

DEPARTMENT OF TEXTILE ENGINEERING



Our Motto ""उद्योगः सर्वार्थ साधकम्"
"Industrialization solves everything"

**JAWAHARLAL NEHRU GOVERNMENT
ENGINEERING COLLEGE SUNDERNAGAR (H.P)**



VISION

To become renowned Textile centre for quality teaching, research innovation.

MISSION

- M1.** To **strengthen** the core competence in Textile Engineering through balanced and dynamic curriculum.
- M2.** To **encourage** research and development in emerging areas of Textile Engineering and promote institute-institute and industry-institute linkages.
- M3.** To **inspire students to improve** quality of life, creation of wealth and economic development of the country.

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ABOUT THE DEPARTMENT

The Department of Textile Engineering was started in 2006 with the start of this college and is one of its kinds in the state of H.P. The department offers B.Tech (T.E) with the aim to provide students with technical and specialized knowledge as well as with theoretical foundation necessary for development.

Each country has its diverse culture and Traditions. A country is unique because of its people, who have different ways of clothing and living. Varied styles of dressing by people have resulted in improving the scope of Textile Engineering. Fashion is an extensive domain, which is directly affecting the textile trade.

Textile Engineering contains the principles, law and scientific techniques which are utilized for development and manufacturing the textile fabrics and all types of yarn. It also involves the study of principles of science that deals with the analysis of polymers involved in the formation of textile fibers.

Other than garment, Textile Engineering also includes one segment that has received significant attention across the world i.e. TECHNICAL TEXTILES. These textiles have application in multiple areas of economic activity such as aerospace, shipping, sports, agriculture, defence, health care etc.

This course ensures a bright career for the students; reason being the demand and supply of textiles will never diminish.

FACULTY PROFILE

Department is proud to possess a well qualified and dedicated faculty members who always strive to perceive and resolve student queries so that the overall personality of the student can be groomed in such a manner that they pass out as Industry Ready Professionals.



PARVEEN KUMAR

Assistant Professor

Qualification: Pursuing Ph.D

Area of Specialization: Spinning, Man-Made Fibre and Testing



PRIYA JASWAL

Assistant Professor

Qualification : Pursuing Ph.D

Area of Specialization : Spinning , Quality Control, Modelling and Simulation



URVASHI MALHOTRA

Assistant Professor

Qualification : M.Tech

Area of Specialization : Conducting Polymers and Modification of Natural Fibres



AMIT KUMAR

Assistant Professor

Qualification : Pursuing Ph.D

Area of Specialization: Phase Change Polymers and Smart Textiles



PREETI GAUTAM

Assistant Professor

Qualification : M.Tech

Area of Specialization: Smart textiles, Novel and chemical Finishes



VIVEK SHARMA

Assistant Professor

Qualification : M.Tech

Area of Specialization: Medical Textiles, Colouration & Novel Finishing of Textiles and Project Management in Textiles



ANKUSH SHARMA

Assistant Professor

Qualification : Pursuing Ph.D

Area of Specialization: Sewing Dynamics, Geotextile, Knitting Technology,



DINESH BHATIA

Assistant Professor

Qualification : Pursuing Ph.D

Area of Specialization: Yarn manufacturing, Fabric Comfort, Textile Structure



AJAY KUMAR

Lecturer

Qualification : B.Tech

Area of Specialization: Spinning and waste management



AKSHAY SHARMA

Lecturer

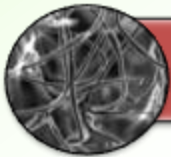
Qualification : M.Tech

Area of Specialization: Spinning and waste management

LABORATORY AND TESTING FACILITIES

Clothing is considered as second skin and by implementing technology in it we are enhancing the overall functionality of the apparel.

Considered to be the most innovative field, the department has well equipped state of the art laboratories supervised by experienced faculty members.



