

## Dr. SAPNA THAKUR

PhD. Biotechnology

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### Present Address:

Department of Genetics Plant Breeding & Biotechnology

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<b>Date of birth:</b>	May 16, 1982
<b>Orcid Id:</b>	0000-0003-1953-2683
<b>Nationality:</b>	Indian
<b>Marital status:</b>	Married
<b>Sex:</b>	Female

### Completed Projects:

1. 'Development of ZnO-Cellulose Nanocomposite for extending storage life of Ginger (*Zingiber officinale*).’ Government of Himachal Pradesh Department of Environment, Science & Technology funded Project, (S&T(F)5-2/2017), 2019-2022. PI: **Dr. Sapna Thakur**.
2. 'Development of Novel packaging film for fruit and vegetable storage using metal oxides Nano particles synthesized by different processes.’ DST funded Project (SR/WOS-A/LS-296/2017), 2018-2021. PI: **Dr. Sapna Thakur**.
3. 'Dettol school hygiene education program.’ Pehel Jagran NGO, Reckitt, funded project, October 2023 to March 2024, 8,00,000/-. Project Coordinator: **Dr. Sapna Thakur**.
4. 'InSoil Machine setup for Soil testing.’ ABSOLUTE funded project, November 2023, 3,00,000/- PI: **Dr. Sapna Thakur**.
5. 'Building a Nature Intelligence Platform, a repository of novel species of microbes found in the extreme climatic regions through the application of novel biotechnological tools.’ ABSOLUTE, Industrial sponsored Project, 2024. PI: **Dr. Sapna Thakur**.
6. 'Apple a Day Cafeteria’ Coordinator: **Dr. Sapna Thakur**.

### Ongoing Project:

1. Establishment of Liquid Handwash, Soap, and Floor Cleaner Production Unit. Eternal University funded project, **2024-2025**. (Co-PI Dr. Sapna Thakur)

### Teaching experience:

Eight years of teaching experience as Assistant Professor in the Department of Genetics Plant Breeding & Biotechnology, D.K.S.G. Akal College of Agriculture, Eternal University, Baru Sahib (H.P.) 173101.

### **Field of Research Work:**

- Agro-nanotechnology
- Nano-pesticides
- FTIR, NMR, UV-Vis Spectroscopy.
- Hydrothermal technique.
- Synthesis of Nanoparticles from plant materials
- Fiber synthesis
- Column chromatography, TLC, HPLC.
- Nano-coating for post-harvest
- Nano-fertilizers
- SEM, TEM and XRD Analysis.
- Electrospinning method.
- DNA isolations and molecular fingerprinting.
- PCR amplifications.

### **Academic Qualifications:**

**PhD:** From Dept. of Biotechnology, Shoolini University, Solan, India (2011-2016) in the field of molecular Biotechnology. (Major Advisor: Dr. D. R. Sharma). Thesis Title: “Studies on genetic divergence and association of genotypes and phytochemicals in *Asparagus adscendens* Roxb. in Himachal Pradesh”.

**M.Sc.:** Passed in (Honr) Biotechnology (June 2009) from Lovely Professional University, Phagwara Road, Jalandhar, Punjab, India.

**Bachelor of Education:** Done B.Ed (Medical) (September 2004) from Himachal Pradesh University, Shimla, Himachal Pradesh.

**B.Sc. Medical:** Passed from Himachal Pradesh University, Shimla, Himachal Pradesh, India in 2003.

**Matric:** Passed from Himachal Pradesh Board of School Education, Dharamshala, Himachal Pradesh, India in 1997.

### **Awards & Honors:**

1. “Women Scientist Fellowship” by Department of Science & Technology DST, Govt. of India, 2018-2021.
2. “Women Researcher Award” by International Scientist Award, VDGGOOD in Engineering, Science & Medicine, 2021.
3. “Best Rising Researcher Award” by Eternal University, Baru Sahib for 2023.

