Shoolini University
NAAC A+ ACCREDITED

# RESEARCH DIRECTORY

2025 THE World University Rankings

**THE World Rankings 2025**

Overall Global Rank: 401-500

2025 QS WORLD UNIVERSITY RANKINGS

**QS World Rankings 2025**

Overall Global Rank: 587

2024 THE IMPACT RANKINGS

**THE Impact Rankings 2024**

Top 200 Global University

www.shooliniuniversity.com



# Shoolini Research

Shoolini is at the forefront of research internationally, and attracts outstanding academics, research staff and students from across the world. Shoolini researchers engage in cutting-edge research across disciplines and make ground-breaking contributions in science, engineering, business, and liberal arts. Our researchers are tackling key global challenges — from finding cures to diseases — to ecological problems — to agriculture and myriad other issues. Our world-class resources include state-of-the art research facilities, extensive grant and funding opportunities, and robust support networks dedicated to turning research into actionable innovations. We are committed to supporting our inspiring community of researchers break new grounds and expand the frontiers of knowledge to help improve the human condition and the state of our planet.

# Vision & Mission



## Vision

To be a Global Top 100 University by 2030

## Mission

01 Establishing a globally recognized platform for cutting-edge research across disciplines.

02 Encouraging the filing of patents and practical applications of research to drive innovation.

03 Building international partnerships to foster research excellence and cross-cultural academic exchange.

04 Conducting research on the unique biodiversity of the Himalayan region for sustainable development and conservation.

05 Integrating knowledge from various fields to address complex global challenges.

06 Directing research efforts towards solving critical issues like climate change, healthcare, and sustainable technologies.

# Major Areas of Research



## 01 Water

Water resource management, conservation techniques, clean water technologies, wastewater treatment, sustainable usage policies, and climate impact on water systems.



## 02 Cancer/healthcare

Molecular and cellular basis of cancer, herbal cancer therapies, drug discovery and development, drug delivery systems, pharmacology and toxicology, and phytocompounds from Himalayan medicinal plants.



## 03 Energy

Renewable energy resources, energy conservation and management, advanced energy systems, clean energy technologies, energy storage solutions, AI applications in energy, and sustainable energy policies.



## 04 Environment

Climate change and sustainability, biodiversity and ecosystem management, disaster management, sustainable agriculture, environmental policy, and AI applications in environmental science.



## 05 Food

Food safety and microbiology, food processing and packaging, fermentation technologies, flavor chemistry, nutrition and dietetics, agricultural science, and sustainable food systems

# Chemistry



## Pankaj Raizada

Professor

**Publications:** 260

**h-index:** 73

**Scopus id:** 36237836300

**WoS id:** AAY-2035-2020

**Email**

pankajraizada@shooliniuniversity.com

**Research Areas**

- Design and synthesis of advanced photocatalytic materials.
- Defect engineering of metal oxides.
- Heteroatom doping for energy applications.
- Environmental remediation technologies.

**Sponsored Projects**

- Completed: 2



## Pardeep Singh

Professor

**Publications:** 283

**h-index:** 76

**Scopus id:** 57031031900

**WoS id:** AAI-7740-2020

**Email**

pardeepsingh@shooliniuniversity.com

**Research Areas**

- Graphene-based photocatalytic materials.
- Novel depollution treatments.
- Pilot-scale applications for environmental remediation.
- Bio-waste material-based activated carbon for pollutant adsorption.
- Physical chemistry with a focus on energy and environmental applications.

**Sponsored Projects**

- Completed: 1



## Praveen Kumar

Associate Professor

**Publications:** 73

**h-index:** 20

**Scopus id:** 7101776680

**WoS id:** AD-7147-2022

**Email**

praveenverma@shooliniuniversity.com

**Research Areas**

- Organic synthesis and catalysis
- Medicinal and natural product chemistry.
- Sustainable organic transformations.
- Selective synthetic protocols using catalytic systems
- Development of bio-relevant organic scaffolds.
- Fine chemical synthesis.

**Sponsored Projects**

- Ongoing: 1

# Environmental Sciences



## Rachna Verma

Associate Professor

**Publications:** 64

**h-index:** 21

**Scopus id:** 57201605948

**WoS id:** AAA-6251-2021

**Email**

rachnaverma@shooliniuniversity.com

**Research Areas**

- Mycology
- Ethnobotany
- Phytochemistry

**Sponsored Projects**

- Ongoing: 1



## Ritesh Banerjee

Assistant Professor

**Publications:** 25

**h-index:** 13

**Scopus id:** 57114233500

**WoS id:** EMZ-8195-2022

**Email**

riteshbanerjee@shooliniuniversity.com

**Research Areas**

- Phytoremediation technologies for soil and water contaminants.
- Toxicological assessment of heavy metals, nanomaterials, and emerging contaminants in plants.
- Ethnobotanical studies on Himalayan plants and their phytochemical compositions.
- Environmental conservation.



