HARYANA STATE RESEARCH FUND | 2025-26

Faculty Principal Investigators

Agriculture

Name of PI	Institute of PI	Designation/Programme & Department	Topic of Research	Summary of Expected Outcome
Dr Sakshi Tewari	JC Bose University of Science and Technology YMCA Faridabad	Assistant Professor, Department of Life Sciences	Smart Metabolite Driven Polyphasic Bioformulation for Boosting Pearl Millet Performance under combinational stresses in Haryana	Innovative, low-cost robust bioformulation: Development of an indigenous, eco-friendly polyphasic bioformulation using locally adapted robust PGP and biocontrol bacteria to reduce chemical inputs and improve soil health. Aligning with SDG – Responsible Consumption and Production; SDG – Life on Land. Climate-resilient pearl millet production: Enhanced pearl millet growth, productivity, quality, salinity tolerance, and disease resistance through sustainable microbial technology....
Dr. Amit Kaushik	CCSHAU, Hisar	Assistant Professor, College of Biotechnology, CCSHAU, Hisar	Development and Evaluation of an Eco-friendly Bionano-formulation from traditional herbs to minimize insect and disease infestation	Development of an Eco-friendly Bio-nano-based Biopesticide: The project is expected to scientifically validate the pesticidal properties of the selected traditional herbs and develop an effective, eco-friendly bio-nano-based biopesticide formulation. Development of Indigenous Technology and Commercial Product: The study is expected to generate a standardized formulation and production technology with potential for technology transfer, product development and intellectual property generation
Dr. Anita Kumari	Central University of Haryana	Assistant Professor, Department of Nutrition Biology, Central University of Haryana	Development of Ready-to-Eat (RTE) Protein-Rich Food Formulations and its Impact for the Management of Undernutrition among Pre-School Children for a Healthy Nation	i. Development of novel protein rich food formulations for pre-school children: Protein rich food formulations will be developed using protein rich vegan sources in varying concentrations. The developed product will be distributed to pre-school children for months through Anganwadi Centers. ii. Data generation: Scientific data will be generated on the prevalence of undernutrition under five years as well as reports, publications (at least high impact factor, SCOPUS indexed), patents, copyrights,...
Dr. Jayant Sindhu	CCS Haryana Agricultural University, Hisar	Assistant Professor, Department of Chemistry	Structure-based Design and Synthesis of Novel Organic Frameworks for Combating Resistance in P. minor	Three major expected outcomes are: (validated molecular targets and prioritised lead molecules against herbicide-resistant Phalaris minor; (synthesis and biological validation of promising resistance-breaking herbicidal candidates with crop-safety assessment; and (development of structure–activity relationships and a reference dataset to guide future herbicide discovery. These outcomes can benefit Haryana by improving management of resistant P....
Dr. Anil Duhan	CCS Haryana Agricultural University, Hisar, Haryana	Assistant Professor, Department of Chemistry, CCS Haryana Agricultural University, Hisar Haryana	Distribution, risk assessment and developing mitigation strategies for microplastics pollution in agricultural eco-system of Haryana.	This project will help in addressing a rapidly emerging environmental and public health threat linked to MPs contamination. Haryana increasingly relies on treated and untreated wastewater for irrigation which raises major concerns about MPs entering the food chain and potentially impacting human health, livestock and long-term soil fertility. By generating the first scientific evidence on MPs loading in Haryana agricultural system, the study will support informed decision-making that protects c...