### **PATENTS GRANTED:**

1. Patent number: 201911012842 (2024)  
Title: Barium strontium titanate material and method of manufacturing the same.
2. Patent number: 201811050133 (2024)  
Title: Iron oxide nanoparticles, iron oxide-cellulose nanocomposite and method of producing thereof.
3. Patent number: 201811049036 (2025)  
Title: Copper nanoparticles (cunps) and method of producing the same.
4. Patent number: 201911021700 (2025)  
Title: Improved process for synthesis of copper nanoparticles.

### **AWARDS:**

1. **Women Scientist A (WOS-A)** fellowship for 3 years sponsored by DST, Govt. of India, 2018-2021.

2. **Women Researcher Award** organized by International Scientist Award 2021, VDGGOOD in Engineering, Science & Medicine.
3. “Best Rising Researcher Award” by Eternal University, Baru Sahib for 2023.

### **Lab Manuals:**

1. Mushroom Cultivation: A Laboratory Manual. Dr Sushma Sharma, Dr. Sapna Thakur, Dr Ajar Nath Yadav. Akal College of Agriculture, Eternal University, Baru Sahib, H.P. 2018.

### **Popular Article:**

1. Thakur S. Green Nanotechnology in Agriculture and Food Industry. EU Voice, Vol: 04, Issue: 1, pp: 22-23 (2018).
2. Thakur S., Thakur S., Guleria G. Biosynthesis of Nanoparticles: Technology Concepts and Future Applications. EU Voice, Vol: 06-07 pp: 19-20 (2020-21).
3. Kaur M., Thakur S., Thakur S. Role of Nanomaterial in Decontamination of Wastewater: A review. EU Voice, Vol: 06-07 pp: 27 (2020-21).
4. Guleria G., Thakur S., Thakur S. Myco-nanotechnology and their Applications in Medical Science. EU Voice, Vol: 06-07 pp: 30-31 (2020-21).
5. Guleria G., Thakur S., Thakur S. *Nyctanthes arbor-tristis* (Parijat Plants) Divine value and Medicinal Importance. EU Voice, Vol: 06-07 pp: 24 (2020-21).

### **Publications:**

1. Roma, Singh N., Maurya V., Johar V., Sharma A., Kumar K., Thakur S., Kumar R. Pepper leaf curl Bangladesh Virus (PLCBV) and weed interaction: Consequences for growth, yield and biochemical vicissitudes in chilli (*Capsicum annuum* L.). (2025) Plant Science Today. ISSN 2348-1900 (online). <https://doi.org/10.14719/pst.5023>
2. Kumar S., Sharma V., Kumari N., Kaur G. A., Saha A., Thakur S., Shandilya M. Recent advances in perovskite materials: exploring multifaceted properties for energy harvesting applications.(2025) **IF: 2.4** *Ionics* 30 (9), 5159-5188
3. Saurabh A., Kaur M., Rukhsana, Guleria G., Thakur S., Shandilya M., Thakur S. Effect of Fe<sub>2</sub>O<sub>3</sub> Nano-fertilizer on growth, and yield of Cauliflower (*Brassica oleracea* var. Botrytis L.) cv. Pusa Snowball K-1 in H.P. *International Journal of Phytoremediation*.(2024) **IF: 4.03** <https://doi.org/10.1080/15226514.2023.2288894>.
4. Guleria G., Thakur S., Shandilya M., Kumar S., Thakur S. The Biomedical Potential of Hydrothermally Synthesized Zinc Oxide Nanoparticles for Antifungal Evaluation and Cytotoxicity Analysis. *Applied Organometallic Chemistry* (2023) Accepted manuscript. 202300448 <https://doi.org/10.1002/aoc.7270> **IF: 4.072**
5. Sharma S., Thakur S., Thakur P., Shandilya M. Bio-synthesized ZnO NPs using cow urine in vitro & in vivo efficacy against late blight pathogen. *Inorganic and Nano-Metal Chemistry* (2023) <https://doi.org/10.1080/24701556.2023.2271451> **IF: 1.716**
6. GunAnit Kaur; Sahil Kumar; Vishal Sharma; Itika Kainthla; Shweta Thakur; Sapna Thakur; Radheshyam Rai. Enhancement in the dielectric and ferroelectric behaviour by interface between the electrode and grain bulk boundaries of Ca, Zr-doped Barium Titanat. *Inorganic Chemistry Communications* (2023) <https://doi.org/10.1016/j.inoche.2023.110644> **IF: 2.495**
7. Mishra M., Thakur S., Shandilya M., Rai R. Comparative studies of structural, impedance, and magnetic behavior of CFO modified BCT particulate composites. *Journal*

