

Proposals Awarded Against TDF 2nd Call (2017-18)

SN.	Project Code	Project Title	PI Information	Partner Industry	University
1	TDF02-053	<i>MULTI-TASKING MACHINE FOR PRECISION SOWING OF ROW CROPS</i>	Dr. Muhammad Jehanzeb Masud Cheema, Program Chair Precision Agriculture, Assistant Professor (BPS-19), Agricultural Engineering mjm.cheema@uaf.edu.com, 0419201919, 0336 8303500	Capt Shahid Raheem, CEO, Agritech Industries, agritec47@hotmail.com, 0616537912, 0321 6389672	University of Agriculture Faisalabad
2	TDF02-098	<i>Need based Integrated E-Learning System for Agricultural Technology Transfer by Using Hybrid Approach</i>	Dr. Babar Shahbaz, Associate Professor, Email: babar.shahbaz@gmail.com , bshahbaz@uaf.edu.pk, Mobile: 03005304934	Dr. Zaheer Ahmad, Agronomy Functional Head, Agrobusiness Solution Division, Engro Fertilizer Ltd., Email: dzahmad@engro.com , Mobile: 0302 8400711 ; +92 21 111 211 211	University of Agriculture Faisalabad
3	TDF02-103	<i>Design and development of a portable water monitoring system</i>	Dr. Muhammad Uzair Qamar, Irrigation & Drainage, Assistant Professor (TTS), Irrigation & Drainage, muhammad.uzair@uaf.edu.com, 0419200161, 0333-5391244	Mr. Abid Javed, Zonal Manager, Faisalabad, engg.aabid@gmail.com, +92423-7651405, 0300-8614884	University of Agriculture Faisalabad
4	TDF02-106	<i>Development, promotion and commercialization of eco-friendly herbal dewormer for the control of parasites in livestock</i>	Dr. Rao Zahid Abbas, Associate Professor (TTS), Parasitology, raouaf@hotmail.com, 041-2631988, 0300-6682811	Muhammad Kashif, AS Harbal Products Gojra 0300-7674684, asherbal483@gmail.com	University of Agriculture Faisalabad
5	TDF02-117	<i>Development and Implementation of an Open Source Extreme Rainfall and Flood Monitoring System for Real Time Alerts and Emergency Management Activities.</i>	Dr. Muhammad Adnan Shahid, Assistant Professor (TTS), Water Management Research Center, University of Agriculture, Faisalabad. m_adnanshahid@yahoo.com, 0419239136, 0323-6023343	Mian Salman Khalid, CEO SK Developers, Net Cash Pakistan. 041-2432244, 0300-8666716, admin@skdevelopers.info	University of Agriculture Faisalabad

6	TDF02-147	<i>Development of packaging protocols for commercially processed products of mango, Kinnow, potato and tomato</i>	Dr. Inam-ur-Raheem (Assisant Professor, National Institute of Food Science and Technology, raheemuaf@gmail.com, +92-419200008, +92-333-6569275)	Mr. Riaz Ahmad, Production Manager, Shezan International Ltd., Lahore, riaz.ahmad@shezan.com, +92-4237466900-341, +92-332-2132338)	University of Agriculture Faisalabad
7	TDF02-153	<i>Design and Development of Biosorbent Technology for Removal of Heavy Metals from Industrial Effluents using Waste Derived Biomaterials</i>	Raziya Nadeem, Assistant Professor, Chemistry/ Analytical Chemistry, University of Agriculture, Faisalabad, 041-9200161-3309, Mobile: 03228669634, +92419200764, Email: raziyaanalyst@yahoo.com Postal Address: House No. 512, Hussain Street, Al-Najaf Colony, Faisalabad	Muhammad Naeem, Director, Textile Printing, United Textile Printing Industries (Pvt) Ltd, United Textile Printing, Industries (Pvt) Ltd. Maqbool Road, Faisalabad, Pakistan, 41-8535936 Fax: (Area code, number) 41-8531936, 03218661336 Email: united@unitedlimited.com	University of Agriculture Faisalabad

8	TDF02-162	<i>Commercialization of a novel indigenous methodology to produce menthol crystals to fulfil local market demands</i>	Dr. Muhammad Asif Hanif, Assistant Professor, TTS-19, Chemistry, drmuhammadasifhanif@gmail.com, 9200161, 00923338362781	Muhammad Arshad, Sole Proprietor PAMICO TECHNOLOGIES, Pamico Technologies, P-214, st no 2 Shadab Colony, Jhang Road, Faisalabad. Phone No:0092-321-6615711, Email: pamicotechnologies@gmail.com	University of Agriculture Faisalabad
9	TDF02-225	<i>Design and development of Anaerobic digestion process with enriched biomethane for power generation for industrial applications/Dairy Farms</i>	Dr. Ehsan Ali, Applied Biosciences and Biotechnology, Professor (BPS-20), ihsnalidr@gmail.com, PBI UAF Faisalabad	Mr. Kashif Rafique Arifidi, Managing Director, Fresh Foods, kashifarifidi@yahoo.com, Behram Village, Risal Pur, Dist Nowshera, Mobile: 03219092765	University of Agriculture Faisalabad
10	TDF02-243	<i>Enhancing value addition of milk by developing specialized cheese and cheese spread</i>	Dr. Ayesha Sameen, Assistant Professor, UAF, 033266107333, ayeshasameen@uaf.edu.pk	Dr. Nasr Minallah, Head MPD, Fauji foods Ltd, nasr.minallah@faujifoods.com, 03234006000	University of Agriculture Faisalabad
11	TDF02-245	<i>Environment friendly extraction technology of natural flavor, fragrance and food colors from indigenous plant material.</i>	Dr. Muhammad Nadeem Akram, Horticulture, Assistant Professor TTS (BPS-19), nadeem.akram@uaf.edu.pk, 041-920161-170 Extension 2935, 03041166574	Dr. Zahid Ashraf, Director Ashraf laboratories (pvt) Ltd. info@ashraflabs.com, 041-8847601-02	University of Agriculture Faisalabad