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Dr. Sakshi Sharma	SGT University, Gurugram	Assistant Professor, Department of Life Sciences, School of Allied Health Sciences.	Development of a Dual-Action Biofertilizer for Enhancing Crop Productivity Growth and Microplastics Biodegradation in Agricultural Soils	The research project is expected to deliver three major outcomes: (i) Development of a novel dual-action microbial biofertilizer for plant growth promotion and microplastic degradation; (ii) Establishment of an eco-friendly microbial strategy for improving soil health and mitigating agricultural microplastic pollution; and (iii) Generation of a scalable technology platform with potential for field application, commercialization, industry collaboration, and capacity building....
Dr. Rajiv Kumar	Haryana School of Business, Guru Jambheshwar University of Science and Technology, Hisar	Professor, Haryana School of Business	Guru Jambheshwar University of Science and Technology, Hisar	The study will assess the financial, operational, and market feasibility of small and medium dairy processing units and identify viable models suitable for rural Haryana. This can support rural industrialization and sustainable dairy enterprises. The research will identify entrepreneurial opportunities and farmers' readiness to establish or expand dairy processing activities. This can promote farmer empowerment, income diversification, and rural employment....
Dr Krishna Rolania	CCS HAU Hisar	Associate Professor/Senior Scientist, Department of Entomology	Insect- pest dynamics in vegetable crops as influenced by climate change under different growing environments	Survey provides information regarding changing insect-pest scenario in vegetable crops under different growing conditions in Haryana. Monitoring provide early detection about pest problems before they reach damaging levels and helpful for timely insect-pest management or prevent pest outbreak. Biological studies and survey help in designing management strategies for insect-pests in vegetable crops
Dr. Jitender Kumar Bhardwaj	Kurukshetra University, Kurukshetra	Associate Professor, Department of Zoology	Anti-Apoptotic Potential of Curcuma longa Against Chlorpyrifos Induced Reproductive Toxicity in Ovarian Antral Follicles	The proposed project will- ¬ Improve livestock fertility and kidding rates, directly strengthening the livelihood and income of rural farming families. ¬ Reduce pesticide-related reproductive losses in goats, supporting sustainable livestock production in agricultural communities. ¬ Promote awareness and adoption of natural, safe interventions like Curcuma longa, lowering dependency on chemical treatments....
Dr. Darshna Chaudhary	Maharshi Dayanand University, Rohtak	Professor, Centre for Biotechnology	"Harnessing nanotechnology and RNAi for eco-friendly management of a devastating pest, legume pod borer (Maruca vitrata), and seed micronutrient enrichment in cowpea"	Sustainable pest management: Development of Maruca vitrata-specific nano-RNAi formulations for effective, GMO-free pest control, with the potential to reduce dependence on chemical pesticides and promote safer agriculture. Enhanced cowpea productivity and nutritional quality: Biofortification of cowpea seeds with iron to enhance their nutritional value and address micronutrient deficiency....
Dr. Manju Yadav	Guru Jambheshwar University of Science and Technology	Assistant Professor, Department of Biotechnology	Elucidation of Defense Metabolic Crosstalk and Regulatory Networks in Arabidopsis thaliana,	To find the machenism how plant's defense act and siganaling is regulated under combined stress. To find the expected network of hub genes and development of markers for identification of their presence in the crop plants for targetting them to increase the tolerance. Development of multiple stress resilient plant varieties for Haryana.

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Dr Priyanka Dalal	Guru Jambheshwar University of Science and Technology, Hisar	Assistant Professor, Dept of Electrical and Electronics Engineering	mmWave Radar-based Non-Contact Monitoring of Leaf Water Content and Water Stress in Major Crops of Haryana ; .	Development of mmWave radar-based sensing system for non-contact estimation of Leaf Water Content (LWC) and early detection of water stress in wheat and cotton. Development of crop-specific water-stress indicators through controlled and field-level experiments, enabling more reliable assessment of crop water status under varying environmental conditions. A technology framework for efficient irrigation management that can be further developed for practical agricultural deployment.
Dr. Sandeep Gupta	Kurukshetra University	Associate Professor, Institute of Environmental Studies	Development of Early Detection Model of Wheat Leaf Rust through Image Driven Machine Learning	Standardized methodology for wheat leaf rust detection using mobile phone captured images and machine leaning technology. Use of artificial intelligence to protect its major crop, reduce yield losses and optimize fungicide use, which causes financial load on the Haryana State. Setting Haryana as a role model for investing in Research & Development that addresses the issues faced by its farmers.

