



List of Proposals Awarded Against First Call of Proposals for Technology Development Fund

- 1. TDF-005: Enzymes Production by Super Koji (*Aspergillus Oryzae*) for Food & Feed Industry, Process Scaling-up at Pilot and Industrial Level.**
Dr. Muhammad Hamid Rashid, Pr. Scientist
NIBGE, Faisalabad, PIEAS, Islamabad

- 2. TDF-016: Indigenization of Water Soluble Fertilizer to Minimize Production Cost for High Value Crops under Drip Irrigation.**
Dr. Syed Hamid Hussain Shah, Director
Water Management Research Center, University of Agriculture, Faisalabad

- 3. TDF-017: Indigenization and introducing new technology for removing contamination of fresh fruits and vegetables at household level.**
Dr. Aman Ullah Malik, Professor / Director
Institute of horticulture Sciences, University of Agriculture, Faisalabad

- 4. TDF-028: Implementation of a field portable prototype as an early warning system for on-site screening of food products in agriculture industry.**
Dr. Akhtar Hayat, Assistant Professor,
Interdisciplinary Research center in Bio medical material, COMSATS Lahore

- 5. TDF-029: Reshaping Online Consumer Experience with Data Driven Personalized Chatbots.**
Dr. Faisal Shafait , Associate Professor,
School of Electrical Engineering and Computer Sciences, NUST, Islamabad



6. TDF-033: Transforming biomass ash residues into commercializable products.

Dr. Basit Yameen, Associate Professor,
Department of Chemistry, LUMS, Lahore

7. TDF-035: Development of indigenized soil moisture sensor based precision irrigation scheduling for improving water use efficiency of different crops.

Dr. Allah Baksh, Professor/ Dean,
Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad

8. TDF-036: Development of innovative technologies to reduce postharvest losses in cereals, oil seeds and pulse.

Dr Irfan Afzal, Associate Professor,
University of Agriculture, Faisalabad

9. TDF-040: Development of probiotic fresh cheese.

Dr Arsalan Zaidi, Principle Scientist,
NIBGE, PIEAS

10. TDF-047: Sensor based Unmanned Aerial Agro-chemical spraying (UAAS) System.

Dr. Muhammad Jehanzeb Masud Cheema, Chair Pricision
University of Agriculture, Faisalabad

11. TDF-051: Commercialization of dried citrus pulp as concentrate source in animal feed.

Dr Muhammad Sharif, Associate Professor,
Institute of animal Sciences, University of Agriculture, Faisalabad



12. TDF-053: Introduction and promotion of one pass conservation tillage machinery for cotton wheat cropping system.

Dr. Alamgir Akhtar Khan, Chairman,
Muhammad Nawaz Sharif University of Agriculture, Multan

13. TDF-061: Design and development of solar hybrid seed dryer (SHSD) using ANSYS.

Dr Waseem Amjad, Assistant Professor,
University of Agriculture, Faisalabad

14. TDF-062: Development of commercial natural indigo dyes for dyeing cotton textile from indigenous indigo plants.

Awais Khatri, Associate Professor,
Mehran University of Engineering Technology, Jamshoro, Sindh

15. TDF-067: RFID Tags and Sensors for Inventory Control, Stock Security and Asset Monitoring.

Engr.Dr.Yasar Amin, Associate Professor,
University of Engineering and Technology, Taxila

16. TDF-068: Unattended Ground Motion Detection and Classification.

Dr. Adeel Akram, Professor,
University of Engineering and Technology, Taxila

17. TDF-077: SETMOKE: A Semantic Engine for Text Management using Ontology and Knowledge Engineering.

Dr. Muhammad Usman Ghani Khan, Associate Professor,
Al-Khwarizmi Institute of Computer Sciences, University of Engineering and Technology, Lahore



18. TDF-078: Brain Informatics: Classification and Modelling of Brain Data.

Dr. Muhammad Usman Ghani Khan, Associate Professor,
Al-Khwarizmi Institute of Computer Sciences, University of Engineering and Technology, Lahore

