

NORTH EASTERN REGIONAL INSTITUTE OF SCIENCE & TECHNOLOGY

[Deemed To-Be-University u/s 3 of UGC Act, 1956]
(UNDER THE MINISTRY OF EDUCATION) GOVT. OF INDIA
Office of the Dean (Research & Development)

Completed Research Projects , 2023-24

Sl. No.	Project Title	SPONSOR	Name of PI	Name of Co-PIs	Start Date/Year	Department/Centre
1	Screening of Phytochemical and Bioactive compounds against human pathogenic bacteria from some selected indigenous medicinal plants of Arunachal Pradesh	DBT	Dr. Pradeep Kumar	Dr. Madhu Kamle	11.01.2019	Forestry
2	Comprehensive metabolic profiling and pharmacological studies of piper species: a natural bio- enhancer in pharmaceuticals"	DBT	Dr. P.R. Gajurel	Prof. B. Singh and Dr. S. S. Singh	05.02.2019	Forestry
3	A Prototype of Auto-navigating E-Card using Multispectral Imaging"	MeiTY	Dr. Rajesh Kumar	Dr. A.D. Singh	11.01.2019	Electronics and Communication Engineering
4	Assessment of natural spring reliability for rural water security in the lesser Himalayan region - Arunachal Pradesh	NMHS-GBPNIHESD	Dr. Pankaj Pandey	Ms. Vanita Pandey	2023	Agricultural Engineering
5	Effect of Climate Changes on Working Capacity and livelihood Sustainability for Agricultural Worker of Arunachal Pradesh	DST	Dr. T. Patel	Dr. P. K. Pranav	25.03.2019	Agricultural Engineering
6	Impacts of climate change on bio resources and livelihoods of local people of Arunachal Pradesh	DST	Dr. Ashish Paul	Dr. O.P. Tripathi and Dr. L.B. Singha	07.03.2019	Forestry
7	Evaluation of Coconut Oil for Application in High Voltage Transformer	Coconut Development Board	Dr. Anu Kumar Das	-	Mar-2019	Electrical Engineering

8	Development of Machining Facilities using MQL for machining hard materials (MODROBS)	AICTE	Dr. M. Chandrasekharan	-	04.04.2019	Mechanical Engineering
9	An assessment of health care waste management practices in health care units of Arunachal Pradesh	ICSSR	Dr. Bijoylaxmi Sammah	Dr. K.N. Dewangan	19.10.2019	Centre for Management Studies
10	Investigation on Aging Stability of <i>Jatropha curcas</i> based Insulating Oil Subjected to Thermo-Electric Stress	DST	Dr. Anu Kumar Das	-	Dec-19	Electrical Engineering
11	Density functional theory (DFT) investigation of metalloisoporphyrins as near infra-red dyes and photosensitizers for photodynamic therapy and iron (III) isoporphyrins as alternative to iron (IV)-oxo porphyrin	SERB (DST)	Dr. Jagannath Bhuyan	-	05.02.2020	Chemistry
12	Special Scheme for North East States (NER)	AICTE	Dr. S. Gao	Mr. T. V. P. Singh	18.03.2020	Electrical Engineering
13	Crosstalk of human hydrogen sulphide producing enzymes and copper relevant in pathophysiology	DBT	Dr. Pramod Kumar Yadav	-	16.03.2020	Chemistry
14	SKILL VIGYAN Programme in Life Sciences & Biotechnology in Arunachal Pradesh	DBT & APSSCS&T	Dr. S. S. Singh	Dr. Binay Singh & Dr. P.R. Gajurel	20.10.2021	Forestry
15	Performance analysis of distribution transformer filled with coconut oil	AICTE	Dr. Anu Kumar Das	-	June, 2019	Electrical Engineering
16	Characterizing pattern and process of alpine ecosystem in Indian Himalaya with special emphasis to Arunachal Pradesh (PRACRITI II)	SAC	Dr. O.P. Tripathi	Dr. Ashish Paul and Dr. Madhusudan Mishra	20.02.2019	Forestry