Science & Technology

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Dr Greeshma Sharma	Rishihood University	Associate Professor, School of Design	Digital Wellbeing Intelligence Engine (DWIE): AI Models Predicting Cognitive Overload,Burnout, and Mental Fatigue Using Neuro-Behavioural and Web-Interaction Signals	Digital Wellbeing Intelligence Engine (DWIE): A validated system to detect early signs of digital fatigue, cognitive overload, and stress. Universities, schools, IT companies, BPOs, and other screen-intensive workplaces in Haryana can use it to identify digital strain early and support healthier work and learning practices. Evidence-based digital wellbeing guidelines: Practical recommendations on screen exposure, breaks, workload, notification practices, and recovery....
Prof. Neeraj Dilbaghi	Guru Jambheshwar University of Science and Technology, Hisar-125001	Professor, Department of Biotechnology	Fabrication and evaluation of nanomaterial based portable sensors for potential carcinogens,	The proposed technique will be user friendly and cost effective. The requirement of sample will be in microliters for the analysis with the help of developed sensor. Government agencies, industries and research institutions will be able for qualitative and quantitative determination of these carcinogenic substances in daily routine procedures.
Dr. Anupam Bhatia	Chaudhary Ranbir Singh University	Associate Professor, Department of Computer Science and Applications	Enhancing Transparency and Accountability in Public Distribution System through Antyodaya Blockchain	This research proposal outlines the design, implementation, and evaluation of a Blockchain-based traceability system for the Public Distribution System (PDS) in Haryana. The traditional PDS, which provides subsidized food grains to vulnerable populations, is often hindered by significant leakages, inefficiencies, and a lack of transparency and accountability....

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Dr. Saroj Verma	K.R. Mangalam University	Associate Professor, School of Medical & Allied Sciences (SMAS), K.R. Mangalam University	Mutation Informatics and Artificial Intelligence for Design of Multivariant Anti-Covid Drug Candidates: Sars-Cov2 Receptor Binding Domain of Spike Protein	The project is expected to deliver (mutation-resilient drug leads against emerging SARS-CoV- variants, strengthening Haryana's preparedness for future outbreaks; (an AI-based drug discovery framework that can be extended to other viral and bacterial diseases, building Haryana's indigenous research and innovation capacity; and (research articles and patent, enhancing scientific output, skilled human resources, and the potential for healthcare innovation in the state.
Dr. Vipin Gupta	Gurugram University, Gurugram	Assistant Professor, Department of Mathematics	Modeling and Simulation of Smart Materials with Nonlocal and Memory Effects for Industrial Applications in Haryana	Development of advanced mathematical and computational models: The project will provide better understanding and prediction of the behaviour of smart materials, creating a foundation for safer and more efficient structures and devices relevant to Haryana's manufacturing and automotive sectors. Indigenous simulation tools: MATLAB/Python-based computational modules will be developed for analysing complex material behaviour....
Dr. Hardev S. Saini	Guru Jmabheshwar University of Science and Technology	Associate Professor, Department of Physics	Data-Driven Integrated DFT Screening and Fabrication of Robust Chalcogenides for High Temperature Thermoelectric Applications	Three Major Expected Outcomes: Rapid screening and theoretical validation of novel, high-performance chalcogenide compositions optimized for high-temperature thermoelectric conversion. Scalable, experimental synthesis of robust chalcogenides demonstrating high thermal stability and enhanced conversion efficiency (ZT). Robust TEG device prototypes fabricated in collaboration with R&D labs for industrial waste heat recovery....
Dr. Vikram Jeet Singh	Guru Jambheshwar University of Science and Technology, Hisar	Associate Professor, Department of Pharmaceutical Sciences	Artificial intelligence assisted design, synthesis, and evaluation of 2,5-disubstituted 1,3,4-oxadiazole derivatives for the management of diabetes and obesity	Citing the fact that a large portion of human population of India and specially Haryana is suffering from diabetes and obesity, the research proposal may come up with newer , -disubstituted - , , -oxadiazole derivatives, designed using artificial intelligence, expected to possess multiple activities like antidiabetic and anti-obesity. The successful molecules will be synthesized and tested by in vitro methods for evaluation of their biological responses....
Dr. Neelam Vashist	Gurugram University Gurugram	Assistant Professor , Department of Pharmaceutical Sciences	"Innovative Pyrimidine derivatives using computational approach: A strategic intervention for breast cancer targeting EGFR/HER2+ Tyrosine kinase"	Design and synthesis of novel pyrimidine derivatives targeting EGFR/HER tyrosine kinases and their evaluation against breast cancer cell lines to identify potential targeted anticancer candidates. Identification of promising lead compounds through comprehensive computational and biological evaluation, generating valuable structure–activity relationship (SAR) data for further optimization and development of lead molecules....
Dr Chandra Mouli Pandey	Shree Guru Gobind Singh Tricentenary (SGT) University, Gurugram	Associate Professor, Chemistry	Development of Lab-on-a-chip platform for early detection of oral squamous cell carcinomas using salivary biomarkers	Point-of-Care Diagnostic Innovation: The research will serve as a basis for the development of an affordable, user-friendly and decentralized screening process, minimizing reliance on advanced laboratory facilities and enabling earlier non-invasive diagnosis of oral cancer and referral of suspected cases. Patent & Technology Translation: Development of new IP, new biomarker-specific aptamer recognition, sensing interface and new integrated device architecture based on graphene oxide nanohybrid....

