VANSHIKA SAXENA

ASSISTANT PROFESSOR

PERSONAL PROFILE

A self motivated, hard working, result oriented individual looking for an opportunity in academic sector and in thirst to apply my in-depth knowledge and skills in a practical work environment to prove myself in the field I'm affianced with.

CORE COMPETENCIES

- Molecular and Cell Biology
- Genetics
- Microbiology
- Immunology
- Biochemistry
- Enzymology
- Fermentation Biotechnology
- Experimental Techniques and Instrumentation
- Animal Cell Technology
- Cancer Biology
- Plant Biotechnology
- Genetic Engineering

PUBLICATIONS

- Published a Book Chapter on "**Role of Serine Proteases and Inhibitors in Cancer.**" by Poddar N.K., Maurya S.K., **Saxena V**. In: Chakraborti S., Dhalla N. (eds) Proteases in Physiology and Pathology. pp 257-287, Springer, Singapore, 2017. https://doi.org/10.1007/978-981-10 2513-6_12; Print ISBN: 978-981-10-2512-9.

- Singh A, Rai A. K, Mishra A, Nand V, Tripathi G. D, Gupta N, **Saxena V**, Singh V. **Eco-Friendly Synthesis of Silver Nanoparticles Using V. serpens Plant, and Evaluation of Their Antibacterial Activity Against Enterococcus faecalis.** Biosc.Biotech.Res.Comm. Vol 13 No (3)2020. (ESCI Journal)

- Submitted DNA Sequence of **Bacillus licheniformis strain BBT3 16S ribosomal** RNA gene, partial sequence Accession: MN326693 Authors: Singh,A., Rai,A.K., Srivastava,V., Gupta,N., **Saxena,V**. and Srivastava,K.

CONTACT INFORMATION

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PROFESSIONAL EXPERIENCE

Assistant Professor

BANSAL INSTITUTE OF ENGINEERING AND TECHNOLOGY, LUCKNOW

AUGUST 2019-JULY2021

Key Deliverables:

- Wrote course curriculum, created and presented all lecture plan.
- Designed and conducted interesting laboratory experiments during every semester.
- Held instructor position simultaneously with being a member of academic committee,library committee, mentor-mentee committee and advisory committee of the department.
- Provided regular feedback and guidance to students.
- Motivate students to actively participate in all aspects of education.
- Prepared students for standardize tests, evaluate their progress and maintain records of the same.
- Conducted regular interactive sessions to enhance students engagement.
- Taught two classes per semester with 45-50 students per class.
- Organised several conferences and seminar for student welfare.
- Designed and completed official work related to academic and administration.

ACADEMIC HISTORY

Birla Institute of Technology and Science

MASTER OF ENGINEERING IN BIOTECHNOLOGY

- **9.8 CGPA**
- Completed in June 2019
- **Favourite field of study:** Advanced cell and molecular biology, Stem cell Technology, Plant Biotechnology & Molecular mechanism of gene expression
- Worked in the department of Academic Under Graduate Division as an intern

Invertis University

BACHELOR OF TECHNOLOGY IN BIOTECHNOLOGY

- **89%**
- Completed in June 2017
- **Favourite field of study:** Immunology, Genetics, Biosensors & Downstream Processing

SOFT SKILLS

- Adaptability
- Leadership
- Problem solving
- Effective Communication
- Flexibility
- Meets Deadlines

TECHNICAL SKILLS

- Molecular Biology Techniques
- Microbiology based Techniques
- Protein Extraction Techniques
- Protein Purification
- Plant tissue culture
- Fermentation Techniques
- Animal tissue culture
- Immunology based Techniques
- Bioinformatics Tools
- Enzyme Technology
- Optimization Techniques
- Biochemical Techniques
- Downstream Techniques
- Protein Estimation Techniques
- Characterization Techniques
- Blotting Techniques
- Nucleic Acid Isolation Techniques
- MS Office

PROJECT HIGHLIGHTS

- Cloning, Overexpression and Purification of bacteriophage proteins by Ni- NTA chromatography.
- Isolation and Biochemical Characterization of Lactobacillus from curd.

