

CURRICULUM VITAE



Vandana Naithani, Ph.D.

Assistant professor
Deptt of chemical sciences,
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Education

Ph.D (Environment Science), **I.K.Gujral Punjab Technical University(IKGPTU)**,
Kapurthala, India (2013)

B.Ed, Panjab University, Chandigarh (2003)

PGDCA, Kurukshetra University, Kurukshetra (2001)

M.Sc (Environment Science), **H N B Garhwal Central University**, Uttrakhand
(1999)

B.Sc (Medical), R S D college (Firopur city, Punjab) affiliated to **Panjab University**,
Chandigarh (1997)

WORK EXPERIENCE

2014- Present: Assistant Professor, **I.K.Gujral Punjab Technical University**,
Kapurthala, India

2011-2014: Industry Coordinator, **I.K.Gujral Punjab Technical University**,
Kapurthala, India

2007-2011, Lecturer, R S D college (Firopur city, Pb) affiliated to **Panjab University**, Chandigarh

2003-2005, Lecturer, R S D college (Firopur city, Pb) affiliated to **Panjab University**, Chandigarh

1999-2002, Lecturer, R S D college (Firopur city, Pb) affiliated to **Panjab University**, Chandigarh

TEACHING INTEREST

Environment Science, Natural Resources Environmental Chemistry, Environment Science, Ecology & Ecosystem, Biodiversity Conservation

Classroom teaching: Undergraduates, Postgraduate, PhD (Course Work)

RESEARCH INTEREST

Soil Chemistry, Clay Minerology, Humic Acid, Water and Soil Pollution

ADMINISTRATIVE EXPERIENCE:

- 2018 to Present : PhD Coordinator of the Chemical Department, I K Gujral Punjab Technical University
- 2018 to present : Coordinator for MoU with other Universities
- April 2015-Janauary 2016: Head of Department of Computer Science and Engg., main campus, I K Gujral Punjab Technical University
- 2016 to April 2017: Examination Coordinator since September at main campus I K Gujral Punjab Technical University.
- 2016 to Present: Coordinator of central Instrumentation center, I K Gujral Punjab Technical University
- 2017 to present: Coordinator for University Annual report of the Chemical Department, I K Gujral Punjab Technical University
- 2017: Bio-Metric Incharge of the Chemical Department, I K Gujral Punjab Technical University
- 2017 to Present : NAAC Coordinator of the Chemical Department, I K Gujral Punjab Technical University
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- 2011-2014: Industry Coordinator: Responsibilities held as
 - **Industry Defined Projects (IDP):** I had worked with I K Gujral Punjab Technical University (PTU), Kapurthala, as **Industry Liaisoning officer**. I was responsible to coordinate colleges for Industry Defined Projects (IDP). IDP is a Funding scheme of Rs. 25000/- for B.Tech/M.Tech students under which students have to work on real life problem of an industry in their six-month training period. Many industrial projects have been completed successfully.
 - **Entrepreneurship development cells (EDC):** I have worked on establishing Entrepreneurship development cells (EDC). Business clubs were opened in nine colleges of IKGPTU. I coordinate activities of innovation during which students got awards. Also, I am Convener of Eco farm to be established in PTU.
 - **Organised Workshops:** I was also responsible for organizing & conducting workshops and I've organized 5 workshops related to industry defined projects.
 - **Co-ordinator of Ph.D Cell:** Co-ordinated the Ph.D programme of the IKG PTU University.

RESEARCH PUBLICATIONS

1. Vandana Naithani, Anirudh P. Singh. A Comparative Study of Clay Minerals of South-Western Region of Punjab, India. *2nd International Conference on Environment, Chemistry and Biology IPCBEE vol.59 (2013) © (2013) IACSIT Press, Singapore. DOI: 10.7763/IPCBEE. 2013. V59. 21.pp 107-113.*
2. Vandana Naithani and Anirudh P. Singh (2014). Identification of Mixed Layers in Clays of Similar Texture. *Global Journal of Applied Environmental Sciences* ISSN 2248-9932 Volume 4, Number 1, pp. 7-20.
3. Naithani, Vandana; Singh, Anirudh P; Nautiyal, M.K. (2017). Spectroscopic Characterization of Humic acids extracted from different types of Soils of Punjab. *Journal of Indian Society of Soil Science*, Volume 65, Issue no. 1, pp 24-31. (ISSN:0019-638x) (Impact factor :0.356)