## Dhriti Kapoor

Assistant Professor

**Publications:** 132

**h-index:** 26

**Scopus id:** 36993069400

**WoS id:** GSI-1430-2022

**Email**

dhritikapoor@shooliniuniversity.com

**Research Areas**

- Plant stress physiology
- Plant Biochemistry Phytoremediation
- Plant growth Regulation
- Ecotoxicology



## Radha

Assistant Professor

**Publications:** 115

**h-index:** 28

**Scopus id:** 57208864372

**Email**

radha@shooliniuniversity.com

**Research Areas**

- Ethnobotany
- Phytochemistry

# Physics



## Mamta Shandilya

Associate Professor

**Publications:** 62

**h-index:** 18

**Scopus id:** 56669652900

**WoS id:** AGA-4529-2022

**Email**

mamtashandilya@shoolini university.com

**Research Areas**

- Condensed Matter Physics
- High piezoelectric materials for energy harvesting applications

**Sponsored Projects**

- Completed: 1, Ongoing: 1



## Itika Kainthla

Assistant Professor

**Publications:** 19

**h-index:** 10

**Scopus id:** 56971633300

**WoS id:** IDH-3576-2023

**Email**

itikakainthla@shooliniuniversity.com

**Research Areas**

- Nanotechnology
- Heterogenous vaporphase catalysis
- Material Science



## Gun Anit Kaur

Assistant Professor

**Publications:** 24

**h-index:** 11

**Scopus id:** 57211167481

**WoS id:** DAE-6394-2022

**Email**

gunanitkaur@shooliniuniversity.com

**Research Areas**

- High piezoelectric material for energy harvesting applications.



## Rohit Jasrotia

Assistant Professor

**Publications:** 110

**h-index:** 29

**Scopus id:** 57206204421

**WoS id:** AAI-6643-2021

**Email**

rohitjasrotia@shooliniuniversity.com

**Research Areas**

- Synthesis of ferrite-based nanomaterials, perovskite materials, semi-conducting materials, dielectric materials and polymers based nanocomposites for investigating their structural, morphological, optical, magnetic and dielectric characteristics for potential applications

# Biotechnology



## Sourabh Kulshrestha

Professor

**Publications:** 112

**h-index:** 24

**Scopus id:** 57204779318

**WoS id:** AAH-7857-2019

**Email**

sourabhkulshreshtha@shooliniuniversity.com

**Research Areas**

- Molecular Plant Microbe Interactions
- Molecular Plant Virology
- Mycovirology
- Water purification

**Ongoing Funded Projects**

- Completed: 9, Ongoing: 2



## Lokender Kumar

Associate Professor

**Publications:** 46

**h-index:** 15

**Scopus id:** 54381874100

**WoS id:** AAY-6862-2020

**Email**

lokenderkumar@shooliniuniversity.com

**Research Areas**

- Microbiology
- Human-microbe interactions
- Cellular signalling processes and the impact of microorganisms on host cells
- Quorum Sensing
- Antibiotic Resistance



## Azhar Khan

Professor

**Publications:** 47

**h-index:** 15

**Scopus id:** 57193806899

**WoS id:** AAV-9189-2021

**Email**

azharkhan@shooliniuniversity.com

**Research Areas**

- Elucidating the mechanism of antihypertensive bioactive compounds derived from medicinal plants from Western Himalayan region, mainly targeting for renin angiotensin system under the influence of diabetes and obesity and subsequently, exploring the anti-biofilm role of natural extracts against pathogenic bacteria.