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Dr. Rekha Rao	Guru Jambheshwar University of Science and Technology, Hisar	Assistant Professor, Department of Pharmaceutical Sciences	Development and evaluation of nanoemulgel for co delivery of synthetic and herbal moieties via dermal rote for breast cancer	Development and preclinical evaluation of novel, patient friendly formulation for breast cancer Patent application of novel formulation This may pave way for clinical investigation of this formulation and finally Commercialization. This project will help in providing more patient friendly and safer treatment option for breast cancer
Prof. HARISH DUREJA	Maharshi Dayanand University Rohtak	Professor, Pharmaceutical Sciences	Revolutionizing Chronic Obstructive Pulmonary Disease (COPD) Relief: Unveiling the therapeutic potential of Terbutaline Sulfate and Mometasone Furoate-Loaded Nanoformulations against Cigarette Smoke-Induced COPD	By completing this project, an innovative nano formulation of mometasone furoate will be created and will help in treatment option for COPD patients.
Dr. Sunil Kumar	Guru Jambheshwar University of Science and Technology, Hisar	Assistant Professor , Department of Artificial Intelligence and Data Science	AI-Powered Cyber Resilience Framework for Digital Universities and Smart Campuses in Haryana	AI-based Cyber Threat Prediction System: Early detection and prediction of cyber threats in universities will help protect Haryana's digital education infrastructure and academic data. Haryana Academic Cyber Dataset and Cyber Resilience Platform: Development of a localized academic cybersecurity dataset and real-time dashboard will support future research and strengthen cybersecurity practices across HEIs in Haryana....
Dr. Archana Kapoor	Guru Jambeshwar University of Science & Technology, Hisar	Professor/ PhD & Department of Pharmaceutical Sciences	Implementing Pyran-Thio Heterocyclic Frameworks to Target SGLT-2 in Lead Development Utilizing Sustainable Approach	The development of green synthetic methods and potential antidiabetic agents aligns with Haryana's growing pharmaceutical, biotechnology, and healthcare needs, especially given the rising prevalence of diabetes in the state. Additionally, the project will strengthen local research capacity, foster industry–academia collaboration, and provide skill development for students and young researchers in green chemistry and drug-discovery technologies....
Dr. Gunjan Goel	Central University of Haryana	Professor, Department of Microbiology	Development of Postbiotic Quantum Dot based Food-Grade Polymers for Active Packaging Films for perishable foods	Biobased intelligent packaging material, Reduction of food spoilage, Technology translation for commercialization
Prof. Surender Kumar	Chaudhary Bansi Lal University Bhiwani	Professor, Department of Chemistry, Chaudhary Bansi Lal University Bhiwani	Green remediation of water contaminants using renewable biomass-based adsorbents: a multi-pollutant treatment approach	Development of low-cost water-purification approach: Renewable adsorbents will be developed from locally available agricultural residues for the removal of multiple water contaminants such as organic pollutants, fluoride, nitrate, arsenic, and heavy metals from water. Optimized adsorption conditions and treatment efficiency will be established, providing a potentially affordable alternative to conventional water-treatment technologies....
Dr Promod Mehta	SGT University, Gurugram-122505	Professor, Dept of Life Sciences, School of Allied Health Sciences,	Rapid diagnosis of osteoarticular tuberculosis by immunological and molecular methods I	i) We expect to yield good sensitivity/specificity to diagnose osteoarticular TB cases by our nanoparticle-based immuno-PCR assay, which may develop a prospective diagnostic kit for routine use. ii) We may get good sensitivity/specificity by detecting circulating cell-free DNA of osteoarticular TB specimens, which may develop a point-of-care test.

