

অসম বিজ্ঞান প্ৰযুক্তিবিদ্যা আৰু পৰিৱেশ পৰিষদ

(বিজ্ঞান প্রযুক্তি আৰু জলবায়ু পৰিৱর্তন বিভাগ, অসম চৰকাৰ)

ASSAM SCIENCE TECHNOLOGY AND ENVIRONMENT COUNCIL

(Science, Technology and Climate Change Department)

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ORDER

The following list of projects has been shortlisted for final presentation during Expert Committee Meeting for selection of projects to be supported under the scheme, "Innovation, Technology Generation and Awareness (ITGA)" of S&T Division, ASTEC.

| SI. No. | Project Name | Principal Investigator |
|---------|--------------------------------------|--|
| 1. | Multi-purpose solar heating system | Dr. Deba Kumar Mahanta, |
| | | Assistant Prof, Dept. of Electrical Engineering, |
| | | Assam Engineering College |
| 2. | Narrow ultraviolet beam optical | Dr. Deba Kumar Mahanta, |
| | system for vitiligo treatment | Assistant Prof, Dept. of Electrical Engineering, |
| | | Assam Engineering College |
| 3. | Development of a smart | Dr. M. R. Mahboob |
| | bowl/container for curd making | Assistant Professor, |
| | | Electrical Engineering Department, |
| | | School of Engineering, Tezpur University, |
| | | Sonitpur, Assam-784028 |
| 4. | Processing and Characterization of | Dr. Girija T R |
| | Vegan Leather Made from Tea Leaf | Associate Professor and Head, Department of |
| | Bacterial Cellulose | Civil Engineering School of Technology, |
| | | Assam Don Bosco University Azara, Guwahati |
| | | 781017 |
| 5. | Green power integrated smart | Dr. Manashita Borah |
| | system for Arsenic removal from | Assistant Professor, |
| | drinking water by Arsiron Nilogon | Department of Electrical Engineering, |
| | method | Tezpur University, Assam |
| 6. | Design and Development of | Dr. Monoj Bardalai, Assistant Professor, |
| | Multipurpose Hybrid Dryer with Solar | Mechanical Engineering, Tezpur University, |
| | and Biomasses for Rural Application | Napaam, 784028, Assam |
| 7. | Sustainable Building Materials | Mr. Gitartha Kalita |
| | Derived from Fungii | Department of Civil Engineering School of |
| | | Technology, Assam Don Bosco University |
| | | Azara, Guwahati, India – 781017 |
| 8. | Design of a Trial product of a Low | Jibon Saikia |
| | Cost Anti Snoring Device | Department of Physics |
| | | J B College |