12	TDF02-246	<i>Linking nutrition to cereal brans: production and commercialization of modified bran flours</i>	Dr. Imran Pasha, NIFSAT, UAF, Associate Professor (BPS-20), ipasha2001@uaf.edu.pk, 0419200853, 0321-6886886	Mr. Danish Shafi, Director, Operations, Shafi Flour Mill, shafiflourmill@gmail.com, (041) 243 5014, 03008666008	University of Agriculture Faisalabad
13	TDF02-016	<i>Maximizing shelf life, microbial safety and quality of red meat through Modified atmosphere packaging technology</i>	Dr. Muhammad Sohaib, Assistant Professor (BPS-19), Food Science and Human Nutrition, University of Veterinary and Animal Sciences, Lahore, muhammad.sohaib@uvas.edu.pk , 042-99212866, 0321-6843849	Mr. Muhammad Imran, Manager Quality Assurance, Metro Cash and Carry. tanolian85@yahoo.com, muhammad.imran@metro.pk, 04237508000, 0324-5000476	UVAS, Lahore
14	TDF02-018	UTILIZATION OF POULTRY WASTE AS AN ENTREPRENEURSHIP	PROF.DR. ATHAR MAHMUDMUD, PROFESSOR/CH AIRMAN, POULTRY PRODUCTION, UNIVERSITY OF VETERINARY AND ANIMAL SCIENCES LAHORE, Telephone:(area code, number and extension) +92(42)99213661Ext216, 5000 Mobile: 0300-8845733 Fax: (area code, number) Email: atharmahmud@uvas.edu.pk	Ch. Shabir Hussain, Chief Executive, BIRD INN POULTRIES(PVT) Ltd.Pakistan, birdinnpoultres786@gmail.com, 03000999907, 03216958586	UVAS, Lahore
15	TDF02-023	<i>Development, validation and commercialization of rapid screening diagnostic strip for cutaneously transmitted bovine zoonoses in Pakistan: A step towards control of occupational hazards in dairy industry.</i>	Dr. Raheela Akhtar. Department of Pathology, Assistant Professor (TTS-19) raheela.akhtar@uvas.edu.pk 0312-4287296	Aslam Javaid, CEO Scientific traders, Lahore . Suit # 4, Basement Hira center , 15 Abkari Road Lahore . Phone No: 03014435875 , 042-37214884 , Email: scientific.traders@yahoo.com	UVAS, Lahore
16	TDF02-028	PREPARATION AND EVALUATION OF MULTIVALENT VACCINE FOR CLOSTRIDIUM PERFERINGINS USING LOCALLY CHARACTERIZED TOXINOTYPES	Prof. Dr. Aftab Ahmad Anjum, Microbiology, Professor (BPS-21), aftab.anjum@uvas.edu.pk, 0300-7259445	Muhammad Naveed Aslam, Plant Manager, Leads Pharmaceutical, mrnavidmna@gmail.com, 051-4441081, 0332-4336885	UVAS, Lahore

17	TDF02-041	THE DEVELOPMENT OF HIGHLY SENSITIVE NOVEL "ELISA KIT" FOR THE QUANTITATIVE DETECTION OF 146S FRACTION OF FOOT AND MOUTH DISEASE (FMD) VIRUS FOR THE QUALITY PRODUCTION AND EVALUATION OF FMD VACCINE IN PAKISTAN	IMRAN ALTAF, UVAS Lahore, imran.altaf@uvas.edu.pk, 03074464628	Dr. Sajjad Hussain, Additional Director FMRC, VRI, LHR, PAK, sajjadsanghi@gmail.com, imran.altaf@uvas.edu.pk,	UVAS, Lahore
18	TDF02-059	Establishing IVEP-Center - An entrepreneurial step towards self-sustainability for Dairy industry of Pakistan	Dr. Amjad Riaz Associate Professor - Tenured (BPS-20) Theriogenology dramjadriaz@uvas.edu.pk +92-3335262325 +92-42-99211449-50 Ext.242	Dr. Muhammad Farooq Alhaiwan series sahiwal info@alhaiwan.com Cell No.: +92 321 8695054	UVAS, Lahore
19	TDF02-093	Extracorporeal Shock-Wave Therapy for Treating Musculoskeletal Injuries in Horses in Pakistan".	DR. SHEHLA GUL BOKHARI, ASSISTANT PROFESSOR (TTS), CLINICAL MEDICINE & SURGERY/ PET CENTRE, UNIVERSITY OF VETERINARY & ANIMAL SCIENCES, LAHORE, Mobile: 03364743413, shehla.gul@uvas.edu.pk Postal Address: c/o Pet Centre, University of Veterinary & Animal Sciences, Lahore, 54000.	Sheikh Shahzad Akhtar, Secretary Lahore race club, 03335505000	UVAS, Lahore
20	TDF02-094	The Use of Platelet-Rich Plasma (PRP) for Treatment of Musculoskeletal Injuries in Horses	Dr. Shehla Gul Bokhari, Assistant Professor, Dept of Clinical Medicine & Surgery (Pet Centre), University of Veterinary & Animal Sciences, Lahore. shehla.gul@uvas.edu.pk 03364743413	Mr. Sheikh Shahzad Akhtar, Secretary, Lahore Race Club, Lahore. irc_races@hotmail.com; 03335505000	UVAS, Lahore
21	TDF02-095	"A Sonographic Diagnosis and Platelet-Rich Plasma (PRP) Treatment for Superficial (SDFT) and Deep (DDFT) Digital Flexor Tendon Injuries in Race Horses in Lahore".	Dr. Shehla Gul Bokhari, Assistant Professor, Dept of Clinical Medicine & Surgery (Pet Centre), University of Veterinary & Animal Sciences, Lahore. shehla.gul@uvas.edu.pk 03364743413	Mr. Sheikh Shahzad Akhtar, Secretary, Lahore Race Club, Lahore. irc_races@hotmail.com; 03335505000	UVAS, Lahore