(https://www.ugc.ac.in/journallist/ugc_admin_journal_report.aspx?eid=MTEwNzA=)

4. **Naithani, Vandana**; Singh, Anirudh P., Nautiyal, M.K. (2017). Characterization of Minerals present in the Agricultural Soil. *International Journal of Basic and Applied Agricultural Research*, volume 15(3), pp 138-146.(ISSN: 0972-8813) (NAAS RATING: 4.6)
5. Chetan sharma; kanchan L.Singh; Anirudh P.Singh; **Vandana Naithani**; Payal sharma; Sonia Mago and Ravinder Kumar chadha.(2018). Microwave and conventional processing of niobium and manganese doped lanthanum germanate based apatites. *Materials Chemistry and Physics*. 218; 204-209. (Journal ISSN: 0254-0584)(IF:2.210)
6. Punit Bhardwaj, Jyotsna Kaushal,**Vandana Naithani**, Anirudh P Singh (2018). Phytoremediation of Pulp and Paper Mill Effluents by *Salvinia molesta* and its comparison with Nanoparticles Inclusive Phytoremediation. *International journal of basic and applied research*, volume 8(8), pp 338-356. (P-ISSN: 22493352 E-ISSN: 22780505) UGC Approved (64041).(Impact factor: 5.960)
7. Ravinder Kumar Chadha, Anirudh P. Singh, Kanchan L. Singh, Chetan Sharma, **Vandana Naithani**, (2019). Influence of microwave processing and sintering temperature on the structure and properties of Sr/Zr doped hydroxyapatite, *Materials Chemistry and Physics*, 223; 319-324. (IF:2.210).
8. Bhawesh Joshi¹, MK Nautiyal, Leela Bhatt, Vikas Mangal,**Vandana Naithani**, (2019). Estimation of Genetic Variability in *Jatropha Curcas* L. Genotypes for Vegetative Traits and Seed yield. *Chem Sci Rev Lett* , 8(29), 11-15.(ISSN no. 2278-6783)[**NAAS Score: 5.21 for 2019, Scientific Journal Impact Factor 6.748**] |
9. Chetan Sharma, Anirudh P. Singh, Kanchan L Singh, Payal Sharma; Sonia mago; **Vandana Naithani** ; Ravinder Chadha, (2020). Comparison of microwave and conventionally sintered manganese and niobium doped lanthanum germanate based apatites by Micro Raman Spectroscopy. *Materials Chemistry and Physics*, 240, 122040. (DOI: 10.1016/j.matchemphys.2019.122040)

10. Ravinder Kumar Chadha, Anirudh P. Singh, Kanchan L. Singh, Chetan Sharma, **Vandana Naithani**, (2020). Effect of Microwave and Conventional processing techniques on mechanical properties of Strontium substituted hydroxyapatite. *Ceramics International*, 46(1), 1091-1098.
(DOI: 10.1016/j.ceramint.2019.09.076)(IF:3.4)

CONFERENCE PROCEEDINGS

1. Vandana Naithani, Anirudh P. Singh. A Comparative Study of Clay Minerals of South-Western Region of Punjab, India. *2nd International Conference on Environment, Chemistry and Biology IPCBEE vol.59 (2013) © (2013) IACSIT Press, Singapore. DOI: 10.7763/PCBEE. 2013. V59. 21.pp 107-113.*

NATIONAL CONFERENCE /SHORT TERM COURSE/TRAINING PROGRAMS/WORKSHOP/SEMINAR ATTENDED

1. Participated in 21 days General Orientation Course (GOC) at HRDC Punjabi University, Patiala from March 3-23, 2020.
2. Participated in one week Short term Course on Recent Advances in Nanostructured Materials organized by NITTTR, Chandigarh from Jan 13-17, 2020.
3. Participated in One week Interdisciplinary National Workshop on recent Advances in Environmental Studies under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (sponsored by MHRD, Govt. of India) at Central University of Punjab, Bathinda from March 25-29, 2019.
4. Participated in ICSSR, New Delhi sponsored two days national seminar on Higher Education in India: A new vision 2030 organized by Department of Economics, R.S.D. College ferozepur City on March 9-10, 2018.
5. Participated in one-day workshop on NAAC at IKG Punjab Technical University, Kapurthala on July 26, 2017.
6. Participated in Short Term Course on Water Quality Management Under TEQIP-II at National Institute of Technology, Jalandhar from June 20-24, 2016.