Textile Fibre Lab



Yarn Manufacture Lab



Fabric Manufacture Lab



Textile Chemical Processing Lab



Textile Testing Lab



Knitting Lab



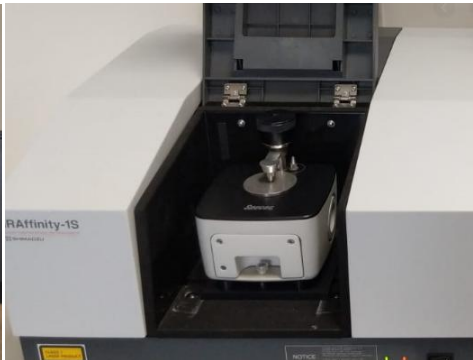
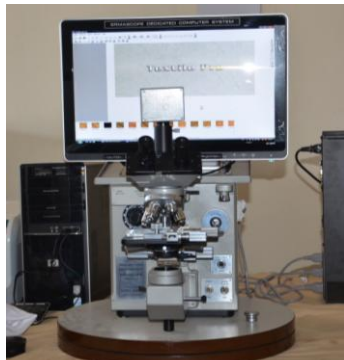
Garment Manufacture Lab



Textile Designing Lab

Textile Fibre Laboratory

- This Lab is equipped with instruments used to categorize fibres on the basis of their dimensional, physical and mechanical properties.



Yarn Manufacture Laboratory

- Spinning lab has equipment and machinery for producing yarns with different technologies at research scale.
- Spinning lab has wide range of spinning commercial machines from old to very modern machines.
- Complete instructional and practical knowledge about construction and working of these commercial machines is being provided



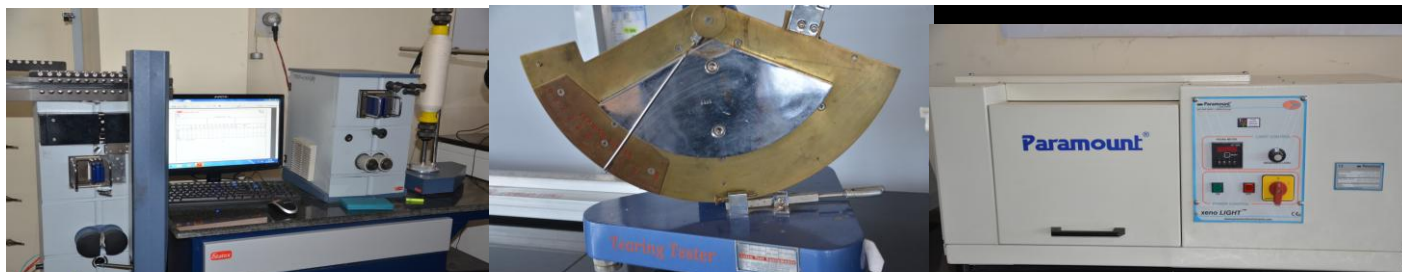
Fabric Manufacture Laboratory

- The Weaving section is equipped with modern preparatory machines and looms. In weaving section- shuttle and rapier looms are installed.
- Apart from these, the lab is equipped with narrow width loom



Textile Testing Laboratory

- ▶ Textile Testing Laboratories of the department has modern instruments for testing various types of fibers, yarns, and fabrics.
- Fibers can be tested for single fibre and bundle strengths, breaking extensions and
- Yarn can be tested for mass irregularity, imperfections, hairiness, twist, Tenacity
- Fabrics can be tested for, fabric mass per unit area (GSM), tensile and tear strength, abrasion resistance, crease recovery, pilling, air permeability, water permeability, bending rigidity, etc



Textile Chemical Processing Laboratory

- ▶ Housed in this laboratory are lab-scale versatile equipment for chemical processing of textile fabrics, yarns and fibres.
- ▶ In addition, the laboratory contains relevant analytical / testing equipment for assessing performance of the treatments imparted to the textiles including computer colour matching systems, spectrophotometers, etc.



Knitting Laboratory

- ▶ The Knitting Laboratory was designed to fit the educational needs of students and to conduct applied research.
- ▶ It features circular single knit machines, double knit machines. Warp knit fabrics can be produced



Garment Manufacture Laboratory

- Garment Manufacture Laboratory of the department is equipped with latest sewing machinery and cutting machines.



Textile Designing Laboratory

- Textile Designing Laboratory in textile designing lab fabric with different constructional parameters are studied.