## Rohit Sharma

Assistant Professor

**Publications:** 67

**h-index:** 23

**Scopus id:** 57212897458

**WoS id:** AC-8355-2020

**Email**

rohitsharma3@shooliniuniversity.com

**Research Areas**

- Cell senescence
- Nutrigerontology
- Probiotics
- Polyphenols,
- Immunosenescence

**Sponsored Projects**

- Ongoing: 2



## Karnika Thakur

Assistant Professor

**Publications:** 9

**h-index:** 7

**Scopus id:** 35489143600

**WoS id:** ABD-6440-2021

**Email**

karnikathakur@shooliniuniversity.com

**Research Areas**

- Unravelling the complexities of fungal plant-microbe interactions
- Molecular biology
- Genomics
- Bioinformatics
- Metagenomics



## Himanshu

Assistant Professor

**Publications:** 36

**h-index:** 11

**Scopus id:** 59326718400

**Email**

himanshusharma2@shooliniuniversity.com

**Research Areas**

- Development and use of molecular markers such as RAPD, AFLP, ISSRs, Genomic and Genic SSRs, Chloroplast SSRs, ILP, and SNPs

# Pharmaceutical Sciences



## Deepak Kapoor

Professor

**Publications:** 60

**h-index:** 17

**Scopus id:** 57194418811

**WoS id:** C-2064-2008

**Email**

deepaknandkishore.558@shooliniuniversity.com

**Research Areas**

- Development and optimisation of novel drug delivery systems such as nanoparticles, nanoemulsions, niosomes, liposomes, ethosomes, implantable systems, and topical and transdermal systems.

**Sponsored Projects**

- Completed: 1



## Deepak Kumar

Professor

**Publications:** 223

**h-index:** 31

**Scopus id:** 55534141182

**WoS id:** B-7350-2012

**Email**

deepakkumar1@shooliniuniversity.com

**Research Areas**

- Medicinal Chemistry
- Bioorganic Chemistry
- Total synthesis of Natural products for biological activities
- Target based approaches to access novel small molecules as drugs for diabetes and cancer.

**Sponsored Projects**

- Ongoing : 5



## Poonam Negi

Professor

**Publications:** 96

**h-index:** 31

**Scopus id:** 57971006900

**WoS id:** AAA-9536-2021

**Email**

poonam.546@shooliniuniversity.com

**Research Areas**

- Drug Delivery
- Nanotechnology
- Colloid Carriers
- Topical/Transdermal drug delivery
- QbD



## Rohit Goyal

Professor

**Publications:** 68

**h-index:** 20

**Scopus id:** 56035487900

**Email**

rohitgoyal@shooliniuniversity.com

**Research Areas**

- Molecular targets of Alzheimer's disease, life-style disorders, Circadian Rhythm dysfunction, Pre-clinical pharmacology, Osteoporosis, Asthma and Natural Products

**Sponsored Projects**

- Completed: 1, Ongoing: 1



## Aditi Sharma

Associate Professor

**Publications:** 39

**h-index:** 12

**Scopus id:** 57075378100

**Email**

aditi.534@shooliniuniversity.com

**Research Areas**

- Post-menopausal osteoporosis
- Bone diseases
- Natural products



## Arun Parashar

Assistant Professor

**Publications:** 96

**h-index:** 31

**Scopus id:** 56609961400

**Email**

arunparashar@shooliniuniversity.com

**Research Areas**

- Neuropharmacology
- Understanding the neurological basis of endocrinal disorders and the effect of gut microbiota on neurological disorders



## Lalit Sharma

Associate Professor

**Publications:** 56

**h-index:** 16

**Scopus id:** 56365370400

**Email**

lalitsharma@shooliniuniversity.com

**Research Areas**

- Drug Addiction, Alzheimer's disease, Neurodegenerative diseases, and natural products

# Bio-engineering and Food Technology



## Dinesh Kumar

Professor

**Publications:** 114

**h-index:** 29

**Scopus id:** 58618445700

**Email**

dineshkumar@shooliniuniversity.com

**Research Areas**

- Industrial Microbiology
- Development of Biosensors for food-borne diseases and human pathogens

**Sponsored Projects**

- Completed 2, Ongoing: 1



## Pankaj Chauhan

Professor

**Publications:** 38

**h-index:** 14

**Scopus id:** 57201636092

**WoS id:** JNB-9220-2023

**Email**

pkchauhan@shooliniuniversity.com

**Research Areas**

- Extraction and purification of bioactive phytonutrients and their in-vitro and in-vivo applications against diabetes, hypertension, and cardiovascular diseases



## Sadanand Pandey

Professor

**Publications:** 244

**h-index:** 48

**Scopus id:** 15027049200

**WoS id:** B-3397-2013

**Email**

spandey@shooliniuniversity.com

**Research Areas**

- Polymer science, nanotechnology, and nanocomposites, composite materials, and surface modification.
- Hydrogels for applications in nutrient recovery, controlled drug delivery, water purification, and biomedicine.