7. Participated in three-days' workshop on MATLAB Fundamental by Math Works Training Services at Punjab Institute of Kapurthala, main campus Punjab Technical University, Kapurthala on March 14-16, 2016.
8. Participated on one-day workshop on Research Paper and Report writing using LATEX at Punjab Institute of Kapurthala, main campus Punjab Technical University, Kapurthala on January 6, 2016.
9. Participated in the training program on the theme "Harnessing Intellectual Property for Strategic Competitive and Collaborative Advantage" organized at Indian Institute of Management, Ahmadabad (IIMA) on 20-22 June 2014.
10. Participated in a 5-day DST Program, "The Science of Living: A Program for Women Scientists organized by Academy of Human Excellence on October 7-11, 2013 at Vadodoara.
11. Participated in the National Training Programme on "Bioenergy Technology" organized by Sardar Swarn Singh National Institute of Renewable Energy, Kapurthala, held on 16-17 March, 2012.
12. Participated in Workshop on Vedic Mathematics organized by Punjab Technical University, Kapurthala, held on 21-22 June, 2012.
13. Participated in National workshop on "Latest Development on the Emerging Green Technologies based on the Applications of Microwave Energy to Material Processing" sponsored by DRDO & INSA New DELHI, from August 20 to 22, 2012 at PTU campus, Kapurthala.
14. Participated in the National Conference on "Advancements & Futuristic trends in mechanical & Materials Engineering" organized by Punjab technical University, Kapurthala, held on 7-8th October, 2011.
15. UGC sponsored seminar on "Women Empowerment: A Macro Study" held on March 5, 2009 at R.S.D. College, Ferozpur city, Punjab.
16. UGC sponsored seminar on "Post Green Revolution Punjab- Economic Crisis and Challenges of Governability" held on March 21, 2007 at D.M. College, Moga, Punjab.
17. National Seminar sponsored by UGC on "World Scientists' Warning to Humanity" held on 24th March, 2007 at Dev Samaj College for Women, Ferozpur city, Punjab.

NATIONAL CONFERENCE /ATTENDED/ PAPER PRESENTED

1. **Vandana Naithani**, Anirudh. P Singh, “Relation between existences of humus and soil texture” Presented a poster in 13th Punjab Science Congress held on Feb 7th-9th, 2010 at Panjab University, Chandigarh.
2. **Vandana Naithani**, Anirudh. P Singh, “Study of Kaolinite mineral in soil of Punjab by FTIR & XRD” presented a poster in 15th Punjab Science Congress held on Feb 7-9, 2012 at Guru Nanak Dev University, Amritsar.
3. **Vandana Naithani**, Anirudh P. Singh, “Identification of Mixed Layers in Clays of Similar Texture” Oral Presentation in 17th Punjab Science Congress held on *Science and Technology for Sustainable Development* Feb 14th-16th, 2014 at Punjab Technical University, Kapurthala.

INTERNATIONAL CONFERENCE /ATTENDED/ PAPER PRESENTED

1. **Vandana Naithani**, Anirudh. P Singh, “A Comparative Study of Clay Minerals of south-Western Region of Punjab, India” Oral Presentation in *2nd International Conference on Environment, Chemistry and Biology* held on December 13-14, 2013 at Stockholm, Sweden.
2. Participated in the International Conference on “Academia – Industry (Corporates and SMEs) Linkages: Barriers and prospects in case of Developing Nations – A search for effective and sustainable partnership model” organized by Asian School of Management, Pune, held on 17th, 18th & 19th February 2012 at Pune.
3. **Vandana Naithani**, Anirudh P. Singh, M. K. Nautiyal, “Spectroscopic Characterization of Humic Acids Extracted from Different Type of Soils of Punjab” Presented a poster in international Conference on “*Innovations in Chemistry for Sustainable Development*” held on December 1-3rd, 2011 at Panjab University, Chandigarh.

