 2020 onwards**
59. Faculty incharge for University new website development, 2020 – Jan 2022

60. Faculty member of **Fitness Club of JUIT as part of the Fit India Campaign from March 2020,2021**
61. **Member of CARE committee of the JUIT Sep18th 2020 onwards.**
62. Reviewer of startup projects in TIEDC,JUIT,2019
63. Departmental Faculty in-charge for conducting Le Fiestus 2020
64. Judged “Hindi Debate Competition” organized by the Literary and Dramatics Club of JYC on the occasion of “Hindi Diwas” i.e. 14th September 2019.
65. Member of Internal Complaint Committee for Prohibition and Prevention of Sexual harassment of women as staff, faculty and students of JUIT July 16,2019,Sep2020,2021,2022,2023
66. Admission Faculty Coordinator of the JUIT from December 2018 -2019-2020
67. Mentor and Internal reviewer for Technology Incubation and Entrepreneurship Development Cell ,JUIT 2019-2020 (<http://www.juit.ac.in/tiedc/InternalReview.php>)
68. Reviewer of Start up project of Mr Arun Sharma from TIEDC,JUIT March,2019
69. Reviewer of Start up project *SVAP (Safe and Vigilante Anti-Rape Product)* from the Department of Industries HP and TIEDC JUIT on 14<sup>th</sup> Feb 2019
70. Reviewer of Start up project UP from the Department of Industries HP and TIEDC JUIT on Organic Manure on 11<sup>th</sup> Dec 2018
71. Participated in Conclave of Chief Ministers and Parliamentarians of Himalayan States on 5<sup>th</sup> October2018 at Peterhoff Shimla
72. Committee member for complaints against Caste based discrimination September 26th 2018 and Sep 2020,2021,2022,2023.
73. Coordinated 3days workshop on “Solan Startup weekend powdered by Google for entrepreneurs organized by Techstars, TIEDC of JUIT and HPCED from 14-16<sup>th</sup> Sep,2018
74. Webmaster of JUIT from February 2018 onwards
75. University grievance redressal committee member 2017-2018-2019
76. Sexual harassment committee member of JUIT 2017
77. Anti ragging committee member of JUIT 2018-2019,2020,2021,2022
78. AQAR and IQACR ‘s Academic and Research committee 2017-2018-2019-2020
79. Outlook Survey -17 compilation of university data.
80. JYC faculty in-charge for conducting MNP and Le Festus 15 and 16 events of JYC

## **X. Research profile**

1. **Link for accessing details at JUIT website :**  
<https://www.juit.ac.in/faculty.php?id=117&dep=bio&page=0>

2. **Google scholar link Hemant Sood:**  
<https://scholar.google.co.in/citations?user=lwVkFbUAAAAJ&hl=en>
3. **Orchid Id:0000-0003-0001-4317**
4. **Scopus ID link <https://www.scopus.com/authid/detail.uri?authorId=26641313800>**
5. **Research Gate :<https://www.researchgate.net/profile/Dr-Hemant-Sood>**

A handwritten signature in black ink on a light-colored background. The signature is cursive and appears to read 'Hemant Sood'.

(Hemant Sood)