

CURRICULAM VITAE

Dr. Nitin Verma

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Objective:

To serve a job with excellence in the field of Bioprocess engineering, Down Stream Processing, Biochemical Technology, Enzyme Engineering, Biochemical engineering, Microbial Technology and Environmental biotechnology as Researchers, Faculty member and Technologist. To implements the existing technologies, generates novel ideas & concepts for the benefits of our organization & goals to solve the problems of our global society.

Summary:

As a researcher and faculty member, generates an ability to solve the problems with fundamental, conceptual & practical approach. An enthusiastic attitude towards learning as well as in acquiring novel concepts and ideas. To manage multiple tasks in a defined deadlines. To maintain a good relationships among the colleagues for maintaining a workful & worthful environment. I believe in myself, having faith in own abilities, without a confidence in our own skills & powers I can't be successful.

Work Experience:

Teaching Assignments: (4+ years)

Working as Assistant professor in Bioprocess Engineering & Fermentation Division of Biotech Department at AITM (AICTE approved & UPTU affiliated), Varanasi, U.P, India.

Responsibilities:

1. Consistently taking classes for B.Tech Biotech students to cover the module for Bioprocess Engineering, Advance Bioprocess Engineering, Fermentation Engineering, Environmental Engineering, Enzyme Engineering, Down stream Processing, Biofuel & Alcohol Technology, Industrial Biotechnology, Agricultural Biotechnology, Heat & Mass Transfer since last couple of years.

2. Consistently conducting laboratory assignments for the following objectives:

In Bioprocess & Fermentative facets:

Upstream and Downstream of bioprocess for the production of Citric acid, α - amylase by Aspergillus sp, Cost effective citric acid production from whey as supplementary carbon sources.

Fermentative production of Penicillin Antibiotics using Penicilium chrysogenum, Batch fermenter for fermentative Process of L- Lysine production.

Estimation of volumetric liquid mass transfer coefficient (K_{La}) using sodium sulphite method, To study the induction effect of β -galactosidase enzyme in E.coli.

Preparation of immobilized enzymes & cells and evaluation of kinetic parameters.

Microbial production of enzymes, acids by (a) solid state and (b) submerged fermentation.

Fermentative production of Ethanol using Saccharomyces cerevisiae, Fermentative production of White & Red Wine, Microbial production of Biosurfactant, Biopolymers using suitable strain.

To find out the thermal conductivity of Insulating materials, To determine the overall heat transfer coefficient in Counter flow heat exchanger.

To determine the growth patterns, effect of carbon, N₂ sources, temperature, pH, specific growth rate, specific product formation rate, specific substrate utilization rate & stoichiometric coefficients of E.coli, Isolation & acclimatization of desired cultures, Determination of specific thermal death rate constant (k_d) for E.Coli.

In Environmental & Strain improvement Facets:

To determine BOD, COD, DO, Hardness, Total, Dissolved and Suspended solids, alkalinity, acidity, Hexavalent chromium, nitrate, sulphate in waste water.

To develop a biofilter for removal of toxic components generated from industrial effluents. Conducting HPLC exercises for identification of process samples, To utilized different solid wastes to manage environmental sustainability.

Elution of plant DNA fragment from agarose gel electrophoresis, Isolation of Plasmid DNA., Isolation of bacterial/fungal genomic DNA, Polyacrylamide gel electrophoresis of DNA, Laboratory based on restriction enzyme digested vector pUC18., To make bacterial cells competent for transformation., To perform transformation of the desired bacterial strain with plasmid DNA, To perform ligation of λ EcoRI digest using T₄ DNA ligase, PCR amplification of DNA and visualization by gel electrophoresis, SDS-PAGE of proteins.