| 9. | Development of Multifunctional Seed | Pulakesh Chetia |
|-----|--------------------------------------|---|
| Э. | Sowing Machine for Agricultural | Assistant Professor, |
| | Purpose | Assam down town University, |
| 10. | Design and develop an electric | Buildtech Engineers |
| 10. | bicycle/bike with stationed | 2nd floor, Subham Swaraj Sadan, VIP Road, |
| | renewable | Chachal |
| | super charging and parking | Opp. HP Petrol Pump, |
| | arrangement | Sixmile, Guwahati - 781022, Assam |
| 11. | Design and Development of a | Dr Gouri Goutam Borthakur |
| | futuristic writing device | Assistant Professor, |
| | Tatanous mang dones | Jorhat Institute of Science and Technology, |
| | | Cheniamguri Sotai, Jorhat -10,Assam |
| 12. | An ANN-based Smart Flood | Dr. Ratul Kumar Baruah, |
| | Surveillance System | Associate Professor, |
| | , | Department of Electronics & Communication |
| | | Engineering, Tezpur University, Napaam - |
| | | 784028, Assam |
| 13. | Design and development of a low- | Dr. Abhijit Deka |
| | cost domestic device for rapid | Assistant Professor, |
| | detection of bovine subclinical | Department of Veterinary Pathology, TVCC, |
| | mastitis | CVSc, Assam Agricultural |
| | | University, Khanapara, Guwahati, Assam |
| | | (781022) |
| 14. | Design innovation of briquette | Dr. Bijoylaxmi Bhuyan, Assistant Professor, |
| | burning stove for household and | Department of Family Resource Management |
| | commercial use | and Consumer Science |
| | | Faculty of Community Science, Assam |
| | | Agricultural University, Jorhat-13 |
| 15. | Design and development of a | Dr. Dhrubajyoti Borpujari, Assistant Professor, |
| | portable restraining device for pigs | Teaching Veterinary Clinical Complex, College |
| | | of Veterinary Science, Assam Agricultural |
| | | University, Khanapara 22 |
| 16. | Life Cycle Analysis of Advanced | Dr. Plaban Bora, |
| | Biofuel from Non-edible Oil | Assistant Professor, |
| | Feedstock of North-East India | Department of Energy Engineering, Assam |
| | | Science and Technology University, Jalukbari, |
| | | Guwahati-13, Assam |
| 17. | Fabrication of Solar Photovoltaic | Dr. Vikas Verma, |
| | Integrated Electrolyzer (SPIE) for | Assistant Professor, |
| | Clean Energy production | Department of Energy, Tezpur University, |
| 40 | Non-thermal presenting of Assert | Tezpur 784 028, Assam |
| 18. | Non-thermal processing of Assam | Nishant R Swami Hulle |
| | lemon juice using ozone processing | Assistant Professor, |
| | | Department of Food Engineering and |
| | | Technology, Tezpur University, Tezpur, Assam 784028 |
| | | 704020 |
| 19. | Preparation of oral phytochemical | Sanjib Khargharia |
| 10. | formulation against respiratory and | Asst Prof, LCVSc, AAU, Joyhing, North |
| | gut diseases of poultry | Lakhimpur |
| | gar allocator of pountry | |

| 20 | Development of indigenous plant oil | Dr. Nirrado Davi |
|---------|--|---|
| 20. | Development of indigenous plant oil | Dr. Nirmala Devi |
| | based soaps for livelihood security | Principal, Dona International Institute of |
| | and employment generation in Assam | Assam, Azara, Guwahati |
| 21. | Synthesis of organic polymer based | Dr. Md. Dilwar Alam Khan |
| | nanocomposite and its application in | Asst. Professor |
| | toxic heavy metals remediation of | Department of Chemistry |
| | drinking water | S. S. College, Hailakandi, Assam-788151 |
| 22. | Combination drug technology for | Dr. Bipul Sarma |
| | improved health care | Department of Chemical Sciences, Tezpur |
| | | University, Tezpur-784028, Assam |
| 23. | Quality evaluation of some ethnic | Archana Talukdar, PhD |
| | traditional food of Assam and their | Assistant Professor (Stage 2), Department of |
| | quality control using bacteriocin | Veterinary Public Health, College of Veterinary |
| | producing lactic acid bacteria | Science, Assam Agricultural University |
| | producing lacine acid bacteria | Khanapara, Guwahati-22 |
| 24. | Technology development for | Dr. Arjun Adhikari |
| | enhanced and widespread | Assistant Professor, |
| | cultivation of 'Bira jora' and 'Sokola | Deptt. of Botany, |
| | Tenga' and untapping their | M.C. College, Barpeta, Assam 781301 |
| | economic prospects | |
| 25. | Development of an Immunity-booster | Dr. Deepshikha Deuri, |
| | Functional Meat Product from | Junior Scientist (LPT), AICRP on PHET, |
| | Kadaknath Chicken incorporated | Khanapara Centre Dept. of Livestock Products |
| | with Indigenous Herbs | Technology Faculty of Veterinary Science, |
| | 3 | AAU, Khanapara, 781 022 |
| 26. | Development of goat bladder from | Dilip Kumar Deka, |
| | abattoir as pharmacologic tool for | Professor of Pharmacology, |
| | incontinence studies | CVSc, AAU, Khanapara, Guwahati-22 |
| 27. | Novel and cost-effective technology | Dr. Dipankar Kalita, |
| | for organoleptic preservation and | Innovator, |
| | long duration storage of the heritage | Institute of Advanced Study in Science and |
| | Assamese rice beverage "Apong" for | Technology (IASST), Paschim Boragaon, |
| | commercialization | Garchuk, Guwahati, Assam 781035 |
| 28. | Iron enrichment and phyto- | Dr. Kuleswan Pame, |
| | preservation of traditional pork | Assistant Professor Department of Livestock |
| | products of Mising tribe of Assam | Product Technology Lakhimpur College of |
| | and its technology up-scaling for | Veterinary Science Assam Agricultural |
| | commercialisation | University Joyhing, North Lakhimpur -787051 |
| 29. | Application of Molecular, | Prof. (Dr.) Munmun Sarma, |
| | Microscopic and Ultrastructural | Deptt. of Anatomy & Histology, College of |
| | Techniques on Study of Body Hair | Veterinary Science, Assam Agricultural |
| | for Species Identification of Wild | University, Khanapara, Guwahati |
| | Animals of Assam | PIN-781022, Assam |
| 30. | Quest for anti-diabetic drugs: | Dr. Namita Nath |
| | Characterization of bioactive | Associate Professor |
| | compounds isolated from minor fruits | Department of Botany, Gauhati University. |
| | of Syzygium nervosum and | Guwahati, Assam |
| | Syzygium assamicum | |
| <u></u> | , · · · | |