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Dr. Ashima Sharma	J.C. Bose University of Science and Technology, YMCA, Faridabad	Assistant Professor/ Biotechnology & Department of Life Sciences	Integrated Chemo-Biotechnological Approach for Post-Consumer Dairy Polyethylene Waste Up-cycling in Haryana	A working two-stage upcycling protocol: An optimized process that deinks, chemically activates and biologically converts printed milk-pouch waste into useful chemicals. This gives Haryana a practical route to cut the -crore annual pouch burden in Gurugram, ease drain clogging and water pollution, and support VISION and SDG An engineered microbial platform: A metabolically enhanced strain with improved PE-degrading enzymes, developed in a Haryana university....
Dr Umang Bareja	Mukand Lal National College, Yamunanagar	Assistant Professor of Mathematics	Functionally Graded Composites for High Performance Acoustic and Vibration Sensors	The proposed research will contribute to technological development in Haryana by strengthening advanced research capabilities in smart materials and sensor technologies. First, it will develop analytical and numerical mathematical models for functionally graded composites and their application in acoustic and vibration sensor analysis. Second, the project will generate new computational tools, methodologies for solving complex differential equations and research findings.
Dr. Vishakha Gupta	Dyal Singh College, Karnal	Professor , Department of Mathematics	Wave Propagation in Porous Magneto-Electro-Elastic Materials: Foundations for Smart Infrastructure and Energy-Harvesting Devices,	The proposed research is expected to provide significant innovations in the modelling and understanding of wave propagation in porous magneto-electro-elastic materials. It will develop advanced theoretical frameworks for analysing the coupled effects of mechanical, electrical, magnetic, and porous properties on different wave modes, including Lamb, SH, and leaky waves
Dr. Sunita Beniwal	Guru Jambheshwar university of science and technology, Hisar	Associate Professor, School of Design	Machine Learning Driven Prediction of Type 2 Diabetes Using Gut Microbiome Data in Haryana Population	Curated global database of T DM. Haryana-specific gut microbiome dataset and biomarkers. T DM prediction framework

Industry Innovation and Others

Name of PI	Institute of PI	Designation/Programme & Department	Topic of Research	Summary of Expected Outcome
Dr. Sohan Lal	Kurukshetra University, Kurukshetra	Assistant Professor, Department of Chemistry	Combating waste plastic pollution by making its composites with Bio-waste.	Development of sustainable hybrid composites: Waste plastics will be reinforced with biochar and agricultural fibers to produce durable, high-performance materials. This can promote sustainable material development and reduce dependence on conventional plastics. Utilization of agricultural and plastic waste: The project will provide a useful route for converting crop residues and waste plastics into value-added products, helping to address crop-residue burning and plastic waste accumulation in H...
Prof. (Dr.) Sanjeev Gupta	Gurugram University, Gurugram	Dean – Research & Development; Chairperson & Professor - Physiotherapy	“Standardization and Validation of Yoga-Based Movement Protocols for Neuromuscular Health Using Surface Electromyography, Motion Capture and Force Platform Analytics: A Community-Centric Model for Preventive Physiotherapy and Sports Rehabilitation” —	Sensor-validated Yoga rehabilitation protocols for clinical and sports use. A Haryana-centric biomechanical and digital movement database for research and technology development. A scalable community and sports-health model supporting injury prevention, preventive rehabilitation and technology-enabled healthcare.