3. Successfully conducted **B.Tech Biotech Research Projects** based on environmental and microbial biotechnology entitled as
 1. ***Comparative studies of waste newspaper recycling with cellulase& amylase enzyme.***
 2. ***Isolation of microbes responsible for biocorrosion& biofouling.***
 3. ***Comparative studies of wine production from different vegetables & fruits.***
 4. ***Isolation of microbes from chilli&their utility in spicy and hot waste food degradation.***
 5. ***Microbial production of ethanol from starchy waste materials.***
 6. ***Isolation of Phenol Degrading Microbes and their Utility in Exploitation of Bottle Guard Peels.***
 7. ***Isolation of Phenol Degrading Microbes and their Utility in Exploitation of wheat bran based solid wastes.***
 8. ***Isolation of Potential Dye Decolourizing Microbes & their Utility in Azo Dye.***
 9. ***Isolation of Potential Dye Decolourizing Microbes & their Utility in Vat Dye Decolourization.***
 10. ***Comparative Studies on their Potentiality of Papaya Peel, Orange Peel & Almond Shell for Microbial Utilization on the Basis of XRD Analysis.***
 11. ***Biodegradation of Carbosulfan Pesticides by Bacteria Grown in to the Nutrient Provided by Green Coffee Waste Materials.***
 12. ***Utility of Carica Papaya Seeds in Microbial Decolourisation of Industrial Dye.***
 13. ***Application of Pretreatment Technology in utilization of lignocellulosic waste materials.***

Research Assignments: (6+ years)

1. Successfully completed Ph.D research workbased on ***fermentative production of cellulases utilizing waste biomass & their utility in various process industries.***
2. Successfully completed M.Tech research projectbased on ***fungal production on extracellular pectinase by fermentation process & their utility in juice industries.***
3. Successfully conducting **B.Tech Biotech research projects.**

Trainings Successfully Completed:

- *Successfully completed training programme on Advanced bioreactor cultivation technology based on XDR and WAVE single use bioreactor, CEDEX microbial cell counter and CEDEX BioHT In HIGHRES Roche metabolite analyser, CHO based microbial cell line, Microbial cell harvesting with crossflow microfiltration at Fast Track Training Programme by GE Healthcare Life Sciences, Bangaluru, Karnataka, India.*
- *Successfully completed Training Programme on Bioprocess (Amylase Production by submerged bioreactor-Bioengineering AG CH8636 Wald Switzerland model, sterilization of bioreactor-ex citu, operation and control) and Downstream Process Techniques (Cell disruption using Ultrasonicator, Homogenizer, Protein separation by salt ppt- Ammonium Sulphate Precipitation, Desalting through Dialysis, Protein Purification by Ultra and Microfiltration, Aqueous Two Phase extraction of enzymes, Drying- Thermal drying of Purified samples and milk through spray dryer) at Department of Biotechnology, SVCE, Sriperumbudur, Chennai, Tamilnadu, India.*
- *Successfully completed Training Programme on Wine and Alcohol Fermentation Technology at Central Food Technological Research Institute (CFTRI), Mysuru, Karnataka, India.*
- *Successfully completed Training Programme on Chromatography (Anion exchange chromatography, Cation exchange chromatography, Size exclusion-gel filtration chromatography, Hydrophobic Interaction Chromatography, Affinity chromatography) Molecular Biology (Designing of Primer, C-DNA synthesis, RNA Isolation, Real time PCR, Iso Electric Focussing, Proteome analysis by 2-D Electrophoresis, 2-D gel running and staining at Vellore Institute of Technology(VIT) Vellore, Tamil nadu, India.*
- *Successfully completed Training Programme on Molecular Biology Techniques (Plasmid/Genomic DNA isolation, Restriction digestion, gene cloning, Competent cell preparation and Transformation, PCR, Agarose Gel electrophoresis and SDS-PAGE) at Solan, Himachal Pradesh, India.*
- *Successfully completed Training Programme on High Performance Liquid Chromatography (HPLC) at SMPIC, NIPER, Chandigarh, India.*
- *Successfully completed Training Programme on Gas Chromatography (GC) and Solid & Liquid Fourier Transform Infrared Spectroscopy (FTIR) at SMPIC, NIPER, Chandigarh, India.*
- *Successfully completed Training Programme of Synthesis of Nanomaterials (Synthesis of nanoparticles, delivery system through nanoparticles, Characterization of nanomaterials through X-ray Diffraction-XRD) at MNNIT, Allahabad, U.P, India.*
- *Successfully completed training programme on Mushroom Cultivation based on Seasonal and Outdoor Technology at DMR, Mushroom Research Centre, Solan (Mushroom city), Himachal Pradesh, India.*
- *Successfully completed Training Programme on IPR (Patent) at National Institute of Intellectual Property Management (NIIPM), Nagpur, India.*
Successfully completed Training Programme on Genomics and Proteomics Databases at Biotech Park, Lucknow, India.
- *Successfully completed short term course on Contaminants in Paper Products DPT, IIT Roorkee, India.*