22	TDF02-116	<i>High Pressure Processing Innovative Technology for Development of All-Natural Fruit Juices</i>	Hafiz Muhammad Shahbaz Department of Food Science & Human Nutrition University of Veterinary & Animal Sciences (UVAS) D6. CNIC# 333021969687-7 : 042 99211449 Mobile: 0344 4400660 shahbaz.uaf@gmail.com; muhammad.shahbaz@uvas.edu.pk Postal UVAS Lahore	Muhammad Nauman R&D Manager Tops Food & Beverages, Telephone: 051 5567041-7 Fax: 051 556546) Mobile: 0322 6024640 Email: noman1725@gmail.com	UVAS, Lahore
23	TDF02-111	<i>Production of special cement by incorporating polymers to enhance its properties like resistance to water penetration , chemical attacks , crack attacks and corrosion , and inducing high strengths and durability.</i>	Dr Maria Idrees , Assistant Professor, TTS, mariaidrees@uet.edu.pk, 03328713752, 04235417025	Shiekh Javed Elahi, Advisor technical, Pioneer Cement Ltd, 135 Ferouzpur road Lahore Pakistan, www.pioneercement.com,jelahi@pioneer cement.com, 03008412801	UET Lahore
24	TDF02-113	LOCAL LANGUAGE SPEECH INTERFACES FOR BANKING SECTOR OF PAKISTAN	Dr. Tania Habib Assistant Professor Computer Science and Engineering Department, University of Engineering and Technology Lahore tania.habib@kics.edu.pk Mobile: 0344-9321252 landline:042-36821444	Tanzeel Ur Rehman Chief Operatinf Officer, Virtual Force Private Limited. +923334294133 info@virtualforce.io	UET Lahore
25	TDF02-114	ENERGY EXTRACTION BY SAFE DISPOSAL OF MUNICIPAL WASTE USING NANOTECHNOLOGY	Dr. Khurshid Aslam Bhatti , Physics, Associate Professor (BPS-20), kabhatti@uet.edu.pk, 0321-6634399	Khalid Ahmed Khan CEO 0300-8471010	UET Lahore
26	TDF02-128	AUTOMATIC PAKISTANI POSTAL ADDRESS RECOGNITION AND PARCEL ROUTING	Dr. Sarmad Hussain Center for Language Engineering, Al-Khawarizmi Institute of Computer Sciences, University of Engineering and Technology, Lahore Mobile: 0300-8414909, sarmad.hussain@kics.edu.pk Postal Address: 133 C Model Town, Lahore, Pakistan	Sohail Iqbal Sheikh, Director, TCS, sohail.shaikh@tcs.com.pk,	UET Lahore

27	TDF02-142	<i>Sustainable, water, chemical and cost efficient textile bleaching</i>	Dr. Muhammad Mohsin, Head/Assistant Professor (BPS-19), Department of Textile Engineering, mohsinmalikntu@yahoo.com, 0412433507, 0321-6010058.	Mr. Zahid Hussain, Senior Manager Interloop, zhussain@interloop.com.pk, 0414360400, 03018661378.	UET Lahore
28	TDF02-171	<i>Design and Development of an Automatic, Robotized and Portable Cleaning System for Solar Photovoltaic Plants</i>	Dr. Waqar Mahmood, Electrical, Professor, Electrical, director@kics.edu.pk, 0321-4755919	Naeem ul Hassan, General Manager, SolarTech Pvt. Ltd., solartech.naeem@gmail.com , 0316-9638965	UET Lahore
29	TDF02-172	<i>Design and Development of Capacity Tester for Valve Regulated Lead Acid (VRLA) Batteries as per IEEE Standard 1188</i>	Dr. Waqar Mahmood, Electrical, Professor, Electrical, director@kics.edu.pk, 0321-4755919	Muhammad Asif Hussain, PhD. Assistant Professor , CERAD UET KSK, asif.hussain@uet.edu.pk , 0336-6645000	UET Lahore
30	TDF02-173	<i>Gadget (Test bench) development for water pump/agricultural tube well energy efficiency measurement and improvement</i>	Dr. Tahir Izhar, Professor (BPS-21), Electrical Department, tizhar@gmail.com, 0333-4249247	Mr. Ahmad Hassan, CEO:Chenab Engineering Focal Person: Mr. Bakhtiar Ahmad, (Director Operations) info@chenabfoundries.com, 041-8751048, 0301-8654491	UET Lahore
31	TDF02-228	<i>VR based neurogaming for mindfulness in children and ADHD patients</i>	Dr. Usman Ghani Khan, Al-khawarizmi Institute of Computer science, Assistant Professor (BPS-19), Computer Science, usman.ghani@kics.edu.pk, 042-99250202, +92-300-6808467	Muhammad Atif Nazeer, Director, Information Technology, Software development , Atifworld1988@gmail.com, +92-321-4666642	UET Lahore
32	TDF02-065	<i>Development of High Performance and Reliable MEMS Inertial Sensors for UAVs Applications</i>	Dr. Muhammad Mubasher Saleem, Assistant Professor, Mechatronics Engineering, College of Electrical and Mechanical Engineering, National University of Sciences and Technology (NUST), Islamabad, Mobile: +92-3336333734 , mubasher.saleem@ceme.nust.edu.pk, Postal Address: Department of Mechatronics Engineering, NUST College of E&ME, Peshawer Road, Rawalpindi	Mr. Fahad Tiwana – Tech Valley, CEO, Technology/Engineering Services, Engineering Services, Tech Valley, 2nd Floor, Technology, Incubation Center, National University of Sciences and Technology, H-12, Islamabad, 0333-5396657 Email: Tiwana@g.harvard.edu	NUST Islamabad