WORKSHOP ORGANIZED

1. Organized 4 workshops on “Industry Defined Project” in PTU in year 2011.
2. Organized (as co-convenor) National workshop on "Latest Development on the Emerging Green Technologies based on the Applications of Microwave Energy to Material Processing" sponsored by DRDO & INSA New DELHI, from August 20 to 22, 2012 at PTU campus, Kapurthala.
3. Organized seminar on “Patenting in Engineering” on March 30, 2013 at PTU campus, Kapurthala.
4. Organized one-day workshop on “Communication Skill” on December 4, 2013 at PTU campus, Kapurthala.
5. Organized workshop on “Creating Innovation and Knowledge Network in Punjab” on December 27, 2013 at Punjab Technical University, Kapurthala.
6. Organized (as Co-convenor) Punjab Science Congress on “*Science and Technology for Sustainable Development*” on February 14-16, 2014 at Punjab Technical University, Kapurthala.
7. Organized One Day Seminar on “Transformation of Wasteland into Wonderland-A Case Study” on April 21, 2014 at Punjab Technical University, Kapurthala.
8. Organized workshop and poster competition on “Jal, Jungle Aur Jeevan - Akshay Vikas Ki Aur” on March 24, 2015 at Punjab Technical University, Kapurthala.
9. Organized Seminar on “IPR in Academia” on March 25, 2015 at Punjab Technical University, Kapurthala.
10. Organized two-day workshop on “Cloud Computing” on Oct 31-Nov 1, 2015 at main campus, Punjab Technical University, Kapurthala.
11. Organized seminar on “IPR: The key issues in Patents, Trade Marks and Copyrights in Indian Scenario” on March 29, 2016 at Punjab Technical University, Kapurthala.
12. Organized Six days’ workshop on “Big Data & Hadoop” on June 6-11, 2016 at main campus, Punjab Technical University, Kapurthala.

DOCTORATE/ M.SC SUPERVISION

- *Phytoremediation of pulp and paper mill effluent and its comparison with nano particles/enhancers incorporated phytoremediation*: Doctorate Candidate, Punit Bhardwaj completed June 2020.
- *Preparation of Organoclay for the removal of Cr (VI) from water*, M.Sc Candidates; Aanchal Sharma; Degree Completed 2018.
- *Study of Humic Acid and Clay mineralogy of soil of a wetland and cropland*; M.Sc Candidate; Urvashi Sharma; M.Sc Candidate; Degree Completed 2020.
- *Study of CeO₂ ZrO₂TiO₂ system as catalyst*; M.Sc Candidate: Jolly Debnath; Degree Completed 2020.
- *SYNTHESIS AND CHARACTERISATION OF DIFFERENT COMPOSITIONS OF-Y₂O₃-zro₂-tio₂ SYSTEM*; Msc Candidate: Amanjot Kaur; Degree Completed 2020.

MEMBERSHIP

1. Indian Society of Technical Education
2. Punjab Science Congress
3. Indian Science Congress

TECHNICAL SKILLS

- ❖ Analytical techniques related to water Testing.
- ❖ Soil analysis.

INSTRUMENTS HANDLED

- ❖ General Handling of Gas Chromatograph and analysis of organic compounds
- ❖ General Handling of FTIR and structural analysis of organic compounds with IR spectroscopy.
- ❖ Particle Size and Zeta Potential Analysis
- ❖ General Handling of UV- Vis Spectrophotometer
- ❖ General Handling of Atomic absorption spectroscope
- ❖ Soil Analysis Techniques

EXTRA-CURRICULAR ACTIVITIES

- ❖ Donated Blood in Blood Donation Camps at college level and University
- ❖ Member of Eco-club at university and college level
- ❖ Participated in Environmental activities in the university

REFERENCES

1. Dr. Anirudh P. Singh,
Dean (R & D),
IKG Punjab Technical University,
Jalandhar-Kapurthala Highway,
Kapurthala-144603
Punjab, India
Phone: Mobile; +91947809005

2. Dr. Gourav Bhargava,
Associate Professor & HOD,
Department Chemical Sciences,
Main Campus,
IKG Punjab Technical University,
Jalandhar-Kapurthala Highway,
Kapurthala-144603
Phone: Mobile; +91947809058

3. Mukesh K.Nautiyal, Professor, Ex-Director of Uttarakhand Council for
biotechnology, Uttarakhand,
Department of Genetics and Plant Breeding,
G.B, Pant University of Agriculture and Technology,
Pantnagar-263145 Uttarakhand, India
Mobile: +919412120767

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