Educational Qualification:

- **Ph.D from Indian Institute of Technology (IIT), Roorkee , India**
- **Masters in Biochemical Engineering - Harcourt Butler Technological Institute, Kanpur.**
- **Masters in Biochemistry - Banaras Hindu University (B.H.U), Varanasi.**
- **Bachelors in Chemistry(Hons) - Banaras Hindu University (B.H.U.), Varanasi.**

Research Publications:

International Journals:

Nitin Verma, Vivek kumar, MukeshC.Bansal, Bottle gourd peel : An agricultural waste biomass utilized in cellulase production by Trichoderma reesei under solid state cultivation, *BioEnergy Research, (Springer)*,ISSN1939-1234,2018,Communicated.

Nitin Verma,Vivek Kumar, Fermentative production of cellulases from renewable resources: A Review, *Waste and Biomass Valorization,(Springer)*,ISSN 1877-2641 ,2018,,Communicated.

Nitin Verma, Vivek kumar, Rajesh Koppolu, Use of response surface methodology for optimizing the process parameters of cellulase production by Trichoderma reesei under wheat bran based solid state fermentation, *Environmental Technology,(Taylor & Francis)*, ISSN0959-3330,2018,Communicated.

Nitin Verma, Vivek kumar, MukeshC.Bansal, Utility of Luffa cylindrica and Litchi cinensis peel, an agricultural waste biomass in cellulase production by Trichoderma reesei under solid state cultivation, *Biocatalysis and Agricultural Biotechnology (Elsevier)*, ISSN-1878-8181,2018,(16), 483-492,2018.

Nitin Verma, MukeshC.Bansal, Vivek Kumar, Pea peel waste: A lignocellulosic waste and its utility in cellulase production by Trichoderma reesei under solid state cultivation ,*Bioresources (USA)*, ISSN1930-2126,6(2),2011,1505-1519, Citation–36.

Nitin Verma,VivekKumar, M.C.Bansal, Utilisation of egg shell waste in cellulase production by Neurospora crassa under wheat bran based solid state cultivation, *Polish Journal of Environmental studies(Poland)*,ISSN 1230-1485,21(2),2012,491-497, Citation-16.

Nitin Verma,M.C.Bansal, VivekKumar,Protoplast fusion Technology and Its Biotechnological applications,*Chemical Engineering Transactions (Italy)*,ISSN 1974-9791,Vol-14,2008,113-120,Citation-15.

Nitin Verma, Vivek Kumar, M.C.Bansal,Enzymatic and other recent approaches in waste paper recycling technology, *Journal of Industrial Research and Technology,(Malaysia)*,ISSN 2229-9467,1(1)2011,46-55,Citation-7

Nitin Verma, MukeshC.Bansal, Vivek Kumar, Scanning electron microscopic analysis of industrially and environmentally significant Aspergillus niger growth under various process conditions, *International Journal of Microbiological Research*,ISSN 2079-2093,2(1) 8-11,2011, Citation-7.

Nitin Verma, M.C.Bansal, Vivek Kumar, Enzymatic deinking with cellulases:Areview,*Journal of Solid Waste Management and Technology(USA)*ISSN1088-1697,37(4) 2011,297-306, Citation-3.