PUBLICATIONS

Sr. No	Name of Faculty Member	Year	Name of Journal/Conference	Title
1	Sh. Parveen Kumar	2007	Indian Journal of Fibre and Textile Research	Hand related properties of polyester-viscose and polyester-cotton ring- and MJS yarn fabrics—Effects of fibre profile and finishing treatment
		2007	Melliand International	Drape and mechanical properties of ring and air-jet spun yarn fabrics
		2008	Indian Journal of Fibre and Textile Research	Comfort aspects of finished polyester-cotton and polyester-viscose ring and MJS yarn fabrics
		2010	Asian Dyer	Application of cationising agent for cotton processing
		2019	2 nd International Conference on Emerging Trends in Traditional and Technical Textile at NIT Jalandhar	Comparative assessment of Yarn Properties prepared on different compact spinning system.
2.	Ms. Priya Jaswal	2014	Journal of The Institution of Engineers (India): Series E	The Empirical Modeling of Snarling in the Yarn
		2014	International Conference on Emerging Trends in Traditional and Technical Textile at NIT Jalandhar	The Empirical Modeling of Snarling in Staple Yarn
		2016	International conference on “Redefining Textiles Cutting Edge Technology of the Future – RTCT at NIT Jalandhar	Effect of fibre cross sectional shape on various fabric characteristics
		2016	International conference on “Redefining Textiles Cutting Edge Technology of the Future – RTCT at NIT Jalandhar	Suture In Medical Textile
		2016	International conference on “Redefining Textiles Cutting Edge Technology	Textile recycling: A Newer Dimension

			of the Future – RTCT at NIT Jalandhar	
		2016	National Conference on “Global Challenges: Role of Science and Technology in Imparting their Solution GCRSTS at TITS Bhiwani	An Overview: Smart Textiles
		2016	National Conference on “Global Challenges: Role of Science and Technology in Imparting their Solution GCRSTS at TITS Bhiwani	Protective Textiles
		2017	National Conference on “Innovative Trends in Science, Technology and ManagementIV at Sri Sai University, Palampur, H.P	ENG OP1: A Review on Easy Care Finish
		2017	National Conference on “Innovative Trends in Science, Technology and ManagementIV University, Palampur, H.P	ENG PP1: A technique to minimize waste
3.	Ms. Urvashi Malhotra	2014	Journal of Applied Polymer Science	Polypyrrole-Silk Electro-Conductive Composite Fabric by In Situ Chemical Polymerization
		2014	International Journal of Fiber and Textile Research	“Recycled fibers: An overview”
		2016	Journal of Textile Science & Engineering	Thermophysiological Wear Comfort of Clothing: An Overview
		2016	Journal of Fashion Technology & Textile Engineering	Impact on Properties of Woven Fabric from Structurally Modified Shoddy/Wool Blended Worsted Yarn
4.	Sh. Amit Kumar	2014	Cellulose	Polyethylene glycol grafted cotton as phase change polymer
		2017	International Journal of Advances in Science Engineering and Technology	Phase change cotton tape development for thermal management

		2018	Sustainable Energy & Fuels	Poly(ethylene glycol) (PEG) modified epoxy phase change polymer with dual properties of thermal storage and vibration damping
5.	Ms. Preeti Gautam	2011	Asian Textile Journal	Fantasy of chromic colourants
		2012	Asian Textile Journal	Colourful Horizons of Luminiscence
		2012	Asian Textile Journal	Textile Cardiovascular Implants Ensuring Healthy Heart
		2012	Asian Textile Journal	Textiles: Empowering the Aviation,
		2012	Asian Textile Journal	Enhanced protection in textiles against UV radiations
		2012	Asian Textile Journal	Antibacterial finishes on cotton: promoting health and hygiene
		2012	Asian Technical Textiles Journal	Implantable Medical Textiles
		2012	Journal of Textile and Apparel, Technology and Management	Application of novel UV absorbers to enhance UV protection of cotton
6.	Sh. Vivek Sharma	2011	Asian Textile Journal	Fantasy of chromic colourants
		2012	Asian Textile Journal	Colourful Horizons of Luminiscence
		2012	Asian Textile Journal	Textile Cardiovascular Implants Ensuring Healthy Heart
		2012	Asian Textile Journal	Textiles: Empowering the Aviation
		2012	Asian Textile Journal	Enhanced protection in textiles against UV radiations
		2012	Asian Textile Journal	Antibacterial finishes on cotton: promoting health and hygiene
		2012	Asian Technical Textile Journal	Implantable Medical Textiles
		2012	Journal of Textile and Apparel, Technology and Management	Application of novel UV absorbers to enhance UV protection of cotton