19. TDF-082: Design and Development of a solar assisted cold storage system for the preservation of perishables.

Dr. Anjum Munir, Associate Professor / Chairman
University of Agriculture, Faisalabad

20. TDF-084: Design and Development of vertical Balancing Machine for Local Industry.

Prof. Dr. Riaz Ahmed Mufti, Professor,
National University of Sciences & Technology, Islamabad

21. TDF-087: Designing, Establishment and Validation of non-invasive diagnostic kit of endemic viral infection in Pakistan.

Sobia Manzoor, Assistant Professor,
Atta-Ur-Rehman School of Applied Biosciences, National University of Sciences & Technology, Islamabad.

22. TDF-088: AAWAZ

Dr. Seemab Latif, Assistant Professor,
Military College of Signals, NUST, Islamabad

23. TDF-090: Design and Development of S-Band TRR Module for Phased-Array Radars.

Dr. Hammad M. Cheema, Assistant Professor,
Research Institute for Microwave and Millimetre wave Studies, NUST, Islamabad



24. TDF-092: Design and Development of UHF/VHF Band Software Defined Radio.

Wasif Tanveer Khan, Assistant Professor,
LUMS, Lahore

25. TDF-094: Converting inexpensive indigenous chitosan to high value commercial pro-angiogenic tissue engineered skin grafts for burn patients.

Dr. Muhammad Yar, Assistant Professor,
Interdisciplinary Research center in Bio medical materials, COMSATS, Lahore

26. TDF-095: Optimization, fabrication and designing of a portable solar powered umbrella.

Dr. Yasir Jamil, Associate Professor,
University of Agriculture, Faisalabad

27. TDF-097: Development of Artificial Intelligence based prediction system for shade change after finishing application.

Assad Farooq, Assistant professor,
Department of Fibre and Textile Technology, University of Agriculture, Faisalabad

28. TDF-102: Lab to Market: Xanthan gum production through microbial fermentation.

Dr. Rashida Rahmat Zohra, Assistant Professor,
Jinnah University for Women, Karachi

29. TDF-107: Preparation of highly specific ELISA kit based on recombinant outer membrane protein (OMP) of *Pasteurella multocida* B2 to detect post-vaccination immune response.

Aamir Ghafoor, Associate professor,
University of veterinary and Animal Sciences, Lahore



30. TDF-110: Light weight bullet proof vest made from 3D comingled woven thermoplastic composite and novel auxetic woven fabrics.

Dr. Yasir Nawab, Assistant Professor,
National Textile University, Faisalabad

31. TDF-116: End-to-end secure communication over voice channel.

Dr. Liaqat Ali Khan, Professor,
The institute of avionics and aeronautics, Air University, Islamabad

32. TDF-039: Buffer Optimized high gradient magnetic separation technology to study the biology of livestock parasites: Immuno-magnetic isolation of infected erythrocytes

Dr. Mazhar Qayyum
Professor Zoology, University of PMAS-AAR, Rawalpindi

33. TDF-011: Development of Bio herbicide Containing Allelopathic Bacteria for Biocontrol of Weeds of Wheat

Dr. Zahir Ahmad Zahir
Professor of Soil management, University of Agriculture, Faisalabad

34. TDF-044: Synthesis of ferrites based polymer sheets for radar absorbing application: Structural dependence and effect of binary/ ternary oxides addition.

Dr. Muhammad Atif
Associate Professor, Physics, Air University, Islamabad

35. TDF-001: Development and Production of Lyophilized Radiopharmaceutical cold Kits of ^{177}Lu / $^{99\text{m}}\text{Tc}$ -DOTA Octreotate Diagnosis and Therapy of Common Cancer in Pakistan

Dr. Samina Roohi
Deputy Chief Scientist, Isotope Production Division, PINSTECH-PIEAS, Islamabad