Nitin Verma,M.C.Bansal,VivekKumar,Comparative studies on biofilm development by Aspergillus niger on polyester sheet and muslin cloth,,*Journal of Biochemical Technology*,ISSN 0974-2328,Vol3(2),Aug 2010,180-181.

Nitin Verma,M.C.Bansal,VivekKumar,Studies on pelleted form of growth morphology achieved by Aspergillus strains with different sugars treatment under submerged cultivation.,*Journal of Pure and Applied Microbiology*,ISSN 0973-7510,Vol-3(2),Oct-2009,559-565.

Nitin Verma, M.C. Bansal, Vivek Kumar, Effects of sugars replacement on the growth of Aspergillus and Neurospora strain under submerged cultivation, Journal of Pure and Applied Microbiology, ISSN 0973-7510, Vol-5(1), 2011, 247-252.

Nitin Verma, M.C. Bansal, Vivek Kumar, Utilisation of waste news paper hydrolysates in growth and production system of Neurospora crassa, International Journal of Applied Environmental Sciences(IJAES), ISSN 0974-0260, Vol 5,(3), 2010, 331-335, (listed in 2010 Neurospora bibliography, USA, 223).

Nitin Verma, M.C. Bansal, Vivek Kumar, Mathematical modelling aspects of Trichoderma reesei system: A review, Chemical Engineering Transactions(Italy), ISSN 1974-9791, Vol-14, 2008, 137-144.

Nitin Verma, Mukesh C. Bansal, Vivek Kumar. Enzymatic deinking of old news paper by cellulases produced by various fungal strains, Journal of Pure and Applied Microbiology, ISSN 0973-751, Vol-5(2), 2011, 749-754.

Nitin Verma, Vivek Kumar, M.C. Bansal, Utilisation of Industrial waste in the growth of Aspergillus and Neurospora strains under submerged cultivation, Journal of Industrial Research and Technology, (Malaysia), ISSN 2229-9467, 1(2) 2011, 88-91.

National Journals:

4. Nitin Verma, Bioethanol from biomass: A review, Journal of biofuels, ISSN 0976-3015, Vol 1(2) 245-256, 2010. Citation 3.

3. Nitin Verma, Vivek Kumar, M.C. Bansal, Influence of inoculum dose on growth and production system of Aspergillus niger and Neurospora crassa for utilization of wheat bran waste biomass, Global Journal of Applied Agriculture Research, ISSN 2248-9991, Vol 1,(1), 21-25, 2011.

2. Nitin Verma, Vivek Kumar, M.C. Bansal, Dairy waste : Utility in Trichoderma growth and production system, Global Journal of Applied Agriculture Research, ISSN 2248-9991, Vol 1,(1), 27-31, 2011.

1. Nitin Verma, Vivek Kumar, M.C. Bansal, Growth studies of Trichoderma, Paecilomyces and Aspergillus with different sugar treatments in submerged fermentations, Journal of Ecofriendly-Agriculture, Vol-4, 2009, 171-173.

Book Chapters:

5. Nitin Verma, Mukesh C. Bansal, Vivek Kumar, Pretreatment Technology: An approach for effective utilization of lignocellulosic biomass. Industrialisation, Ecofriendly Industries and Climate Changes, ISBN 978-81-7625-627-8, 2010, Published by Sarup and Sons, New Delhi.

4. Nitin Verma, M.C. Bansal, Vivek Kumar, Effect of different fermentation vessels on the growth and production system of Aspergillus niger under solid state cultivation, 113-117, Published in Advances in Chemical Engineering, MacMillan Advanced Research Series, ISBN CORP000185, 2011, MacMillan Publishers India Pvt Ltd.

3. Nitin Verma, M.C. Bansal, Vivek Kumar, Vikas Pruthi, Effect of surfactants on the growth and production system of Aspergillus niger and Neurospora strains under submerged condition, 118-124, Advances in Chemical Engineering, MacMillan Advanced Research Series, ISBN CORP000185, 2011, MacMillan Publishers India Pvt Ltd.