7.	Sh. Ankush Sharma	2014	Geosynthetics International 21(5):301-309	Performance of transesterified jute rolled erosion control products
		2014	International Journal of Fiber and Textile Research	"Recycled fibers: An overview";
		2016	Proceedings of the International Conference on Nanotechnology for Better Living at Singapore	Application of nanotechnology in self-cleaning clothes
		2017	Journal of Fiber Bioengineering and Informatics	Biodegradable Geomeshes for Rainsplash Erosion Control
8.	Sh. Dinesh Bhatia	2014	International Journal of Fiber and Textile Research	Comparative assessment & empirical modeling for aesthetic behavior of vortex & ring yarn knitted fabrics on laundering
		2014	International Journal of Fiber and Textile Research	"Recycled fibers: An overview";
		2015	Journal of The Institution of Engineers (India): Series E	Moisture Management Behaviour of Knitted Fabric from Structurally Modified Ring and Vortex Spun Yarn
		2016	Journal of Textile Science & Engineering	Thermophysiological Wear Comfort of Clothing: An Overview
		2016	Journal of Fashion Technology & Textile Engineering	Impact on Properties of Woven Fabric from Structurally Modified Shoddy/Wool Blended Worsted Yarn
		2017	International Journal of Engineering, Technology, Science and Research	Structural Analysis Of Merino Wool, Pashmina And Angora Fibers Using Analytical Instruments Like Scanning Electron Microscope And Infra-Red Spectroscopy
9.	Sh. Akshay Sharma	2019	Tekstilec	Thermal Resistance and Moisture Management Behaviour of Nettle/Polyester Nonwoven Fabrics

EVENTS ORGANIZED BY THE DEPARTMENT

Department organizes various National and International conference/workshop /symposium every year to bring together academicians and experts from different parts of the country

- National workshop on *“Innovations and Emerging Trends in Textiles”* 29th April, 2013 sponsored by TEQIP-II.
- Two Days National Seminar on *“Recent Innovations and Advances in Textiles”* (RIAT-2014) (March 28-29, 2014) Sponsored by TEQIP-II.
- International Conference on *“Innovation in Textiles”* organized on 7th Nov 2015.
- International Symposium on *“Emerging Technologies in Textiles”* organized on 26th September, 2016.
- One week workshop on *“GATE Exam preparation”* was organized from 19th - 23rd Dec 2017.



- One Day workshop on *“Innovations and Emerging Trends in Textile Industries”* organized on 29th September, 2018.
- One Day Workshop on *“Innovations and Emerging Trends in Textile”* organized on 21st September, 2019.
- Two days Workshop on *“Transitory Textiles-The Future is Textile”* organized on 15 – 16 November, 2019.

EXPERT LECTURES ARRANGED:

Department of Textile Engineering conducts series of expert lectures by Professors, Industry experts and Research scholars from reputed institutes.

- **Prof. K.N. Chatterjee**, Head, Department of Fashion and Apparel Engineering, delivered lecture on “**Garment Manufacturing**” on 16 May 2015.
- **Sh. Indrajit Pal**, Sr. Manager Arisht Spinning Mills (Unit of Vardhman Textile Ltd), Baddi (H.P), on the topic “**Latest Development in Spinning and Textile Testing**” on 14 August 2015.
- **Dr Rajesh Mishra** from Technical University of Liberec, Czech Republic and **Prof. B K Behera** from IIT Delhi delivered lecture on “**Nanotechnology and applications in Textile**” and “**Advancements in Weaving technology**” on 6th November, 2015
- **Mr. Ashish Kapoor**, Research Scholar, College of Textiles, North Carolina State University, Raleigh, NC, US delivered an expert lecture on “**Smart Textiles**” on 06 August 2016.
- **Er Varun Sharma** Head North Region Auxilia technology Private Limited Chandigarh and **Er Isha Agnihotri**, R&D Executive PDC Deptt Auro Dyeing Vardhman Textile Limited Baddi Solan HP delivered expert lectures on “**Marketing in Textile Industry and Latest Dyeing Techniques Adopted in Industry**” on 5-6 th September, 2016 .
- **Prof. K. Balasubramanian**, Dean/Head Department of Material Engineering, Defence Institute of Advancement Technology, Pune on the topic of “ **Latest Research and Development in Technical Textiles**” on 20th March, 2017.
- **Mr. Ashish Kapoor**, Research Scholar, College of Textiles, North Carolina State University, Raleigh, NC, US delivered an expert lecture on “**Electronics Textiles & Emerging Research areas in textiles and Path to higher education**” on 08 April 2019.