| 31. | Hyphenated technology driven | Dr. P. Radhakrishnanand |
|-----|--|--|
| 31. | 1 | |
| | analytical methods to validate the | Associate Professor, National Institute of Pharmaceutical Education |
| | active ingredients in traditional medicines of Assam | |
| | medicines of Assam | & Research-Guwahati, Changsari, Silla Village, |
| 20 | Lieu of planting to abolesse in | Guwahati, Assam-781101 |
| 32. | Use of plastination technique in | Dr Jiten Rajkhowa, |
| | teaching Macroscopic Veterinary | Assistant Professor, CVSc. Khanapara-22 |
| | Anatomy | |
| 33. | The Nature of Adaptability of Bio | Dr Polakshi Bhattacharyya Baruah, |
| | degradable Sanitary Pads Among | Assistant Professor, Department of |
| | the Women | Economics, Assam Don Bosco University |
| 34. | Design and development of external | Dr Arup Das, Assistant professor, Veterinary |
| | orthopaedic devices (Orthoses and | Surgery and Radiology, Veterinary Clinical |
| | Prostheses) for animals | Complex, College of Veterinary Science, |
| | | Assam Agricultural University, Khanapara, |
| | | Ghy-22 |
| 35. | Characterization and analysis of | Dr. Sushen Kirtania |
| | biodegradable composites reinforced | Assistant Professor, |
| | with locally available natural fibers in | Department of Mechanical Engineering, |
| | and around Assam | Tezpur University, Napam, Tezpur, Sonitpur, |
| | | Assam - 784028 |
| 36. | Delineation of soils based on nutrient | Dr Rashmi Baruah |
| | status and econometrics under | Junior Scientist |
| | different land uses for future | (Soil Science), Regional Agricultural Research |
| | sustainability in East Karbi Anglong | Station, Assam Agricultural University, |
| | using GIS and machine learning | Diphu, Karbi-Anglong 782460 (Assam) |
| | technique | |
| 37. | Developing a Farmer's User Friendly | Dr S. A .Arif |
| | Mobile Application using | Assistant Professor |
| | Participatory Epidemiological | Department of Veterinary Clinical Medicine, |
| | approach for Profitable Livestock | College of Veterinary Science, Assam |
| | farming in Assam | Agricultural university, Khanapara, Assam |
| 38. | Development of low-cost and high | Shyamal Kumar Das |
| | performance aluminum-graphite | Assistant Professor |
| | battery for rural electrification | Department of Physics, Tezpur University, |
| | | Assam, 784028 |
| 39. | Investigation of non-thermal plasma | H. Bailung |
| | activated water towards the | Prof. and Head |
| | beneficial effects on plants and biotic | Physical Sciences Division, |
| | stress control | Institute of Advanced Study in Science and |
| | | Technology (IASST), DST, Govt. of India, |
| | | Vigyan Path, Paschim Boragaon, Garchuk, |
| | | Guwahati - 781035, Assam |
| 40. | Technology generation for value | Dr. Arundhati Phookan, Asst. Prof (Stage 2), |
| | added geese meat products and | Dept, of Animal Genetics and Breeding, |
| | awareness for entrepreneurship | College of Veterinary Science, Khanapara, |
| | development in Geese farming in | Ghy-22 |
| | Assam: an approach towards | |
| | upgrading underestimated noble | |
| | sector of poultry | |