33	TDF02-072	<i>Development of Antenna Training and Measuring System.</i>	Dr. Farooq Ahmad Bhatti, Associate Professor, EE, MCS NUST, fabhatti@mcs.nust.edu.pk,03335177375	Masud Ahmed Bhatti, Proprietor, MUBARAK Hi-tech, mubarakhitech.1950@gmail.com, 03335177362	NUST Islamabad
34	TDF02-154	<i>EKKO - Wave Therapeutic Device "Fostering a Disability free Society"</i>	Dr. Muhammad Usman Akram, Assistant Professor, Computer Engineering Department, usmakram@gmail.com, 051-2304729, 0333-6913921	Dr. Sajid Gul Khawaja, CTO, RISETech, sajid.gul.2009@gmail.com, 051-1234567, 0345-5192792	NUST Islamabad
35	TDF02-164	<i>Development of Engineering Rubber Compounds for Automotive Applications</i>	Prof. Dr. Nasir Mahmood Ahmad, Professor, School of Chemical and Materials Engineering, SCME, National University of Sciences and Technology, NUST, Mobile: 03334109990, Email: nasir.ahmadl@scme.nust.edu.pk Postal Address: SCME, NUST. H-12, Islamabad	Mujtaba Hassan, Director CHENAB ENGINEERING WORKS & FOUNDRIES PVT LTD, DIRECTORS, FOUNDRY & MACHINING, MAIN JHUMRA ROAD, NISHATABAD, FAISALABAD.0092-41-8751048, 03216608440 Email: M.HASSAN@CHENAB FOUNDRIES.COM	NUST Islamabad
36	TDF02-176	<i>Retrofitting of Brick Kilns to Improve Energy Efficiency and Environmental Impact</i>	Muhammad Bilal Sajid, Assistant Professor, United States – Pakistan Center for Advanced Studies in Energy (USPCASE), National University of Sciences and Technology (NUST), Mobile: 0321-9989991 Fax: (area code, number) ;, Email: mbilalsajid@uspcase.nust.edu.pk, Postal Address: USPCASE, NUST, Sector H-12, Islamabad	Waqar Mehdi, EPC E5. FACTORY / INDUSTRY Al-GHAZI Engineering Works E6. OFFICIAL MAILING ADDRESS Al Ghazi Engineering Works, Kala Shah Kaku Lahore	NUST Islamabad
37	TDF02-182	<i>Low cost precision agriculture services using high resolution multi-spectral imaging and mapping software</i>	Dr. Waqar Shahid Qureshi, Asst. Prof. NUST College of EME, Department of Mechatronics Engineering	Mr. Fahad Tiwana, Tech Valley, TIC NUST	NUST Islamabad

38	TDF02-209	<i>INDIGENOUS FABRICATION OF AL₂O₃ CERAMIC TILES FOR BALLISTIC ARMOUR</i>	Dr. Malik Adeel Umer; Assistant Professor; TTS; Grade-19; School of Chemical and Materials Engineering; umer.adeel@scme.nust.edu.pk; 03470002747; 0321-5040103	Mujtaba Hassan, Director; m.hassan@chenabfoundries.com; 0418751048	NUST Islamabad
39	TDF02-262	<i>Automating Industrial Supply Chains for Provenance and Compliance Using a Blockchainbased Internet-of-Things Solution</i>	Dr. Taha Ali, Assistant Professor, taha.ali@seecs.edu.pk, 051-90852117, +92-335-2790514, School of Electrical Engg. And Computer Science, NUST, Islamabad. (H-12 Campus)	Dr. Saad Bin Qaisar, CTO, Bitsym Private Limited, Islamabad. saad@bitsym.com. +92-33-5580-5580.	NUST Islamabad
40	TDF02-035	<i>Smart Rice Quality Analyzer Gadget Using Machine Learning and Image Processing</i>	Dr. Muhammad Khurram, Associate Prof. BPS-20, Computer Engg, NED UET, mkhurrum@neduet.edu.pk, 03353046110	Mr. Aansar Abbas, Al Karam Rice Engineering, S.I.T.E., Karachi, 92 21 32550291 aansarabbas@yahoo.com	NED UET, Karachi
41	TDF02-057	<i>Digital Surveying and Modeling of Buildings and Surroundings using Hand Held Laser Scanners</i>	Dr. Syed Riaz un Nabi, , Assistant Professor (BPS-19), Electronic, riazun1036@gmail.com, 02199261261, 0314-2053562	Mr. S. Imran, CEO, Techno world instrument service, imran@twis.com.pk, 021-34817776, 0300-2134373	NED UET, Karachi
42	TDF02-145	<i>LOW COST ASSISTIVE ROBOTS FOR DIFFERENTLY ABLED CHILDREN AND GENERAL USE</i>	Dr. Hashim Raza Khan, BPS-19, Assistant Professor/Senior Manager Instrumentation Centre, Electronic Engineering Department, hashim@neduet.edu.pk, 021-99261261 (8 lines) Ext: 2407, 2514, Cell: 03213743422	Mariyum Jamshid, COO Traxlogic +92-313-2148-449, mariyum.jamshid@hotmail.com	NED UET, Karachi

43	TDF02-235	<i>Adoption of Scientific Software (Fluent, Cadence And Matlab) As Cloud Services</i>	DR. MUHAMMAD ALI ISMAIL ,Associate Professor & In-Charge High ,Performance computing , Centre ,Computer and Information Systems Engineering ,NED University of Engineering and Technology ,030022555856 ,Email: maismail@neduet.edu.pk, alibaluja@gmail.com ,Postal Address: Department of Computer & Information Systems Engineering NED University of Engineering and Technology, Karachi - 75400	MUHAMMAD ABID MUNIF KHAN , M.S - National University of Computer and Emerging Sciences (FAST) ,SQA Automation Lead, Contour Software (Pvt) Ltd and Fast Computer Solutions,Office No. 1, Babe-Usmani, Plot No. 31 Bahdurabad , Karachi., 0321-9234078,fastcomputers@yahoo.com	NED UET, Karachi
44	TDF02-270	<i>Intelligent Energy Efficient Fans for Home and Commercial Users</i>	Prof. Dr. Saad Ahmed Qazi, Professor/Dean (Electrical & Computer Engineering), Electrical Engineering, , University Road, Karachi 75270, 021-99261261-8 Ext: 2390, 03238228867, saadqazi@neduet.edu.pk	Asad Ishaque Suri, Mehran Electron company Karachi. Partner, Plot No. 16, Sector 6A, North Karachi, Karachi, mehranfans@hotmail.com	NED UET, Karachi
45	TDF02-038	<i>Performance of confined Dry Block Masnry Against Blast Loading</i>	Dr.Khan Shahzada, Associate Professor, Civil Engineering Department, University of Engineering & Technology Peshawar	Yaqoob Khan, Eco Enterprises Islamabad +92-300 8540337, yaqoobkhan@gmail.com	UET , Peshawar
46	TDF02-040	<i>Establishment of Center for Industrial and Building Energy Audits (CIBEA) at UET Peshawar</i>	Dr. Mohammad A Irfan, Professor (BPS-21), Department of Mechanical Engineering 091-9216499 0346-930-4648	Zarak Khan, CEO, FF Pvt. Ltd, Peshawar, , Mobile: 0300 8560439 Email: zk@ff.com.pk	UET , Peshawar
47	TDF02-052	<i>Marble industry: A case study on industrial symbiosis, envisioning zero waste</i>	Dr. Muhammad Imran Ahmad, Assistant Professor (TTS), Chemical Engineering Department, imran.ahmad@uetpeshawar.edu.pk, 03449020774	Mr. Waqas Ahmed Ansari, Manager (Projects), Pakistan Stone Development Company (PASDEC). waqas.pasdec@gmail.com, 051-92634657.	UET , Peshawar