2. Nitin Verma, M.C. Bansal, Vivek Kumar, C.B. Mazumder, Effect of moisture percentage on Aspergillus niger and Neurospora strains growth and production system using wheat bran solid support, 144-148, Advances in Chemical Engineering, MacMillan Advanced Research Series, ISBN CORP000185, 2011, MacMillan Publishers India Pvt Ltd.

1. Nitin Verma, Vivek Kumar, M.C. Bansal, S.K. Mandal, Influence of nitrogen sources on the growth and production system of Aspergillus strains under submerged cultivation, 125-129, Advances in Chemical Engineering, MacMillan Advanced Research Series, ISBN CORP000185, 2011, MacMillan Publishers India Pvt Ltd.

International Conference Proceedings:

11. Verma Nitin, Kumar Vivek, Bansal M.C., *Importance of Cellulases in Bioethanol from Biomass: A review*, pp 208-219, *Proceedings of 5th International biofuels conference*, held on Feb 7-8, 2008, organized by **Winrock International**, New Delhi, India.

10. Nitin Verma, Mukesh.C. Bansal, Vivek Kumar, *Growth and Morphological Studies of Trichoderma and Aspergillus and its coculture for effective utilization of lignocellulosic biomass*, 77-81, *Proceedings of International Conference on Challenging Environmental trends and Sustainable Environment (CETAS-2009)* held at **Environmental Science and Engineering Department, GJUS& T, Hisar**.

9. Nitin Verma, M.C. Bansal, Vivek Kumar, *Comparative Batch Growth Kinetic Studies of Trichoderma, Aspergillus and Neurospora strains under Submerged Cultivations*, 892-897, *Proceedings of International conference on Emerging Technologies in Environmental Science and Engineering*, held on Oct 26-28, 2009, organized by **(AMU) India in collaboration with Toledo University, U.S.A.**

8. Nitin Verma, Vivek Kumar, M.C. Bansal *Various Inducers involved in environmental viable cellulase biosynthesis*, 1690-1695, *Proceedings of International conference on Emerging Technologies in Environmental Science and Engineering*, held on Oct 26-28, 2009, organized by **Aligarh Muslim University (AMU) India in collaboration with Toledo University, U.S.A.**

7. Nitin Verma, Vivek Kumar, Mukesh C. Bansal, *Studies on development of biofilm on muslin cloth by Aspergillus niger*, 880-884, *Proceedings of International Conference on Recent Advances in Environment Protection (RAEP-2009)*, held on Dec 17-19, 2009 at Agra.

6. Nitin Verma, M.C. Bansal, Vivek Kumar, *Bagasse hydrolysate: Utility in Trichoderma growth and production system*, 885-889, *Proceedings of International Conference on Recent Advances in Environment Protection (RAEP-2009)*, held on Dec 17-19, 2009 at Agra.

5. Nitin Verma, Vivek Kumar, Mukesh C. Bansal, *Utility of e- shell wastes in environmentally important Neurospora crassa growth system*, 890-894, *Proceedings of International Conference on Recent Advances in Environment Protection (RAEP-2009)*, held on Dec 17-19, 2009 at Agra.

4. Nitin Verma, Vivek Kumar, M.C. Bansal, *Fungal Cellulases: Production, Applications and Recent Approaches*, 717-720, *Proceedings of International conference on Emerging Technologies for Sustainable Environment*, held on Oct 29-30, 2010, organized by **Aligarh Muslim University (AMU) India in collaboration with La Sierra University, U.S.A. and Asia Pacific International University, Thailand.**

3. S.K. Mandal, M.C. Bansal, Vivek Kumar, **Nitin Verma** *Studies on effect of pretreated starch on Aspergillus niger system*, 721-723, *Proceedings of International conference on Emerging Technologies for Sustainable Environment*, held on Oct 29-30, 2010, organized by **Aligarh Muslim University (AMU) India, with La Sierra University, U.S.A. and Asia Pacific International University, Thailand.**