## Ila Joshi

Assistant Professor

**Publications:** 10

**h-index:** 4

**Scopus id:** 57209043658

**WoS id:** KCQ-2040-2024

**Email**

ilajoshi@shooliniuniversity.com

**Research Areas**

- Identifying important Meloidogyne incognita effector genes related to root-knot nematode parasitism, addressing a significant agricultural issue



## Tarun Pal

Assistant Professor

**Publications:** 35

**h-index:** 14

**Scopus id:** 56072559000

**WoS id:** V-4301-2019

**Email**

tarunpal@shooliniuniversity.com

**Research Areas**

- Computational Biology
- Genomics and Metagenomics



## Asir Gani

Assistant Professor

**Publications:** 56

**h-index:** 28

**Scopus id:** 36627119800

**Email**

asirgani@shooliniuniversity.com

**Research Areas**

- Food Biopolymers
- Engineering properties of food biomaterial

# Agriculture



## Somesh Sharma

Professor

**Publications:** 64

**h-index:** 20

**Scopus id:** 56431414200

**WoS id:** GRX-2421-2022

**Email**

someshsharma@shooliniuniversity.com

**Research Areas**

- Food processing, food fermentation, food industry waste utilization, and Postharvest management of horticultural crops for sustainable development of rural population residing in the Western Himalayan region

**Sponsored Projects**

- Completed: 3



## Santanu Mukherjee

Associate Professor

**Publications:** 38

**h-index:** 18

**WoS id:** LLK-7934-2024

**Email**

santanu@shooliniuniversity.com

**Research Areas**

- Fate of emerging contaminants, biogeochemical transformation of nutrients, and the role of dissolved and particulate organic matter in determining contaminants' fate in the environment

**Sponsored Projects**

- Completed: 1, Ongoing: 2



## Muntazir Mushtaq

Assistant Professor

**Publications:** 35

**h-index:** 14

**Scopus id:** 57192303698

**WoS id:** HGA-2449-2022

**Email**

muntazirmushtaq@shooliniuniversity.com

**Research Areas**

- Genomics, transcriptomics, molecular breeding, crop phenotyping, crop biotechnology, functional and applied genomics, tissue-culture and genetic transformation, genome editing, abiotic and biotic stress in crop plants



## Shweta Sharma

Assistant Professor

**Publications:** 15

**h-index: 8**

**Scopus id:** 57217999870

**Email**

shwetasharma@shooliniuniversity.com

**Research Areas**

- Vegetable breeding aimed at improving production, quality, and nutritional value

# AI, Computers & Data Science



## Pankaj Vaidya

Professor

**Publications:** 24

**h-index:** 5

**Scopus id:** 57210970221

**Email**

pankaj.vaidya@shooliniuniversity.com

**Research Areas**

- Artificial Intelligence (AI) and Machine Learning (ML)



## Gaurav Gupta

Associate Professor

**Publications:** 89

**h-index:** 16

**Scopus id:** 58401967300

**Email**

gaurav@shooliniuniversity.com

**Research Areas**

- Machine learning in different domains with special focus on healthcare and agriculture

**Sponsored Projects**

- Ongoing: 2



## Sonia

Associate Professor

**Publications:** 26

**h-index:** 13

**Scopus id:** 57213078881

**Email**

sonia@shooliniuniversity.com

**Research Areas**

- Cyber Security and Artificial Intelligence (AI)



## Brij Bhushan

Assistant Professor

**Publications:** 15

**h-index:** 9

**Scopus id:** 57212414007

**Email**

brijbhushan@shooliniuniversity.com

**Research Areas**

- Smart Agriculture (Internet of Things)
- IoT-based Indirect Solar Dryer to reduce the post-harvest losses of temperate fruits and vegetables and to develop a digital system to check the soil fertility level based on Munsell Color Chart using artificial intelligence

# Engineering



## M S Thakur

Professor

**Publications:** 42

**h-index:** 9

**Scopus id:** 57221767700

**Email**

mohindrasinghthakur@shooliniuniversity.com

**Research Areas**

- Finite Element Analysis
- Advanced Reinforced Concrete Design
- Advanced Steel Design
- Plastic Analysis of Steel
- Earthquake Engineering
- Wind load on structures
- Prestressed Concrete
- Advance Solid Mechanics
- Advanced Structural Analysis
- Non-Destructive Testing



## Robin Thakur

Associate Professor

**Publications:** 35

**h-index:** 11

**Scopus id:** 57194701045

**WoS id:** IYJ-8002-2023

**Email**

robinthakur@shooliniuniversity.com

**Research Areas**

- Renewable Energy (Hydro Turbines



## Navsal Kumar

Assistant Professor

**Publications:** 35

**h-index:** 14

**Scopus id:** 57194985691

**Email**

navsalkumar@shooliniuniversity.com

**Research Areas**

- Irrigation water management, environmental hydrology, agrometeorology, soil hydraulics, unsaturated zone modelling, evapotranspiration modelling, crop water stress index, and the application of artificial intelligence and machine learning approaches