- of Materials Science: Materials in Electronics* (2023) <https://doi.org/10.1007/s10854-022-09550-6> **IF: 2.779**
8. Guleria G., Thakur S., Shandilya M., Thakur S., Kalia S. Nanotechnology for sustainable agro-food systems: The need and role of nanoparticles in protecting plants and improving crop productivity. *Plant Physiology and Biochemistry* (2022) 194, p533-549 <https://doi.org/10.1016/j.plaphy.2022.12.004> **IF: 5.437**
  9. Kumari P., Thakur S., Guleria G., Thakur S., Sharma S. Spectroscopic and Magnetic performance of Cobalt (Co) Incorporated NiMn<sub>0.05</sub>Fe<sub>1.95</sub>O<sub>4</sub> Nanoferrites: A potent antifungal activity against *Aspergillus niger* (MT675916). *Nano* (2022) <https://doi.org/10.1142/S1793292022501132> **IF: 3.556**
  10. Kumar S., Shandilya M., Thakur S. Efficacy of polymeric nanofibrous membranes for proficient waste water treatment. *Polymer Bulletin* (2022) <https://doi.org/10.1007/s00289-022-04417-6> **IF: 2.87**
  11. Guleria G., Thakur S., Shandilya M., Kumar S., Thakur S. Synthesis of  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>/Ethyl Cellulose-based Nanocomposites to Extend the Shelf-life of *Capsicum annuum* L. var. Grossum. *Materials Today: Proceedings* (2022) <https://doi.org/10.1016/j.matpr.2022.09.222> **Cite Score: 2.3**
  12. Thakur P., Thakur S., Kumari P., Shandilya M., Sharma S., Poczai P., Alarfaj A. A. & Sayyed R. Z. Nano-insecticide: synthesis, characterization, and evaluation of insecticidal activity of ZnO NPs against *Spodoptera litura* and *Macrosiphum euphorbiae*. *Applied Nanoscience* (2022) <https://doi.org/10.1007/s13204-022-02530-6> **IF: 3.869**
  13. Guleria G., Sharma D. K., Thakur S., Kumari P., Shandilya M., Thakur S. Environment friendly and biodegradable  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> / C<sub>20</sub>H<sub>38</sub>O<sub>11</sub> nanocomposite growth to lengthen the *Solanum lycopersicum* storage process. *Advances in Natural Sciences: Nanoscience and Nanotechnology* (ANSN) 13, p-025004; 2022. <https://doi.org/10.1088/2043-6262/ac70db> **IF: 2.379**
  14. Kaur G. A., Kumar S., Thakur S., Thakur S. & Shandilya M. Structural and ferroelectric growth of Ba<sub>0.85</sub>Mg<sub>0.15</sub>TiO<sub>3</sub>–Ga<sub>2</sub>O<sub>3</sub> ceramic through hydrothermal method. *Journal of Materials Science: Materials in Electronics*; 32(18);p 23631-23644 (2021) <https://link.springer.com/article/10.1007/s10854-021-06854-x> **IF: 2.478**
  15. Thakur S., Shandilya M., Guleria G. Appraisalment of antimicrobial zinc oxide nanoparticles through *Cannabis Jatropa curcasa Alovera* and *Tinospora cordifolia* leaves by green synthesis process, *Journal of Environmental Chemical Engineering*; 9(1); p 104882; (2021); doi: <https://doi.org/10.1016/j.jece.2020.104882> **IF: 5.87**
  16. Shandilya M., Thakur S., Thakur S. Magnetic amendment in the fabrication of environment friendly and biodegradable iron oxide/ethyl cellulose nanocomposite membrane via electrospinning, *Cellulose*; 27(17); p 10007-100017 (2020); doi: <https://doi.org/10.1007/s10570-020-03455-5> **IF: 6.123**
  17. Thakur S., Shandilya M., Thakur S., Sharma D. K. Growth mechanism and characterization of CuO nanostructure as a potent Antimicrobial agent. *Surfaces and Interfaces*; 20; p 100551; (2020); doi: <https://doi.org/10.1016/j.surfin.2020.100551> **IF: 6.2**
  18. Thakur S., Kaur M., Lim WF, Lal M. Fabrication and Characterization of Electrospun ZnO nanofibers; Antimicrobial assessment. *Materials Letters*; 264; p 127279; (2020). **IF: 3.423**
  19. Sharma S., Veerubommu S., Brar G. S., Thakur S., Thakur P., Phurailatpam S. and Yadav A. N. Genetic diversity and phylogenetic profiling of *Fusarium* sp., the causing storage rot of ginger (*Zingiber officinale*) in Himachal Pradesh and its potential environmental eco-friendly management strategies. *Research Journal of Biotechnology* RJB-T-2018-0116 (2018). **IF: 0.454**