2. Nitin Verma, M.C. Bansal, Vivek Kumar, *Utilization of wheat straw hydrolyzates in Trichoderma reesei growth and production system*, 714-716, *Proceedings of International conference on Emerging Technologies for Sustainable Environment*, held on Oct 29-30, 2010, organized by **Aligarh Muslim University (AMU) India in collaboration with La Sierra University, U.S.A. and Asia Pacific International University, Thailand.**

1. Nitin Verma, M.C. Bansal, Vivek Kumar, *Growth and morphological studies of Trichoderma strains under submerged cultivation*, 711-713, *Proceedings of International conference on Emerging Technologies for Sustainable Environment*, held on Oct 29-30, 2010, organized by **Aligarh Muslim University (AMU) India in collaboration with La Sierra University, U.S.A. and Asia Pacific International University, Thailand.**

National Conference Proceedings:

7. Nitin Verma, Mukesh.C. Bansal, Vivek Kumar., *Waste Paper Recycling: An Enzymatic Approach for Effective Environmental Management*, 249-255, *Proceedings of All India Seminar on "Advances in Environmental Science and*

Technology”, held on Feb15-16 organized by **Institution of Engineers (India), Aligarh Local Centre, Aligarh and Aligarh Muslim University (AMU), Aligarh, U.P., India.**

6. Nitin Verma, Vivek Kumar, Mukesh C. Bansal, Application of Trichoderma, Aspergillus and Neurospora in Bioremediation Process: A review, 363-371, **Proceedings of All India Seminar on “Advances in Environmental Science and Technology”**, held on Feb15-16 organized by **Institution of Engineers (India), Aligarh Local Centre, Aligarh and Aligarh Muslim University (AMU), Aligarh, U.P., India.**

5. Nitin Verma, Mukesh C. Bansal, Vivek Kumar., Solid state fermentation : A Generalized and Engineering Aspect, 355-362, **Proceedings of All India Seminar on “Advances in Environmental Science and Technology”**, held on Feb15-16 organized by **Institution of Engineers (India), Aligarh Local Centre, Aligarh and Aligarh Muslim University (AMU), Aligarh, U.P., India.**

4. Nitin Verma, Vivek Kumar, M.C. Bansal, Growth Studies of Neurospora crassa for Effective Utilisation of Lignocellulosic Waste Biomass, 126-131, **Proceedings of National Conference on “Recent Advances in Waste Management**, held at **Chemical Engineering Department of Institute of Technology, Banaras Hindu University (BHU), Varanasi** on Feb, 20-21, 2009.

3. Nitin Verma, M.C. Bansal, Vivek Kumar, Waste Paper Recycling with Cellulases : An Effective and Environmental Friendly Approaches for Solid Waste Management, 118-125, **Proceedings of National Conference on “Recent Advances in Waste Management”** held at **Chemical Engineering Department of Institute of Technology, Banaras Hindu University (BHU), Varanasi** on Feb 20-21, 2009.

2. Nitin Verma, M.C. Bansal, Vivek Kumar, Effects of mutagens on growth of environmentally important Neurospora and Aspergillus strains, 148-150, **Proceedings of National conference on environmental degradation: Effects, controls and remedies (EDECR)**, held on Feb-25-27 at Sirsa (Haryana), India.

1. Nitin Verma, Vivek Kumar, M.C. Bansal, Effects of wheat bran particle size and their combinations on the growth and production system of Aspergillus niger, 124-125, **Proceedings of National conference on environmental degradation: Effects, controls and remedies (EDECR)**, held on Feb-25-27 at Sirsa (Haryana), India.

National Exams qualified:

GATE with 91.99 percentile (organized by Indian Institute of Technology, Chennai)

CSIR-UGC NET (National Eligibility Test).