| 41. | Development of Environment friendly | Dr. Biswajit Dutta, Ph.D |
|-----|--|--|
| | compost by utilizing post-mortem | Assistant Professor (Stage: II), Department of |
| | poultry carcasses as an organic | Veterinary Pathology, |
| | fertilizer | College of Veterinary Science, Assam |
| | | Agricultural University |
| | | Guwahati-781 022 (Assam) |
| 42. | Development of a Recombinant | Dr. Deep Prakash Saikia |
| | subunit vaccine against Swine | Assistant Professor, |
| | pasteurellosis and evaluation of its | Department of Animal Biotechnology, Faculty |
| | immunoprotective efficacy | of Veterinary Science, Assam Agricultural |
| 40 | | University, Guwahati-781022 |
| 43. | Development of a Recombinant | Dr. Dipak Deka, |
| | Protein based indirect ELISA for | Associate Professor, |
| | Cost-effective Assessment of | Department of Animal Biotechnology, |
| | Immune Response to Rabies | College of Veterinary Science, Khanapara, |
| 4.4 | Vaccine in Canine and Human | AAU, Guwahati-22, Assam Dr. Ditul Barman |
| 44. | Development of dermatology laboratory for diagnosis and provide | Assistant Professor, |
| | therapeutic protocol for | Dept. of Clinical Medicine, CVSc, AAU, |
| | dermatological disorders in livestock | Khanapara, Guwahati - 22, Assam |
| | and petanimals | Manapara, Guwanati - 22, Assam |
| 45. | Augmentation of boar fertility using | Dr. Manna Baruti |
| 10. | proteomic approach in native breeds | Assistant Professor |
| | of Assam | PI, NECBH-DBT, College of Veterinary |
| | S. 7.100 S. 1.1 | Science, Assam Agricultural University, |
| | | Khanapara, Guwahati-22 |
| 40 | Fundamina Organo/Tipous of | Du Dough o It sati Noth |
| 46. | Exploring Organs/ Tissues of | Dr. Parsha Jyoti Nath Asst. Professor |
| | Slaughtered Porcine and Caprine Origin for Development of Biological | Deptt. of Surgery & Radiology, College of |
| | Alternatives to Address Skin and | Veterinary Science, AAU, Khanapara |
| | Abdominal Defects | Veterinary Gererice, AAG, Mianapara |
| 47. | Designing environment friendly low | Dr. Raj Jyoti Deka |
| | cost hoof trimming crate for intensive | Assistant Professor |
| | diary animals to facilitate welfare | Department of Livestock Production & |
| | | Management, College of Veterinary Science, |
| | | AAU, Khanapara, Guwahati |
| 40 | Development of Devid and Cost | Dunam Dutta DkD |
| 48. | Development of Rapid and Cost- Effective Visible Isothermal Assay | Rupam Dutta, PhD Assistant Professor, Department of Animal |
| | for Detection of Canine Parvovirus | Biotechnology College of Veterinary Science, |
| | Infection using Polymerase Spiral | Assam Agricultural University |
| | Reaction | Khanapara, Guwahati-22, Assam |
| 49. | Preparation of oral phytochemical | Sanjib Khargharia |
| 10. | formulation against respiratory and | Asst Prof, LCVSc, AAU, Joyhing, North |
| | gut diseases of poultry | Lakhimpur |
| | | 1 - |
| 50. | Development of technology for | Dr. Santosh Upadhyay |
| | extraction of protein hydrolysate with | Junior Scientist (Biochem.) AICRP on PHET, |
| | anti-diabetic and antioxidant | Khanapara Centre Dept. of Livestock Products |
| | peptides from slaughterhouse waste | Technology Faculty of Veterinary Science, |

| for its possible application in food | AAU, Khanapara, Guwahati 781 022 |
|--------------------------------------|----------------------------------|
| industry | |

(Dr. Jaideep Baruah) Head i/c, S&T Division, ASTEC