20. Thakur S., Thakur S., Shandilya M. and Rai R. Synthesis of silver nanoparticles from *Centella asiatica*(L.) plant and in vitro derived callus culture: Assessment of antibacterial activity. *Academia Journal of Biotechnology* 6(3): 066-073 (2018). **IF: 3.671**
21. Thakur S., Sharma S., Thakur S and Rai R. Green Synthesis of Copper Nanoparticles Using *Asparagus adscendens* Roxb. Root and Leaf Extract and Their Antimicrobial Activities. *International Journal of Current Microbiology and Applied Sciences*. 7(4): 683-694 (2018). **IF: 0.654**
22. Thakur S., Thakur S. and Kumar R. Bio-Nanotechnology and its Role in Agriculture and Food Industry, *Journal of Molecular and Genetic Medicine*; 12(1): (2018).
23. Sharma S., Phurailatpam S., Thakur S., Prasad D. and Thakur N. Post-Harvest Management of Storage Rot of Ginger in Sirmour Areas of Himachal Pradesh, India. *International Journal of Pure & Applied Bioscience* 6 (1): 586-592 (2018).
24. Thakur S., Sharma D. R. Review on medicinal plant: *Asparagus adscendens* Roxb. *International Journal of Pharmaceutical Science and Health (IJPHC)* 5 (3): 82-97 (2015). **IF: 2.44**
25. Thakur S., Sharma D. R. Antibacterial activity and High-performance liquid chromatography (HPLC) analysis of *Asparagus adscendens* Roxb. root extracts. *International Journal of Advanced Scientific and Technical Research* 5 (3): 359-371 (2015). **IF: 3.94**
26. Thakur S., Rai R. & Sharma S. Study the antibacterial activity of copper nanoparticles synthesized using herbal plants leaf extracts. *International Journal of Biotechnology and Research (IJBTR)*. 4 (5) 21-34 (2014). **IF: 1.20**