EXPERIMENTAL LEARNING

MRD LIFE SCIENCES PVT. LTD. | JUNE 2015- JULY 2015

- Hands on Industrial training with state of art lectures on Microbiology, Molecular Biology, Proteomics & Biochemical Techniques.

- Learned several techniques such as PCR, Transformation,Cloning, Competent cell preparation, Restriction digestion, Gene Expression, AST, MIC, Metabolite screening, DNA/RNA Extraction, Electrophoresis, Southern/Northern/Western Blotting, Fermentation & DSP.

INTERESTS

- Reading
- Listening Music
- Cooking

MAJOR ACHIEVEMENTS

- Participated in online Virtual Workshop on "**Advanced Bioinformatics**" on 13th July to 7 August 2020 organised by Bansal Institute of Engineering & Technology, Lucknow
- Participated in Seminar on "**Immunology in 21st Century for Improving One health**" on 7-8 August 2020 organised by SVPUAT Meerut.
- Participated in Webinar on "**Adressing IP Issue with Relation to Inventions**" on 27th June 2020 at the Department of Biotechnology of Bansal Institute of Engineering & Technology, Lucknow.
- Participated in Online Conference on "**Novel Corona & Novel Challenges: Life Ahead with COVID 19"** on 3 June 2020 organised by SGGSC, Chandigarh.
- Participated in Online Faculty development Program on "**Innovations in Drug Delivery Systems**" organized by Bapatla College of Pharmacy on 31st May-5th June 2020
- Participated in Webinar on "**Adressing IP Issue with Relation to Inventions"** on 27th June 2020 at the Department of Biotechnology of Bansal Institute of Engineering & Technology, Lucknow.
- Participated in Virtual workshop on "**Drug Design & Discovery**" on 28th May 2020 at the Department of Biotechnology of Bansal Institute of Engineering & Technology, Lucknow.
- Organised a Technical Series on " **Molecular Biology Techniques**" at BIET, Lucknow on 18-19 February, 2020.
- Organised a Workshop on " **Python for Biologists**" at BIET, Lucknow on 18 October, 2019.
- Attended Workshop cum seminar on " **Biogas Production by Food and Organic Waste**" at BNCET Lucknow on 30 August, 2019.
- Awarded "**Gold Medal**" for securing **First Position** in annual examination for year 2013-14, 2015-16 & 2016-17.
- Presented Poster on "**Brain Awareness Program**" held at Invertis University on 14 March, 2016.
- Participated in "**Hands on Training of Bioinformatics**" held at Invertis University on 3-4 November, 2015.
- Presented Posters entitled "**Haemophilus–the pathogenic bacteria**" and "**Gene transfer In Animals**" in the International Conference on "New Frontiers in Industrial and Applied Biotechnology: **GenoPro 2015**" held at Invertis University on 18-19 September, 2015.
- Awarded "**Best Performer**" award during weekly test organised by MRD Life Sciences for BSIT 2015.
- Presented Poster entitled "**Artificial Neural Network**" in the International Seminar on "New Frontiers in Biotechnology: Functional Genomics & Proteomics " held at Invertis University on 27-28 September, 2014.

INTERNSHIP

Indus Biotech Pvt. Ltd.

JANUARY 2019- APRIL 2019

- Individually handled the project of "**Extraction and Characterization of Proteins from vegetable origin material"**.
- Worked on several instruments such as HPLC, Spray drier, Affinity and Size exclusion Chromtography, Amino acid anlaysis, Mendeley, Spectroscopy, SDS PAGE, Bradford Assay, Vaccum drying & Moisture analyser.

MRD Life Sciences Pvt. Ltd.

JANUARY 2017- APRIL 2017

- Individually handled the project of **" Strain Improvement for enhanced expression of amylase and cellulase from *Bacillus cereus* and formation of its recombinant *E.coli*"**.
- Worked on several techniques such as streaking, identification of bacteria, fermentation, downstream processing, cloning, gene expression, Media optimization, Enzyme characterization, DNS assay & Biochemical analysis.