## Arunava Poddar

Assistant Professor

**Publications:** 38

**h-index:** 10

**Scopus id:** 57203884645

**Email**

arunavapoddar@shooliniuniversity.com

**Research Areas**

- Irrigation Scheduling, Soil Moisture Dynamics, Root Water Uptake Modelling, Evapotranspiration, Shallow Ground Water Table, Capillary Rise, Water Balance Studies, Water Harvesting, and Sustainable Water Management

# Management Sciences



## Narinder Verma

Professor

**Publications:** 15

**h-index:** 6

**Scopus id:** 57194330861

**Email**

narinderverma@shooliniuniversity.com

**Research Areas**

- Financial Management

**Sponsored Projects**

- Completed: 1



## Kesari

Professor

**Publications:** 8

**h-index:** 1

**Scopus id:** 57218862452

**Email**

kesari@shooliniuniversity.com

**Research Areas**

- Environmental economics and natural resource management

**Sponsored Projects**

- Ongoing: 1



## Sunil Kumar

Associate Professor

**Publications:** 14

**h-index:** 2

**Scopus id:** 59140633400

**Email**

sunilkumar2@shooliniuniversity.com

**Research Areas**

- Human resource management, e-training, and the application of artificial intelligence in business



## Chander Mohan Gupta

Associate Professor

**Publications:** 14

**h-index:** 3

**Scopus id:** 57216391328

**Email**

chandermohan@shooliniuniversity.com

**Research Areas**

- Financial Crimes



## Abhilasha Chauhan

Assistant Professor

**Publications:** 10

**h-index:** 5

**Scholar id:** CqqviSwAAAAJ

**Email**

abhilashachauhan@shooliniuniversity.com

**Research Areas**

- Behavioural Studies, Tourism Studies, Digital Marketing, Artificial Intelligence, and sustainability

# Liberal Arts



## Tej Nath Dhar

Professor

**Publications:** 6

**Scopus id:** 58689147900

**Email**

tejnath@shooliniuniversity.com

**Research Areas**

- American Literature, Indian Writings in English, African Literature, Canadian Fiction, and Postcolonial Theory and Practice



## Purnima Bali

Associate Professor

**Publications:** 6

**h-index:** 2

**Scopus id:** 57942623200

**Email**

purnimabali@shooliniuniversity.com

**Research Areas**

- World Literature, Indian Writing in English, Literary theories and cultural studies



## Navreet Sahi

Associate Professor

**Publications:** 6

**Scopus id:** 58689357900

**Email**

navreetkaursahi@shooliniuniversity.com

**Research Areas**

- Cultural studies, including picaresque narratives, anti-heroes, trickster traditions in native cultures, psychoanalysis, and gender studies



## Ekta Singh

Assistant Professor

**Publications:** 2

**h-index:** 2

**Scholar id:** PRIkuLYAAAAJ

**Email**

ekta@shooliniuniversity.com

**Research Areas**

- Himalayan studies encompassing archaeological, anthropological, historical, and ethnographical contexts

# Spirituality and Happiness



## Saamdu Chetri

Professor

**Publications:** 6

**h-index:** 2

**Scholar id:** NRLeIOwAAAAJ

**Email**
saamduchetri@shooliniuniversity.com

**Research Areas**

- Yoga
- Spirituality and happiness



## Nidheesh Yadav

Associate Professor

**Publications:** 11

**h-index:** 1

**Researchgate:** Nidheesh

**Email**

nidheeshyadav@shooliniuniversity.com

**Research Areas**

- Yoga
- Complementary and alternative therapy

# Research Achievements

01 **Ranked 3rd in India for research quality and 175th globally in THE World University Rankings 2025**

02 **Ranked 224th globally for citations per faculty in QS World University Rankings 2025**

03 **Ranked No. 1 in India for citations per paper in QS Asia University Rankings 2025**

04 **Ranked #101-200 globally in THE Impact Rankings 2024 for contributions to achieving the SDGs**

05 **Ranked 9th in India for patent filing by the Indian Patent Office**

06 **Nineteen researchers recognized among the top 2% scientists globally by the Elsevier-Stanford list**

07 **56.5% of papers published in Q1 journals indexed in Scopus, with articles in top journals including Nature**

# Shoolini University

Think Learning,
Think Success

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