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Dr. Yoshiko Miyata Ishioka	O.P. Jindal Global University	Professor, Jindal School of Liberal Arts and Humanities	Symptom Patterns and Social Roles Among Adults 40+ in Rural Sonipat District	This project will establish Haryana's village-level health baseline for adults aged and above across rural Sonipat and identify how agricultural and domestic labor drive midlife health decline. Together, these outcomes support Haryana's development in three clear ways: they provide real village health data, catch chronic issues early to lower medical costs for families, and keep our rural workforce healthy and productive.
Dr. Dilip Sharma	Amity Institute of Pharmacy, Amity University Haryana, Gurugram	Assistant Professor, Amity Institute of Pharmacy	Targeting GDNF/RET Signaling and Kinesins KIF5B/KIF17 with Novel Small Molecules for Diabetic Nephropathy Therapy	To maximize the socio-economic benefits in the development of Haryana from the project " Unraveling GDNF/RET and Kinesins KIF B/KIF Signaling Dynamics via Novel Small Molecules in Diabetic Nephropathy Therapy," a multi-faceted action plan is proposed. First, securing intellectual property rights for the novel small molecules and their therapeutic applications is essential for attracting investment and commercial interest....
Prof Manju Panwar	B P S Mahila Vishwavidhalaya, Khanpur Kalan, Sonipat Haryana	Professor, Dept of Social Work	Impact of University Community Engagement on Local Communities in Haryana	The expected outcomes of the proposed study will contribute significantly to rural development in Haryana by providing evidence on the effectiveness of university–community engagement initiatives. It will systematically map and quantify physical and tangible improvements across adopted villages, focusing on progress in rural development indicators like education, sanitation, household income, and clean energy access....
Dr Gaurav Gupta	K R Mangalam University, Gurugram	Assistant Professor (Senior Scale), School of Basic and Applied Sciences	The Sustainable Glass Project: Re-engineering Core Materials for a Net-Zero Future	The three major expected outcomes and their direct contributions to Haryana's industrial and socioeconomic development include: Soda-Ash Substitution Formulations: Developing proprietary glass batch formulations replacing % of imported soda ash with locally sourced minerals. Contribution: Eliminates import dependence for local manufacturers, reducing raw material costs and shielding Haryana's industrial ecosystem from global supply chain disruptions....
Dr Kailash Chandra Barmola	SRM University Delhi-NCR Sonepat	Associate Professor, Department of Psychology SRM University Delhi-NCR Sonepat Haryana	Psychological Wellbeing Index of Haryana School Students (PWBI-Haryana)	Development of a psychological test, Assessment of Psychological Wellbeing of Students, A tool to assess Wellbeing of students quickly. An app to measure Wellbeing of students
Prof (Dr) Mayank Kinger	Chaudhary Bansi Lal University, Bhiwani	Professor, Department of Chemistry, CBLU, Bhiwani	Simulation studies on bio-removal of Cr and Ni from electroplating industry effluents of Haryana using Metagenomics approach	Development of a robust, metagenomics-guided microbial consortium specifically tailored for the efficient and simultaneous bio-removal of chromium and nickel from complex electroplating wastewater. Optimization of crucial operational parameters through simulation studies, leading to improved removal efficiency, reduced treatment time and lower operational cost....
Dr. Seema	Dayanand Mahila Mahavidyalya, Kurukshetra	Assistant Professor, Department of Hindi	हरियाणा की भात परम्परा के लोकगीतों का संकलन एवं सामाजिक- सांस्कृतिक अध्ययन	पुरानी वृद्धाओं द्वारा गाए जाने वाले भात गीतों की विविधता को वीडियोग्राफी और ऑडियो रिकॉर्डिंग के माध्यम से डिजिटल रूप में संरक्षित और सुरक्षित रखा जा सकेगा। हरियाणवी बोली के मौखिक लोक साहित्य की प्रमुख विद्या 'भात गीतों ' की मौखिक शैली को लेखन के माध्यम से लिपिबद्ध करके इस परंपरा को भविष्य में सुरक्षित रखा जा सकेगा । हरियाणवी लोक संस्कृति की भाषाई विविधता को देखा जा सकेगा।