- **Sh. Amit Kumar**, Sr. Manager Winsome Textiles Industries Ltd. Baddi (H.P) delivered an expert lecture on “**Latest Development in Textile Chemical Processing**” on 6 September, 2019.
- **Mr. Vipul Pandit**, Manager/Flying Doctor in Kyung – In Synthetic Corporation South Korea delivered an expert lecture on “ **Technology and its Impact on Textile Industry**” on 11 September, 2019.
- **Dr. Pawnesh, DPO Mandi**, delivered expert lecture on “**Maintaining psychological health/Stress management in times of COVID 19**” on 9 June 2020.



- **Dr Vinay Midha**, Professor, NIT Jalandhar delivered expert lecture on “**Latest Trends in Nonwoven Technology**” on 18 – 19 June 2020.
- **Dr. S Dhamija**, Associate Prof., TITS Bhiwani and **Ms. Anshul Malotra Vaidya**, Product developer and Marketing head, Krishna wool Mandi delivered expert lecture on “**Medical Textiles and Revival of Textiles post COVID 19**” from 22 - 23 June 2020.
- **Mr. Sandeep Patel**, Assistant Director in Handicrafts Ministry of Textiles delivered expert lecture on “**Job opportunities and Scope for Textile Engineers**” on 27 June 2020.

STUDENT PARTICIPATION

► Paper Presentation

S.No	Name of student	Name of college
1	Ashish Kapoor	<ul style="list-style-type: none"> NIT Hamirpur Punjab Engineering College, Chandigarh-VYOM VJTI Mumbai
2.	Bharat Rana	<ul style="list-style-type: none"> Young researcher's symposium
3	Himadri Chatterjee	<ul style="list-style-type: none"> Start-up Event, JUIT Wakhnaghat International Conference on Emerging Trends in Traditional and Technical Textiles, in NIT Jalandhar
4	Sanjeev Kumar	<ul style="list-style-type: none"> International conference on Emerging trends in traditional and technical textiles, in NIT Jalandhar

► Poster Presentation

S.No.	Student Details	Name of Event	Location
1	Mr. Himadri Chatterjee Mr. Nitish Sharma	Start-up Event (UV Rays Protected T-shirts)	JUIT Wakhnaghat
2	Mr. Sanjeev Kumar Sahni, Mr. Ankush Kumar Simer	Advances in Textile Materials & Processes ATMP-2018	IIT Kanpur
3	Mr. Himadri Chatterjee	Advances in Textile Materials & Processes ATMP-2018	IIT Kanpur
4	Mr. Vikas Sharma & Mr. Suraj Ratnia,	Advances in Textile Materials & Processes ATMP-2018	IIT Kanpur
5	Vishal Rana & Sahil Bhardwaj	58 th Joint Technological Conference	NITRA Ghaziabad
7	Mr. Rohan Behl Mr. Pratiyaum Sharma,	Advances in Textile Materials & Processes ATMP-2018	IIT Kanpur
8	Sanjeev Saini & Sumit Thakur	58 th Joint Technological Conference	NITRA Ghaziabad
9.	Suraj Gupta & Suderlata	58 th Joint Technological Conference	NITRA Ghaziabad

► Sports & Cultural

S NO.	Name of College	Event	S NO.	Name of College	Event
1	IIT Mandi	Cricket, Football	4	IIT Mandi	Techno-cultural Fest (1 st position in Dance competition)
2	Sirda Group of institution	Kabaddi	5	NIT Hamirpur	Hill Fair
3	JayPee, Wakhnaghat	Basket ball, Badminton	6	Baddi University	Tech Fest

PLACEMENT AND HIGHER STUDIES

Since the beginning of its inception, the Department has always been instrumental in producing academicians and practitioners with knowledge of the various aspects of Textile Engineering. The students of our Department are always eager to learn and they get placed before they receive their degree. The past three batches of the students are presently serving at various positions and levels in the following companies and universities among others.