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17	Network Analytics for user performance management, using machine learning and data analytics	AICTE	Dr. Amar Taggu	-	14.03.2019	Computer Science and Engineering
18	Ergonomic Design and Performance Evaluation of Self Propelled Multipurpose Weeder Suitable to Northeast Hilly Agriculture	AICTE	Dr. T. Patel	-	14.03.2019	Agricultural Engineering
19	Assessment of Variability in Glacier melt and Snow melt Runoff under Projected Climatic Scenarios for Data Scarce Himalayan River Basins	DST	Dr. Aditi Bhadra	Dr. Anish Bandyopadhyay	28.05.2019	Agricultural Engineering
20	Exploration and conservation of high value wild edible macro fungi (WEM) from higher altitudes of Arunachal Pradesh and biotechnological evaluation of their nutraceuticals/novel metabolites	DBT	Dr. K. Shrivastava	Dr. S. S. Singh	01.10.2019	Forestry
21	Development of Employment generation feasibility in Ziro of Arunachal Pradesh through cottage industry for making biodegradable disposable serving dish utilizing locally available non-poisonous leaves and Renewable energy	DST	Dr. Adikanda Parida	Dr. B. Choudhury	2019	Electrical Engineering
22	Mass Propagation, packaging and marketing of wild ornamental banana from North Eastern India	DBT	Dr. Karuna Shrivastava	Dr. P.R. Gajurel & Dr. Bijoyaseni Sarmah	20.10.2021	Forestry

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Ongoing Research Projects (2023-24)

Sl. No.	Title of the Project	Funding Agency	Project No.	Name of PI	Name of Co-PI	Departments
1	Human Engineering and safety in Agriculture	ICAR	128	Dr. K.N. Dewangan	Dr. T. Patel	Agricultural Engineering
2	Characterizing pattern and process of alpine ecosystem in Indian Himalaya with special emphasis to Arunachal Pradesh (PRACRITI II)	BAG	279	Dr. O.P. Tripathi	Dr. Ashut Paul and Dr. Madhusudan Mishra	Forestry
3	Ergonomic Design and Performance Evaluation of Self Propelled Multipurpose Weeder Suitable to Northeast Hilly Agriculture	AICTE	205	Dr. T. Patel		Agricultural Engineering
4	Assessment of Variability in Glacier melt and Snow melt Runoff under Projected Climatic Scenarios for Data Scarce Himalayan River Basins	DST	287	Dr. Aditi Bhadra	Dr. Anub Bandyopadhyay	Agricultural Engineering
5	Unnat Bharat Abhiyan (UBA)	IIT Delhi	289	Dr. P. Lingfa	-	Mechanical Engineering

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6	Exploration and conservation of high value wild edible macro fungi (WEM) from higher altitudes of Arunachal Pradesh and biotechnological evaluation of their nutraceuticals/novel metabolites	DBT	291	Dr. K. Shrivastava	Dr. S. B. Singh	Forestry
7	Development of Employment generation feasibility in Ziro of Arunachal Pradesh through cottage industry for making biodegradable disposable serving dish utilizing locally available non-poisonous leaves and Renewable energy	DST	294	Dr. Adikanda Parida	-	Electrical Engineering
8	Use of non-toxic nanoformulation for prolonging shelf life and reduction of post-harvest loss of mandarin orange (Citrus reticulata) of North East India	DBT	299	Dr. Manju Kanle	Dr. Pradeep Kumar	Forestry
9	Impact of Climate Change on Water Resources of Arunachal Pradesh	DST	300	Dr. K. N. Dewangan	Dr. R. K. Prasad, Dr. A. Bandyopadhyay, Dr. P. K. Pandey, Dr. Meera Yadav, Dr. Ashish Paul	Agricultural and Civil Engineering; Chemistry and Forestry
10	Development of solar operated paddy thresher for sustainable livelihood of Agricultural workers in North-eastern India	NECTAR	NA	Dr. T. Patel	-	Agricultural Engineering

11	Mass Propagation, packaging and marketing of wild ornamental banana from North Eastern India	DBT	304	Dr. Karuna Shrivastava	Dr. P.R. Gajurel & Dr. Bijoylaxmi Samra	Forestry
12	Study and Development of Epoxy-Based Bamboo Composites for shipping containers using Indigenous Bamboo species of Arunachal Pradesh using Artificial Intelligence (Graph Neural Networks)	AICTE	308	Dr. Santosh Tamang	Dr. Kunal Barua	Mechanical Engineering and Physics
13	Exploration of native legumes and characterization of associated nitrogen fixing microsymbiots in North-Eastern India for development of biofertilizers	DBT	300	Dr. P. R. Gajurel	Dr. B. B. Singh	Forestry
14	Design and Implementation of Financial Tracking and Management E-platform for Chartered Professional Accountants	IBITF-IIT Bhilai	315	Dr. Ningila Marchang		Computer Science and Engineering
15	Impact of climatic variables on heat stress and real time monitoring with IoT based solutions for sustainable agricultural livelihood	DST	316	Dr. T. Patel	Mr. Anubhab Pal	Agricultural Engineering