### **Book Chapters:**

1. Sharma V, Kumar S, Kainthla I, Shandilya M, Thakur S. Applications of solid waste-derived carbon nanomaterials in fuel cells. In *Waste-Derived Carbon Nanomaterials*. Volume 2 2025 (pp. 103-121). American Chemical Society.  
<https://doi.org/10.1021/bk-2025-1495.ch006>
2. Sapna Thakur, Geetika Guleria, Prerit Chauhan and Mamta Shandilya. *Advances in Nanocomposites for the Potential Management of Plant Diseases. Properties and Applications of Nanocomposite Membranes*; ISBN-979-8-89113-279-5
3. Sunil Kumar, Sushma Sharma, Sapna Thakur, Tanuja Mishra, Puneet Negi, Abd El-Latif Heshan, Ali A. Rastegari, Neelam Yadav and Ajar Nath Yadav. *Bioprospecting of microbes for Biohydrogen production: Current status and future challenges. Bioprocessing for Biomolecule production*, first edition. John Wiley & Sons Ltd. 2020. ISSN 978-1-119-43432-0
4. Sushma Sharma, Divjot Kour, Kusam Lata Rana, Anu Dhiman, Shiwani Thakur, Priyanka Thakur, Sapna Thakur, Neelam Thakur, Surya Sudheer, Neelam Yadav, Ajar Nath Yadav, Ali A. Rastegari, and Karan Singh. *Trichoderma: Biodiversity, Ecological Significance, and Industrial Applications*. Springer Nature Switzerland AG 2019; [https://doi.org/10.1007/978-3-030-10480-1\\_3](https://doi.org/10.1007/978-3-030-10480-1_3) (2019). ISSN 978-3-030-10480-1
5. Divjot Kour, Kusam Lata Rana, Sapna Thakur, Sushma Sharma, Neelam Yadav, Ali A. Rastegari and Ajar Nath Yadav (2018). Disruption of Protease Genes in Microbes for Production of Heterologous Proteins. In: *New and Future Developments in Microbial Biotechnology and Bioengineering*. Elsevier, Gupta-NFD-1631512. (2018). ISSN 978-0-444-63503-7
6. Sapna Thakur, Shweta Thakur, Mamta Shandilya, Madan Lal & Radheshyam Rai. *Biosynthesis of Nanoparticles using plant extracts*. Edited by Radheshyam Rai (2017).

Nova Publishers, USA, 2017, ISBN: 978-1-53612-269-5 (Hardcover) ISBN: 978-1-53612-280-0 (e-book).

### **Under Revision:**

1. Guleria G., Thakur S., Shandilya M., Kumar S., Thakur S., Kalia S. Preparation of ZnO nanoparticles/ethyl cellulose-based nanocomposite coating solution for the extended storage life of tomatoes: A study of phytochemicals and proximate analysis. *Postharvest Biology and Technology* **IF: 5.537**

### **Communicated Publications:**

1. Saurabh A., Thakur A., Guleria G., Thakur S. Evaluation of Nano-Zn fertilization on the Vegetative and Yield Attributes of Strawberry (*Fragaria × ananassa* Duch.) cv. Camarosa in Himachal Pradesh. *Scientia Horticulturae* **IF: 4.342**
2. Sharma S., Thakur S., Thakur P., Shandilya M., Rai R. An experimental simulation of a-Fe<sub>2</sub>O<sub>3</sub> NP biogenically generated with the fungus *Trichoderma harzianum* to boost Trichoderma antimycotic activity against *Fusarium* wilt of tomato: in vitro and in vivo study. *BMC Plant Biology* **IF: 5.761**
3. Kaur G. A., Kumar S., Thakur S., Thakur S. & Shandilya M. Evaluation of structural, dielectric, and ferroelectric properties of BCT-BZT ceramics via hydrothermal method at different sintering temperatures. *Frontiers in Physics* **IF: 3.56**
4. Sahil Kumar; Gun Anit Kaur; Dhananjay K. Sharma; Sapna Thakur. Proliferation of reduced graphene modified carbon nanofiber composite for the escalation of optical properties. *Nano-Structures & Nano-Objects* **IF: 5.454**

### **Student Guided:**

#### **1. Major Advisor:**

PhD. Biotechnology 1 (Complete Feb. 2023) **Theses title:** Synthesis, characterization, antimicrobial, and toxicological effect of metal oxide nanoparticles (MOFNPs).