Climate Change, Water Management, AYUSH, Education and Skill

Name of PI	Institute of PI	Designation/Programme & Department	Topic of Research	Summary of Expected Outcome
Dr Ravi Kumar	S.D. (PG) College, Panipat	Assistant Professor, Deaprtment of Botany	IMPACT OF FUNCTIONAL BIODIVERSITY ON ECOSYSTEM SERVICES & SUSTAINABILITY IN FOREST ECOSYSTEMS OF HARYANA	Functional Biodiversity Database: Development of baseline data on vegetation composition, functional traits, and ecosystem-service indicators in selected forest ecosystems of Haryana. This will strengthen the scientific basis for biodiversity assessment and forest planning. Identification of Key Species and Functional Traits: Identification of plant species and functional characteristics that contribute significantly to carbon sequestration, soil conservation, nutrient cycling, productivity, an...
Dr. Anupama Panghal	NIFTEM, Kundli	Associate Professor, Food Business Management and Entrepreneurship Development Department	Integrated Sustainable Value Chain & Carbon Revenue Generation Model for Agro-Food Companies and FPOs in Haryana	This project will lead to generation of Carbon Trading model(a reference toolkit), by managing food loss and waste in agri-food sector. A copyright for carbon credit readiness index, generated through this project which can be used by Carbon market stakeholders to analyse their carbon credit readiness, for trading of carbon credits and making extra revenues....
Dr. Kakoli Dutt	J.C. Bose University of Science and Technology, YMCA, Faridabad	Associate Professor, Deptt of Life Sciences	Chlorella sp. mediated valorization of azo dye wastewater for biodiesel feedstock development	a) Removal of dye from industrial textile wastewater and growth of algal biomass with no added cost of water or nutrient or specific infrastructure as simple open ponds can also be utilized. b) Production of biodiesel to assist reduction of energy requirement. c) Improved water recyclability for industrial dye based usage. These will reduce water stress and simultaneously facilitate an ecosystem for algal feedstock production which can support biodiesel industry by reducing substrate dependence ...
Dr. Ashok Kumar	Department of Journalism and Mass Communication, Central Univerity of Haryana	Professor, Department of Journalism and Mass Communication	Contemporary Higher Education in Haryana: A Critical and Analytical Discourse on NEP 2020	Evidence-based assessment of NEP implementation: The study will document the status of implementation, institutional practices and challenges of NEP implementation in HEIs in Haryana and will serve as a basis for informed policy decisions. Stakeholder-based understanding of higher education reforms: Stakeholder perspectives will help identify gaps between policy objectives and institutional experiences, which will help target interventions and course correct....
Dr Samridhi	Guru Jambheshwar University of Science and Technology, Hisar, Haryana, 125001	Assistant Professor, Department of Pharmaceutical Sciences	Benzothiazole-thiazole hybrids as potential neurotherapeutics: An integrated synthetic, in vitro and computational studies	Promising drug leads: Development and identification of novel benzothiazole and thiazole based molecules with potential against Alzheimer's and Parkinson's disease. Strengthening research in Haryana: Building expertise and research capacity in medicinal chemistry, drug design, and biological evaluation within the state. Long-term healthcare impact: Generating a strong foundation for future development of affordable, home-grown therapeutic options and contributing to better management of neurode...
Dr. (Mrs.) Anita Singh Kirrolia	Guru Jambheshwar University of Science & Technology, Hisar	Assistant Professor, Department of Civil and Environmental Engineering (Erstwhile Department of Environmental Science & Engineering)	Harnessing Indigenous Algal Strains for Wastewater Remediation and Climate-Resilient Bioresource Development in Haryana	Indigenous algal resource and treatment platform: Identification and characterization of Haryana-adapted algal strains with promising wastewater remediation capability will create a state-specific biological resource and standardized treatment protocols for future scale-up. Sustainable agricultural bio-inputs: Biomass generated during treatment will be evaluated for development of algal biofertilizers and bio stimulants, potentially supporting soil health and reducing dependence on conventional...