48	TDF02-157	<i>Design and development of dynamic Power Factor correction controller</i>	Dr. Abdul Basit, Assistant Professor, U.S. Pakistan Center for Advanced Studies in Energy (USPCAS-E), University of Engineering & Technology, Peshawar, Mobile: 03119965550, 091-9219581, : Email:abdul.basit@uetpeshawar.edu.pk, Postal Address: Sector B/3, Plot D, Near Sui Gas Office, Opposite ILM School, Hayatabad, Phase 5, Peshawar, Khyber Pakhtunkhwa Pakistan.	Taimur Ahmad, Chief Executive Officer, CREATIVE ENGINEERING & MANAGEMENT SERVICES (CEMS), H#640, Street#20, Jasmine Block, Sector C, Bahria Town Lahore, Contact:	UET , Peshawar
49	TDF02-187	<i>Development of Low Cost, Engineered, Energy Efficient, Sustainable Housing</i>	Dr. Mohammad Adil, Assistant Professor, Department of Civil Engineering, University of Engineering and Technology, Peshawar, adil@uetpeshawar.edu.pk, +923139543411	Naveed Saeed Khan, CEO, FASTFOLD, NORWEST GROUP (Pvt) Ltd. Islamabad, Office No. 02, 3rd Floor, TS Plaza, DHAPhase II, Main GT Road, Rawalpindi, Pakistan	UET , Peshawar
50	TDF02-071	<i>Design and Development of a Rotibot (An Automated machine/appliance to cook bread/chapatti roti)</i>	Dr. Wasif Tanveer Khan, Assistant Professor of Electrical Engineering, LUMS, wasif.tanveer@lums.edu.pk, 042-35608471 ,+923336480649	Mr. Khurram Zafar, Director 47 Ventures, kz@47.ventures, +92-0333-4826459	LUMS, Lahore
51	TDF02-075	<i>Internet of Things (IoT) based Conversion Kit for Motor Loads</i>	Dr. Tariq Mahmood Jadoon Associate Professor and Department Chair Electrical Engineering, SBASSE jadoon@lums.edu.pk +92 300 8429478	Mr. Waqas Moosa Director Marketing Marketing department waqas.moosa@hadronsolar.com +92 42 35008041 +92 345 8492425	LUMS, Lahore
52	TDF02-101	<i>Li-Ion battery unit as replacement of Lead-acid batteries for existing and new storage based electrical systems.</i>	Dr. Jahangir Ikram, Associate Professor of Electrical Engineering, LUMS, jikram@lums.edu.pk, 042-35608303 ,+92 300 8476345	Mr. Mansoor Lashari, Director Business Development, Sozo Group of Companies, mansoor.lashari93@gmail.com, 051-35408767, +92-321 4160 692	LUMS, Lahore

53	TDF02-127	<i>MICROFLUIDIC LAB ON A CHIP CYTOMETER FOR POINT OF CARE HIV/AIDS DIAGNOSTICS</i>	Dr. Nauman Zafar Butt, Electrical Engineering, Assistant Professor, nauman.butt@lums.edu.pk, 0423-5608414, 0322-8428231	Dr. Faisal Sultan, Chief Executive Officer (CEO), Shaukat Khanam Memorial Hospital & Research Center, faisal@skm.org.pk, +92 42 5905000 x3002, 0300-8401089	LUMS, Lahore
----	-----------	--	---	---	--------------

54	TDF02-069	<i>PROCESS SCALE UP AND OPTIMIZATIONS FOR SYNTHESIS OF THERMOSTABLE INDUSTRIAL ENZYMES</i>	Dr. Nasir Ahmad, Assistant Professor (BPS-19), Institute of Agricultural Sciences, nasirahmad.iags@pu.edu.pk, mna.pk1@gmail.com, 042-99231846, 0331-4408881	Muhammad Nasir Ahmed, Manager Operations, AB Mauri Pakistan Phone; 04235260591-4 Extn. 108 Mobile No. 03034446575	University of Punjab, Lahore
55	TDF02-163	<i>DEVELOPMENT OF CELL REPLACEMENTS FOR REPAIR OF DAMAGED AND DISEASED ORGANS</i>	Azra Mehmood, Assistant Professor, Stem cells research group Centre of Excellence in Molecular Biology (CEMB), University of Punjab, Lahore, (42) 35293141-46 Mobile: 03334107008, Email: azra_mehmood@hotmail.com +92 (42) 35293149 Postal Address: Centre of Excellence in Molecular Biology, 87-West Canal Bank Road, Thokar Niaz baig University of the Punjab, Lahore-5700, Pakistan	Shehla Javed Akram, CE, DON VALLEY PHARMACEUTICALS Pvt Ltd, shehlajavedakram@yahoo.com, 03008442010, 04235935196	University of Punjab, Lahore
56	TDF02-169	<i>Transforming CEMB-PARBBiotech maize prototype into viable commercial product for sustainable maize production.</i>	Prof. Dr. Idrees Ahmad Nair, Molecular Biology, Professor (BPS-21), CEMB-Punjab University, dr.idrees@gmail.com, 04235293139, 0321-7440016	Mr. Aamir Aziz Malik, Head Agri farm Services, ceo@aziz-group.com, 0616537720, 0300-8639190	University of Punjab Lahore
57	TDF02-244	<i>Cost Effective Production of Essential oils for Pharmaceuticals, Flavor and Cosmetics.</i>	Dr. Shabnam Javed, Chemistry, Assistant Professor (BPS-19), Chemistry, Centre for Undergraduate Studies, shabnam.hons@pu.edu.pk, 042-99232068, 0323-4830505	Mr. SHAHID SAMEER, Managing Director, NS Engineering Concern, nsec786@hotmail.com, 092-03214524669 042-36848662	University of Punjab Lahore