IIT DELHI	DIAT PUNE
NIT JALANDHAR	MIT NAGPUR
NIFT DELHI	NIT HAMIRPUR
NIFT GANDHINAGAR	HPU SHIMLA
NIFT BHOPAL	TITS BHIWANI
ENSAIT, FRANCE	COLLEGE OF TEXTILES, NORTH CAROLINA STATE UNIVERSITY
IMT NAGPUR	Many more...

The graduates have been recruited by some of the leading Indian companies/organization/Govt. Department, such as

• INDIAN ARMY	• INDORAMA
• VARDHMAN GROUP, BADDI.	• SPORTKING
• VARDHMAN YARNS & THREADS LTD., HOSHIARPUR, PUNJAB.	• WINSOME TEXTILE INDUSTRIES
• VARDHMAN SPINNING & GENERAL MILLS, CHANDIGARH ROAD, LUDHIANA.	• SHINGORA TEXTILES, LUDHIANA.
• AARTI INTERNATIONAL LTD. LUDHIANA.	• SALUJA GROUP, LUDHIANA.
• NAHAR GROUP OF INDUSTRIES, LUDHIANA	• MORARJEE GROUP, NAGPUR.
• RSJ TEXTILE INSPECTION NOIDA.	• SHAHI EXPORTS, GHAZIABAD
• LEADING PUBLIC SECTOR BANKS LIKE SBI	

ALUMNI ACHIEVEMENTS

Radhika Vaid	Ph.D. in Fiber and Polymer Science from College of Textiles, NC State University	<ul style="list-style-type: none"> She has won a grant for her project through the American Association of Textile Chemists and Colorists (AATCC) Foundation.
Dr. Vijay Kumar	Post doctorant (ATER) from Ecole nationale supérieure des arts et industries textiles (ENSAIT) France	<ul style="list-style-type: none"> He completed his PhD from University of Lille (Sustainable management and Design for Textiles), University of Boras (Textile management) and Soochow University in, (Textile Sciences and Engineering).
Ashish Kapoor	Pursuing his Ph.D. in Fiber and Polymer Science from College of Textiles, NC State University.	<ul style="list-style-type: none"> Winner in the Graduate School's 2018 Three Minute Thesis. He is developing next-generation fabrics that will include sensors that detect the wearer's respiration, heart rate, perspiration and more.
Vipul Pandit	M.Tech from NIT Jalandhar	<ul style="list-style-type: none"> Manager/Flying Doctor in Kyung – In Synthetic Corporation South Korea

- Sumesh Minhas, **Segment Head** Industrial and Speciality Business at Marketing (Vardhman Textile Industries)
- Sandeep Patel, **Assistant Director** in Handicrafts Ministry of Textiles
- Bhawna Kapil, **Asst. Executive** at Vardhman Group
- Sapna Singh, **Assistant Professor** at K.R Mangalam University
- Angat Kapoor, **Quality Assurance officer** at Textile Committee, Ministry of Textiles
- Bunty Beakta, **Senior Process Engineer** at Indorama Corporation
- Isha Agnihotri , **R&D Executive** PDC Deptt. Auro Dyeing Vardhman Textile Limited Baddi
- Sourabh Awasthi, **Scientist BIS Headquarters, New Delhi.**
- Ritika Thakur, **Product Management at Decathlon Sports India**

Higher Education (PhD) from Foreign universities



Radhika Vaid
PhD from NC state
University US



Dr. Vijay Kumar
Post doctorant (ATER)
from (ENSAIT) France



Ashish Kapoor
Pursing PhD from NC
state University US

PhD from IIT Delhi



Swati Sharma



Rupali Dhiman



Ranjana Negi



Sumit Sharma

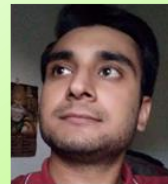
M.Tech from IIT Delhi



Gaurav Mishra



Raman Sandhoo



Ravi Raj



Shweta

PhD From NIT Jalandhar



Samridhi Garg



Payal Bansal



Manu Aggarwal

M.Tech From NIT Jalandhar



Bharti Rana



Omender



Bhavesh

M.Ftech from NIFT



Sapna Singh



Sapna sharma



Pragati



Akansha



Nishant



Megha



Vaibhav

FUTURE GOALS

The focus of the faculty at the Department is to enhance their potentials in the cutting- edge research and to create world-class laboratories for teaching and research.

Contact Details

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