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Dr Vanita Rose	Maharshi Dayanand University Rohtak	Research and Development Coordinator, Faculty of Education	Mapping Inclusion: Evaluating the Availability, Accessibility, and Effective Use of Assistive Technologies and Special Educator Support in Government Schools of Haryana	State-level Inclusion Status Report: The study will generate a comprehensive evidence-based mapping of the availability, accessibility and utilization of assistive technologies, special educators and support facilities across government schools of Haryana. This will help identify regional disparities and resource gaps for targeted planning. Identification of Policy–Practice Gaps: The research will identify major infrastructural, pedagogical, administrative and capacity-building barriers
Dr. Mohit Kumar	Guru Jambheshwar University of science and technology	Assistant Professor, Department of Printing Technology, GJUS&T, Hisar	Evaluation of Security Protocols Embedded in A3 Colour Digital Presses to Protect Sensitive Printed Information: Implication for Business & Government Applications	सुरक्षित डिजिटल प्रिंटिंग फ्रेमवर्क A कलर डिजिटल प्रिंटिंग प्रेसों के लिए कॉपी, स्कैनिंग, छेड़छाड़ और अनधिकृत पुनर्मुद्रण-रोधी सुरक्षा प्रोटोकॉल का विकास एवं परीक्षण किया जाएगा। इससे सरकारी, शैक्षणिक और व्यावसायिक दस्तावेजों की विश्वसनीयता बढ़ेगी। ज्ञान, कौशल एवं नवाचार का सृजन: शोध-पत्र, तकनीकी रिपोर्ट, नमूना सुरक्षा दस्तावेज, परीक्षण पद्धति तथा प्रशिक्षित मानव संसाधन विकसित होंगे;...
Dr. Sunil Kumar	Kurukshetra University	Professor, Department of Sociology	Barriers to Business, Bridges to success:Exploring Entrepreneurship Among Rural and urban women in Haryana with special Focus on Matru Shakti udyamita yojana	Evidence based database a comprehensive database of rural and urban women entrepreneurs and beneficiaries of matru Shakti udyamita Yojana will be developed Identifications of barrier the study will identify key financial skill market technological and institutional barrier affecting womens entrepreneurship and assess gap in the scheme implementation Policy recommendation evidence based recommendation will be developed to improve assess to finance skill market and institutional support and emplo...
Dr. Himanshu Grover	GDC Memorial College, Bahal	Assistant Professor, Department of Geography	A GEOSPATIAL STUDY OF GROUNDWATER MANAGEMENT AND AQUIFER RECHARGE ZONATION FOR SUSTAINABLE AGRICULTURE IN SEMI ARID HARYANA	Integrated Groundwater Assessment - Assessment of groundwater depletion and quality using groundwater-level data, primary water-quality analysis and GWQI mapping. Priority & Unsuitable Zones - Identification of recharge-priority areas and groundwater zones unsuitable for human consumption and irrigation, with suitable purification measures. Sustainable Management Framework - Development of a GIS-based framework integrating groundwater conservation, aquifer recharge, sustainable irrigation
Dr Sumita Gulati	S. A. Jain College, Ambala City	Assistant Professor/Department of Mathematics	Machine Learning-based Integrated Climate-sustainability Intelligence Framework for Air and Water Resource Management in Haryana,	Haryana-specific AI/ML Environmental Intelligence Framework: Development of an integrated predictive framework for air and water quality using climatic, meteorological and environmental variables. It will support a transition from conventional monitoring towards predictive and preventive environmental management. District-level Environmental Vulnerability Assessment: Identification and mapping of air and water-quality hotspots and environmentally vulnerable districts....
Dr. Kiran Sharma	BML Munjal University	Associate Professor, School of Engineering & Technology	SamVidyaa: An AI-enabled Experiential Learning Platform to Elevate Technical Skills	Industry-ready youth: Build practical technical and problem-solving skills through experiential learning, improving employability and strengthening Haryana's skilled workforce. Inclusive learning: Use AI-based personalization to identify and support slow learners, reducing learning gaps and improving educational outcomes across tier- and tier- institutions....

Name of PI	Institute of PI	Designation/Programme & Department	Topic of Research	Summary of Expected Outcome
Nidhi	Maharshi Dayanand University	Associate Professor, Management	Skill Development and Employability of Youth in Haryana: An Evaluation Using a Demand Driven Employability Framework	The project has three major expected outcomes. First, it will provide a comprehensive assessment of skill gaps and the alignment between higher education curricula and the workforce requirements of Haryana's agriculture, manufacturing and service sectors. This will help institutions revise programmes according to actual employer needs. Second, it will develop a practical and scalable model of industry–academia collaboration covering internships, live projects, joint curriculum development, on-th...