Memberships:

- **Associate member** of Competence platform on Energy crops and agroforestry systems for semiarid ecosystems in **Africa (COMPETE).**
- **Member** of **European Federation of Biotechnologists (EFB).**
- **Life member** of **Society of Biological Chemists (India).**
- **Associate member** of **Korean Society for Biotechnology & Bioengineering (ID:AVD2917938).**
- **Passport no: R8881538.**

Biological Techniques Known:

Analytical Techniques:

HPLC, Gas Chromatography, Spectrophotometry, Biochemical analysis, Fourier Transform Infrared Spectroscopy (FTIR), Proximate chemical analysis of lignocellulosic raw materials, Chromatography (Anion

exchange chromatography, Cation exchange chromatography, Size exclusion-gel filtration chromatography, Hydrophobic Interaction Chromatography, Affinity chromatography.

Molecular Biology Techniques:

Recombinant DNA Techniques, DNA isolation, Genomic DNA Extraction, Poly Acrylamide Gel Electrophoresis (PAGE), Immuno-electrophoresis, PCR, RTPCR. Molecular Biology (Designing of Primer, C-DNA synthesis, RNA Isolation, Real time PCR, Iso Electric Focussing, Proteome analysis by 2-D Electrophoresis, 2-D gel running and staining.

Downstream process & Bioprocess Techniques:

Media Optimization by *Box Behnkem design method & Plackett Burman Design* method. Cell disruption using Ultrasonicator, Homogenizer, Protein separation by salt ppt- Ammonium Sulphate Precipitation, Desalting through Dialysis, Protein Purification by Ultra and Microfiltration, Aqueous Two Phase extraction of enzymes,, Antimicrobial activity test by Disc Diffusion Method and Minimum Inhibitory Concentration (MIC) Method., Handling Fermenters,, Primary metabolites, Secondary metabolites production.

Other Achievements:

- Successfully organizing a National Conference on ETSTM-2017 as a member of organizing committee at AITM, Varanasi.
- Successfully run Department of Biotechnology, AITM, Varanasi as Departmental Coordinator and Head of Department.
- Worked as **Reviewer** for Biocatalysis and Agricultural Biotechnology, Industrial Crops & Products, Forest Research Studies in China, African Journal of Biotechnology, African Journal of Microbiology. Desalination and Water Treatment, Science Alert Journal.
- Worked as **Editorial Board Member** for Conference Alerts & Science Alerts Journals.
- Successfully organized UPSEE-2016 as Centre Controller.
- Success fully Conducted Workshop on Flow Cytometry as Co-Convener.
- Successfully Conducted Workshop on Comet Assay as Coordinator.
- Successfully Organized International Conference on Advancements in Disease, Genetics, Structural & System Biology as Coordinator.

Current Areas of Research

- Bioethanol from biomass. Biofuel production technology with special emphasis on cost effective approach.
- Pretreatment Technology for effective utilization of lignocellulosic biomass
- Microbial production of industrial enzymes, acids & alcohol by fermentation process using agricultural and industrial wastes and their utility in process industries.
- Waste paper recycling with enzymes (biodeinking).
- Microbial degradation of phenolics based industrial effluent.
- Biofilter development for industrial effluents treatment.
- Strain improvement technologies such as genetic engineering for effective production and their utility in environmental management.
- Environmental solid waste management. Adsorption of solid waste in toxic metal removal.

Computer Skills:

Word processing: MS-Word, Power point, Excel.

Hobbies & Interests

Reading, Playing cricket and listening music.

Personal Details:

Name: Dr. Nitin Verma
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Email ID: nitiniit2008@gmail.com
Languages Known: English, Hindi.

References:**Dr. Vivek Kumar**

Associate Professor

Centre for Rural Development and Technology (CRDT)

Indian Institute of Technology, Delhi, India.

Area of Research: Biomass Utilization, Valorization of Biomass, Waste Management, Rural Technology.

Contacts: 09412619735, vivekk@iitd.ac.in

Dr. Vikas Pruthi

Associate Professor,

Department of Biotechnology, Indian Institute of Technology (IIT) Roorkee, India.

Area of Research: Microbial Technology, Biofilms, Biosurfactants.

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Dr. C.B. Mazumder

Associate Professor

Department of Chemical Engineering, Indian Institute of Technology (IIT) Roorkee, India.

Area of Research: Biochemical Engineering, Environmental Engineering.

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