58	TDF02-046	<i>Commercialization of high wear and corrosion resistance Iron based Amorphous-ceramic composite coatings for industrial applications</i>	Dr. Muhammad Yasir, Assistant Professor, Materials Science & Engineering, muhammadyasir85@gmail.com,0519075508,03335772469	Naveed Ashraf ,Senior Manager R&D, Shafi Reso Chemicals SRC (Pvt) Ltd. Telephone: 04235260401-04 Fax: 04235260416 Mobile: 03400009402 Email: naveed.ashraf@src.com.pk	IST Islamabad
59	TDF02-070	<i>Development of Monopulse Microwave Instrument Landing System (ILS) receiver and glide slope Antenna Array</i>	Dr. Muhamamd Amin, Avionics, Professor (BPS-21), RF and Microwave, Dr.Ing.Amin@gmail.com, 0519075425, 0310-4151033	AVM Asad Ikram, DG Aviation Design Institute (AvDI), PAC, Kamra ikramasad@hotmail.com, 051-90992015,051-9225514, 0322-8594039	IST Islamabad
60	TDF02-188	<i>Design & Development of an Intelligent UAS Powered Sustainable Forest Management System</i>	Dr. Abdul Munem Khan (Professor, BPS-20, Aeronautics & Astronautics, munem1961@gmail.com, 0519075530, +923208844136	Mr. Aamir Majeed, CTO & Co-Founder, aamir@burqstream.com, 051-5172721, +92-333-7686258	IST Islamabad

61	TDF02-223	<i>Development of an assistive device for independence and mobility of paraplegic patients</i>	Dr. Zareena Kausar, Robotics, Assistant Professor , Mechatronics Engineering, zareena.kausar@mail.au.edu.com, 051-9262557-238,	Maj Gen Professor Salman Ali, Fazaia Medical College Islamabad (051 2281487)	Air university Islamabad
62	TDF02-268	<i>DIGITAL LAND MAPPING FOR MEGA PROJECTS</i>	Dr. Ibraheem Haneef, Associate Professor, Institute of Avionics & Aeronautics, Email: ibraheem.haneef@mail.au.edu.pk, ih122702@gmail.com, 051-9507845, 0331-4288863, 0320-8844085	Mr. M. Osama A. Gillani, Mapalytics Pvt Ltd. Tel : 0334-5501073 Email: gillani@mapalytics.org, osamagillani@gmail.com	Air university Islamabad

63	TDF02-024	<i>Development of a Nontracking Collector with Nano Fluids to Enhance the Thermal Capabilities of the Collector</i>	Dr. Ali Nawaz Mengal, Assistant Professor, Mechanical Engineering Department, ali.nawaz@buitms.edu.com aliract@gmail.com, 03482109116	MUHAMMAD NAVEED ASHRAF, Shafi Resco, Head Office (Plant) 3km Bulhar Road off 22 Km Ferozpur Road Rohi nallah Lahore Pakistan. Postal Code 53100	BUIITEMS, Quetta
64	TDF02-054	<i>Study on the effects of Silver nano particles (AgNPs) in epoxy monomers based PDLC films (Smart glass)</i>	Dr. Mujtaba Ellahi, Balochistan University of Information Technology, Engineering and Management Sciences (BUIITEMS), 923332991136,923310222184, mujtaba.ellahi@buitms.edu.pk;mujtaba.ellahi@gmail.com	M. Aslam Bhutta, Managing Director, International Polymer industries Pvt. Ltd. Plot 49, St 10, Industrial area I.9/2 Islamabad, Phone No: 051-4430835-37, Fax No:051-4430834, Email: polymerpk@gmail.com	BUIITEMS, Quetta
65	TDF02-083	<i>Cyber Threat Intelligence Platform (CTIP)</i>	Masoom Alam, Associate Professor, Computer Sciences, COMSATS Institute of information Technology Islamabad, 0332-9298404 Fax: (area code, number) : Email: masoom.alam@comsats.edu.pk Postal Address: COMSATS Institute of Information Technology, Park Road, Islamabad	Mahir Mohsin Sheikh (Trillium Information Security Systems), Telephone: +92515524181 Fax: +92 51 556 8044 Mobile: +92 3085200001 Email: info@infosecurity.com.pk	CIIT, Islamabad

66	TDF02-137	<i>Non-Thermal Plasma for Ecological Farming”</i>	Najeeb-ur-Rehman, Associate Professor, COMSATS Institute of Information Technology, Islamabad, 0321-5022470, najeeb-urrehman@comsats.edu.pk Postal Address: Department of Physics, COMSATS Institute of Information technology Islamabad	Salman Seed Company, CEO, Importer/Exporter, sseeds@gir.pknet.com.pk, 03455754706- Abdur Rehman , Manager Operation, High Tec Solution, 03009778954 , rehmanphy@gmail.com	CIIT, Islamabad
----	-----------	---	---	---	-----------------