PhD. Biotechnology 1 (perusing 2023)

MSc. Biotechnology 4 (Complete)

#### **2. Member of Advisory Committee:**

MSc students 10

PhD Students 2

### **Journal Memberships:**

1. VDGOD in Engineering, Science & Medicine one Year membership.
2. Soft Materials Research Society lifetime membership.

### **Conferences/workshops Organized:**

1. 2 Days Farmer's Workshop Programme on "To study facilitating demonstration on new storage technology to minimize ginger & garlic storage losses in Himachal Pradesh" at Eternal University, Baru Sahib (H.P.) from 29-30 March, 2022.
2. International Conference on "Water, Agriculture, Dairy and Food Processing for Sustainable Economy" (WADFPSE- 2022) on 25-26 March, 2022; Eternal University, Baru-Sahib, H. P.



3. National Science Day Celebration on 28 February, 2022 at Eternal University, Baru-Sahib, H. P.
4. National Conference on “Sustainability: Methods, Practices & Adaptation-Indian Perspective (SMPAIP)” 4-5 September 2021; Eternal University, Baru-Sahib, H. P.
5. Workshop on Aspects of Material Science & Engineering-I (WAMSE-I) 2021, held in the Lingaya’s Vidyapeeth, Faridabad, Haryana, India on 22-23 February 2021.
6. 21<sup>st</sup> INDO-US Flow Cytometry Workshop; 6-7 February 2020; Eternal University, Baru-Sahib, H.P. (**Organizing Secretary**)
7. National Science Day; February 28, 2020: Eternal University, Baru-Sahib, H.P.
8. National conference NIBES-2019; May 24-25, 2019; Eternal University, Baru-Sahib, H.P.
9. Intellectual property rights: Issues and Challenges (IPRIC-2019) one day workshop on 28<sup>th</sup> March 2019 at Eternal University, Baru Sahib, HP.
10. National conference on Healthcare in India- Need for Paradigm shift; August 30-September 1, 2019 Eternal University, Baru-Sahib, H.P.

#### **International/National Conferences attended:**

1. International Conference on APA BIOFORUM, 14-16 July, 2022; e-conference.
2. International Conference on “Water, Agriculture, Dairy and Food Processing for Sustainable Economy” (WADFPSE- 2022) on 25-26 March, 2022; Eternal University, Baru-Sahib, H. P.
3. National Conference on “Sustainability: Methods, Practices & Adaptation-Indian Perspective (SMPAIP)” Poster Presentation in the national conference SMPAIP-2021 (4-5 September 2021; Eternal University, Baru-Sahib, H. P.).
4. Contributed talk on “Synthesis of CE@Fe<sub>2</sub>O<sub>3</sub>-NC nanocomposite coating and real time application on extending storability of Tomato (*Solanum lycopersicum*) varieties Solan Garima” in 4<sup>th</sup> International Conference on Soft Materials (ICSM 2020) at University of Rajasthan Jaipur during 15-18 October 2020.
5. Contributed talk on “Nanomaterials in Agriculture” in National Conference on Nanomaterials in Biology (NCNB 2019) at University of Rajasthan Jaipur during 9-12 October, 2019.
6. National conference on Healthcare in India- Need for Paradigm shift; August 30-September 1, 2019 Eternal University, Baru-Sahib, H.P.
7. “Iron Oxide-Cellulose Nanocomposite synthesis and real time application on extending storage life of Capsicum (*Capsicum annuum*)” Poster Presentation in the national conference NIBES-2019 (May 24-25, 2019; Eternal University, Baru-Sahib, H. P.).
8. “Nanocomposite Iron Oxide-Cellulose packaging films for extending storage life of Tomato and Okra” Poster Presentation in the International conference ICNSMD-2018 (December 17-20, 2018; Delhi University, India).
9. “Enhanced dielectric and ferroelectric properties of BaTiO<sub>3</sub> ceramics Prepared by Electrophoretic deposition” Poster Presentation in SMART (National conference on Smart Materials: Advances in Research and Techniques) Shoolini University, Solan (26-27 November 2015).

#### **Workshops attended:**

1. 11 Days OP, UGC-MMTTC (GAD-MMTTC), SGTBK College, DU, 2024.
2. 21 days FDP, CSJM University Kanpur & ICAR-ATARI Kanpur, 15th May – 13th June, 2023.