67	TDF02-012	<i>Development and commercialization of transgenic potato lines tolerant to fungi and viruses</i>	Dr. Anwar Khan, Molecular Biology, Assistant Professor (BPS-19), anwarleo2003@gmail.com; anwar@hu.edu.pk 0321-8129281	Mr. Azam Cheema, CEO Sayban International 03008438336	Hazara University Mansehra
68	TDF02-013	<i>Development and commercialization of broad spectrum bioformulated fungicide.</i>	Dr. Anwar Khan, Molecular Biology, Assistant Professor (BPS-19), anwarleo2003@gmail.com; anwar@hu.edu.pk 0321-8129281	Mr. Azam Cheema, CEO Sayban International 03008438336 Muhammad Amir, BIOTECHNOLOGIST. 0305-4442168	Hazara University Mansehra
69	TDF02-124	<i>Development of a Multi-Purposed Environment Friendly and Efficient Smart Wood Stove</i>	Khuram Pervez Amber, Department of Mechanical Engineering, Mirpur University of Science and Technology, Mirpur, AJK, 0341-5964460 khuram.parvez@must.edu.pk, Mirpur University of Science and Technology, Allama Iqbal Road, 10250, Mirpur, AJK	Najma Shaheen CEO, Sukhi Development Foundation, 385, Sector F-3/3, Haul Road, Mirpur AJK, Pakistan, 05827- 481580, 05827- 438808 , info@sukhi.org	MUST AJK Muzaffarabad
70	TDF02-203	<i>Development of an assistive device for a visually impaired person.</i>	Dr. Sajjad Manzoor, Lecturer (BPS-18), Electrical (power) Engineering, sajjad.ee@must.edu.pk, 0321-1081933	Mr. Tasar Raheem, owner (Nusrat Pharma), 058264-42300-43944, 0344-5227522, nusratmsk@hotmail.com	MUST AJK Muzaffarabad
71	TDF02-006	<i>Establishment of vermi-tech unit at Azad Jammu and Kashmir, Muzaffarabad for vermi product development.</i>	Dr. Saiqa Andleeb Assistant Professor, BPS-19, Department of Zoology, Azad Jammu and Kashmir University, Muzaffarabad, Pakistan, drsaiqa@gmail.com	Dr. Nadeem Tariq, Manging Partner, First Biotech LLC associate of Niha Corp USA farrukh@nihacorp.com	UJAK Muzaffarabad
72	TDF02-011	<i>Pilot plant for development of biodegradable laundry liquid detergent and dish washer liquid detergents according to European standards.</i>	Dr. Murid Hussain, Chemical Engineering, Associate Professor (TTS), Chemical Engineeing, drmhussain@ciitlahore.edu.pk, 042111-001-007 (Ext: 106), 0335-0807509	Mr. Sheikh Ahsan Rasheed, CEO Hafeez Ghee & Genral Mills (PVT) Ltd. Multan ceo@shamaghee.com, 061-4482741-6, 0345-7203333, 2-Mr. Mohammad Naveed Hashmi (Focal Person) , Manager Projeects naveed@shamaghee.com, 061-6526589, 0345-7200955	COMSATS Institute of Information Technology, Lahore
73	TDF02-151	<i>Development of first Commercial scale citric acid production plant in Pakistan by submerged fermentation of</i>	Dr . Shaukat Ali, Assistant Professor, Dow Research Institute of Biotechnology and Biomedical Sciences (DRIBBS), Dow University of Health Sciences, Karachi., Mobile:	Rizwan Panjwani, Director, New investment opportunities in biotechnology., Sindh gas Pvt Limited, rizwan@sindhgas.com, +92-21 111 786 572 Fax: +92-91-3588 3562 Mobile: 03218269673 Email:	Dow University of Health Sciences, Karachi.

		<i>Aspergillus niger</i> using cane molasses as raw material; A milestone yet to be achieved	03363010185 , ali.shaukat@duhs.edu.pk Postal Address: Principal Office, Dow College of Biotechnology, 2nd floor, DIMC building, Dow University of Health Sciences, Ojha campus, Suparco road, Karachi, Pakistan.	rizwan@sindhgas.com	
74	TDF02-161	<i>Automatic Weapon Detection in Real-time Videos for Identification of Potential Terrorists and Robbers</i>	Dr. Muhammad Gufran Khan, Assistant Professor, Electrical Engineering FAST National University of Computer & Emerging Sciences, ChiniotFaisalabad Campus Mobile: 0345-1112984 Fax: (area code, number) : Email: m.gufran@nu.edu.pk Postal Address: FAST - National University of Computer & Emerging Sciences, Chiniot-Faisalabad campus, Loonaywala Stop, Faisalabad Road, District Chiniot	Mr. Rehan Mushtaq, CTO, AI Apps Section, Ingenious Zone (Software House),16/2-A Kehkshan Colony #1, Jaranwala Road – Faisalabad, 041-8723771 Fax: (Area code, number) Mobile: 0300 9666656 Email: rehan@ingeniouszone.com	FAST National University of Computer & Emerging Sciences, Chiniot-Faisalabad Campus
75	TDF02-078	<i>Cost effective production of hydrolytic enzymes: Sealing the gaps from bench top to market</i>	Dr. Maryam Shafique Assistant Professor (TTS-19), Microbiology, 03005266109, maryamshafique@yahoo.com	Dr. Rashid Saleem, Sr. Manager R&D. Phone: +92-42 35260401-04 Fax: 92-4235260416 Mobile: +92-340 0009415 Email: r&d@src.com.pk	FUUAST Karachi
76	TDF02-178	<i>Ecofriendly, inland, closed circulatory aquaponic system for sustainable production of vegetables and fish</i>	Prof. Dr. Naureen Aziz Qureshi, VC, GCWU Faisalabad, 03002978863, naureenaziz.queshi@gmail.com	M. Tariq Tanveer, CEO, Qadir Bakhsh Farms, Agri tourism development corporation of Pakistan, info@atdcpakistan.com, 03216627199	GC Women University Faisalabad

77	TDF02-150	<i>Genetic Transformation of Pathogenesis-Related genes in Wheat (Triticum aestivum) for sustainable resistance against advance stem rust strains</i>	Dr Shazia Anwer Bukhari, Chairperson Department of Biochemistry, GCUF, Faisalabad, bukhari.shazia@yahoo.com, 03006637159	Muhammad Azam Rasheed, National Seed Company, Shekhupura road Gujrawala, 03214837212	GCU Faisalabad
78	TDF02-192	<i>Prototype development for Enzyme based poultry feed supplement and its use in poultry industry</i>	Dr. Abdul Hameed ,Professor (on contract)Centre for Interdisciplinary Research in Basic Sciences.,International Islamic University, Islamabad D6. MAILING ADDRESS ADDRESS Centre for Interdisciplinary Research in Basic Sciences International Islamic University, H-10 Islamabad,Abdul.hameed@iiu.edu.pk, Office :051-9258091, Mobile:03005208819, Res: 051- 5738775	Mr. Muhammad Munir, Managing DirectorPharmaceutical E5. FACTORY / INDUSTRY Aulton Pharmaceuticals E6. OFFICIAL MAILING ADDRESS Plot# 84/1, Block A, Phase 5, Industrial State, Hattar,:arif489@yahoo.com,03003008368	IIUI Islamabad
79	TDF02-027	<i>A Real-time High Power Induction Motor Health Monitoring System</i>	Dr. Usman Younis, Assistant Professor, Department of Electrical Engineering, usman.younis@itu.edu.pk, 042 99046078, 03315015302	Mr. WASIF AHMED, Manager Electrical Engineering, Shafi-Reso Chemicals (Pvt) Ltd, wasifam@yahoo.com, 042 3526040104, 0322-4002183	Information Technology University, Lahore
80	TDF02-037	<i>IntelliMed - An Intelligent Tutoring System for Medical Problem Based Learning</i>	Prof. Dr. Hameedullah Kazi, Professor, Department of Computer Science, hkazi@isra.edu.pk, 022-2030181, 0300-3075922	Mr. Shahbaz Ahmed, CEO Logical technologist shahbaz.ahmed@logicaltechnologist.com, 0332-2211331	ISRA University, Hyderabad
81	TDF02-269	<i>Design, Development and Deployment of Mineral Cadastre and Mine Planning and Design System</i>	Dr. Safi Ur Rehman, (Assistant Professor (BPS-19), Mining Engineering, dr.safi@kiu.edu.pk, 05811-960010-13, 0333-9219121	Waqas Abdul Aziz, Sindh Engro Coal Mining Company (SECMC)	Karakoram International University

82	TDF02-217	<i>Development and Indigenization of Floppy Sprinkler Irrigation System for Future Irrigation</i>	Dr. Sarfraz Hashim, Assistant Professor (BPS-19), Agricultural Engineering, sarfraz.hashim@mnsuam.edu.pk, 0301-4060357	Mr. Ahsan ul Haq, Chief Executive officer, m/s Noori Agrolines, nooriagrolines92@yahoo.com, 061-4580949 , 0300-6332536	Muhammad Nawaz Shareef University of Agriculture, Multan
83	TDF02-197	<i>Development of commercial cotton varieties expressing Cr1Ac and Cry2Ab proteins for effective control of Lepidopteran insects</i>	Dr. Shahid Mansoor, SI; Director NIBGE, Department of Biotechnology, NIBGE, PIEAS; Email: shahidmansoor7@gmail.com; Ph: 9241-2651471; Mobile: 0300-7944841	Mr. Javed Saleem Qureshi; Chief Executive & Chairman, Four Brothers, Lahore, 77-D/1, 1st Floor Lahore Centre, Main Boulevard Gulberg, Lahore-Pakistan	NIBGE, Faisalabad

84	TDF02-261	<i>Traffic Congestion Prediction and Visualization Platform</i>	Dr. Irfan Ul Haq Principal Scientist, PIEAS 03155886570, 0512354290	Dr. Shahid Mahmood Phone: +92 51 222 8571 - 73 Fax: +92 51 2228604 - 05	PIEAS Islamabad
85	TDF02-212	DEVELOPMENT OF MODULAR PLUGIN HYBRID ELECTRIC POWERTRAIN PROTOTYPE WITH SCALABILITY FOR LIGHT DUTY VEHICLES (MYPRID)	Dr Mohammad Aamir Khan, Associate professor, Mechanical Engineering Department, mohammad.aamir@me.uol.edu.pk, (042) 111 865 865 ext 1514, 0300 4163173	Zubair Aamir, General Manager Sazgar Engineering Works Ltd ,18-KM Raiwind Road, Lahore, Pakistan, zubairaamir21@yahoo.com, (042)35330329, 321 8469005	The University of Lahore, Lahore
86	TDF02-180	<i>Indigenized and secure Private IaaS cloud solution with DPI based Policy Enforcement</i>	Dr. Farrukh Zeeshan Khan, UET Taxila	Xflow research inc. software technology park, service road North I-9/3 Islamabad	UET Taxila
87	TDF02-043	<i>Development of a medicinal product, capable of fighting against obesity and metabolic syndrome.</i>	Dr. Darakshan Jabeen Haleem, Meritorious Professor (Contractual), Neuroscience Research Laboratory, Dr. Panjwani Center for Molecular Medicine and Drug Research (PCMD), International Center for Chemical and Biological Sciences (ICCBS). University of Karachi. Contact: 0300-3390776, djhaleem@uok.edu.pk	Mr. Raheel Saeed, Director and CEO at Dawasaz (Pvt) Ltd. Contact: 0303-9136475, raheelsaeedj48@gmail.com	University of Karachi

88	TDF02-086	<i>Design of A Solar Thermal Cold Storage System Using Natref (CO2).</i>	Dr. Naeem Abas, Assistant Professor, Head of Department (BPS-19), Departement of Electrical Engineering, naeemkalair@uog.edu.pk, 03005879115	Ahtsham Dost, Humak Industries / MIA group of industries, Aurangzeb Plaza no 3 Adjacent PACE Gujrat Phone No: 0533526000, Email: Ahtsham.dost@humak.pk	University of Gujrat, Hafiz Hayat
89	TDF02-123	<i>Enhanced Protein Recovery from Broken Rice/ Rice waste through chemical process</i>	Prof.Dr.M.Suleman Tahir, PhD Dean Faculty of Engineering Chairman, Chemical engineering, University of Gujrat E-03, Hafiz Hayat campus, university of Gujrat Phone: 0092 (53) 364- 3112 0092 (53) 364-3117 Ext: 153 Email:drsuleman.tahir@uog.edu.pk	M. Shoaib Sethi CEO Khatoon Industries (pvt) Ltd, Gujranwala Phone: 0306-4294900	UOG, Gujrat.