3. 5 Days FDP, CIMAGE, Professional College, Patna, 22nd – 26th June, 2023
4. 5 Days FDP Programme (18-21<sup>st</sup> Jan, 2022) on Methods of Material Sciences by Bhavanas Vivekananda College of Science, Humanities & Commerce, Sainikpuri, Secundrabad- 500094, India.
5. 1 Day workshop on National Intellectual Property Awareness Mission on 4<sup>th</sup> Feb, 2022; at Eternal University, Baru Sahib, Sirmour (H.P.) India.
6. 21 Days Advanced National Training Programme (ANTP 2021) organized by Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh, 02-22 March, 2021.
7. 21<sup>st</sup> INDO-US Flow Cytometry Workshop “Basics of Flow Cytometry and its Applications in Plant Biology” Eternal University, Baru Sahib, Sirmour (H.P.) India, 6-7 February 2020.
8. International Workshop on Advanced Materials for Engineering & Solar Energy Applications, Shoolini University, Solan (H.P.) India, 16-17 December 2020.
9. Importance of Intellectual Property Rights, Eternal University, Baru Sahib, Sirmour (H.P.) India, 30 November 2019.
10. Faculty Development Program for Student Induction (FDP-SI) Eternal University, Baru Sahib, Sirmour (H.P.) India, 21 - 23 November 2019.
11. 5 Days National Workshop on Innovation Techniques Characterization, Optimization and Data Analysis (ITCOD) 8-12 July, 2019 at Chitkara University, Punjab.
12. Online workshop on PHYTON from IIT Bombay on 22 June, 2019.
13. Intellectual property rights: Issues and Challenges (IPRIC-2019) one day workshop on 28<sup>th</sup> March 2019 at Eternal University, Baru Sahib, HP.
14. HIMCOST one day workshop (DST sponsored) ‘Studies on improving Livelihood generation through Scientific Interventions in *Pinus gerardiana* Wall. and important Wild Mushrooms in H.P.’ Shimla (H.P.) (June 23, 2018).

#### **Foreign Collaborations:**

1. Institute of Physics of the Czech Academy of Sciences (CAS), Cukrovarnicka 10, CZ-16200 Prague, Czech Republic.
2. Departamento de Engenharia de Materiais e Cerâmica, Universidade de Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal
3. Department of Biophysics, Munster Technological University, Ireland
4. Department of Biophysics, University of the Free State, South Africa

#### **Other work responsibilities:**

1.	Dr. Sapna Thakur	Chairperson, IPR Cell, RDC
2.	Dr. Sapna Thakur	Coordinator, Herbal/Botanical Garden, Eternal University
3.	Dr. Sapna Thakur	Coordinator, Start-Up Activities, IIC
4.	Dr. Sapna Thakur	Coordinator, Apple a Day, Eternal University
5.	Dr. Sapna Thakur	Organizing Secretary & Chief Coordinator, International Conference (P2P: TSRRIISED-2025)



6.	Dr. Sapna Thakur	Chairperson, Registration Committee, Kisan Mela
7.	Dr. Sapna Thakur	Member, Internal Quality Assurance Cell (IQAC)
8.	Dr. Sapna Thakur	Member, Organizing Committee, 2-Days Hands-On Workshop on Processing Of Pickles
9.	Dr. Sapna Thakur	Member, Alumni Committee, Convocation
10.	Dr. Sapna Thakur	Member, NEP Syllabus Committee, Department of Biotechnology

**More details at:**

1. **ORCiD-** <https://orcid.org/0000-0003-1953-2683>
2. **Research gate-** <https://www.researchgate.net/profile/Sapna-Thakur-6>
3. **SCOPUS-** <https://www.scopus.com/authid/detail.uri?authorId=57197867445>
4. **Web of Science-** <https://www.webofscience.com/wos/author/record/ABJ-3571-2022>
5. **Google Scholar-** <https://scholar.google.co.in/citations?hl=en&user=Pd1mqF0AAAAJ>