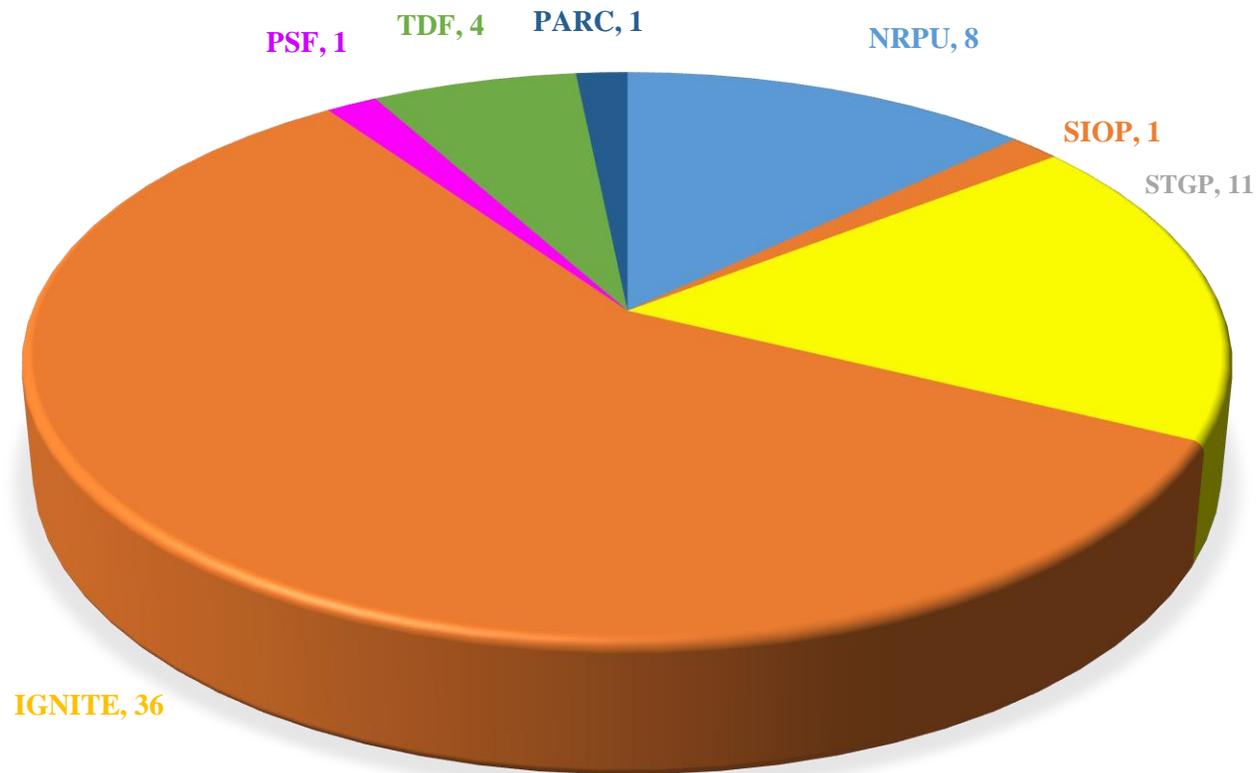
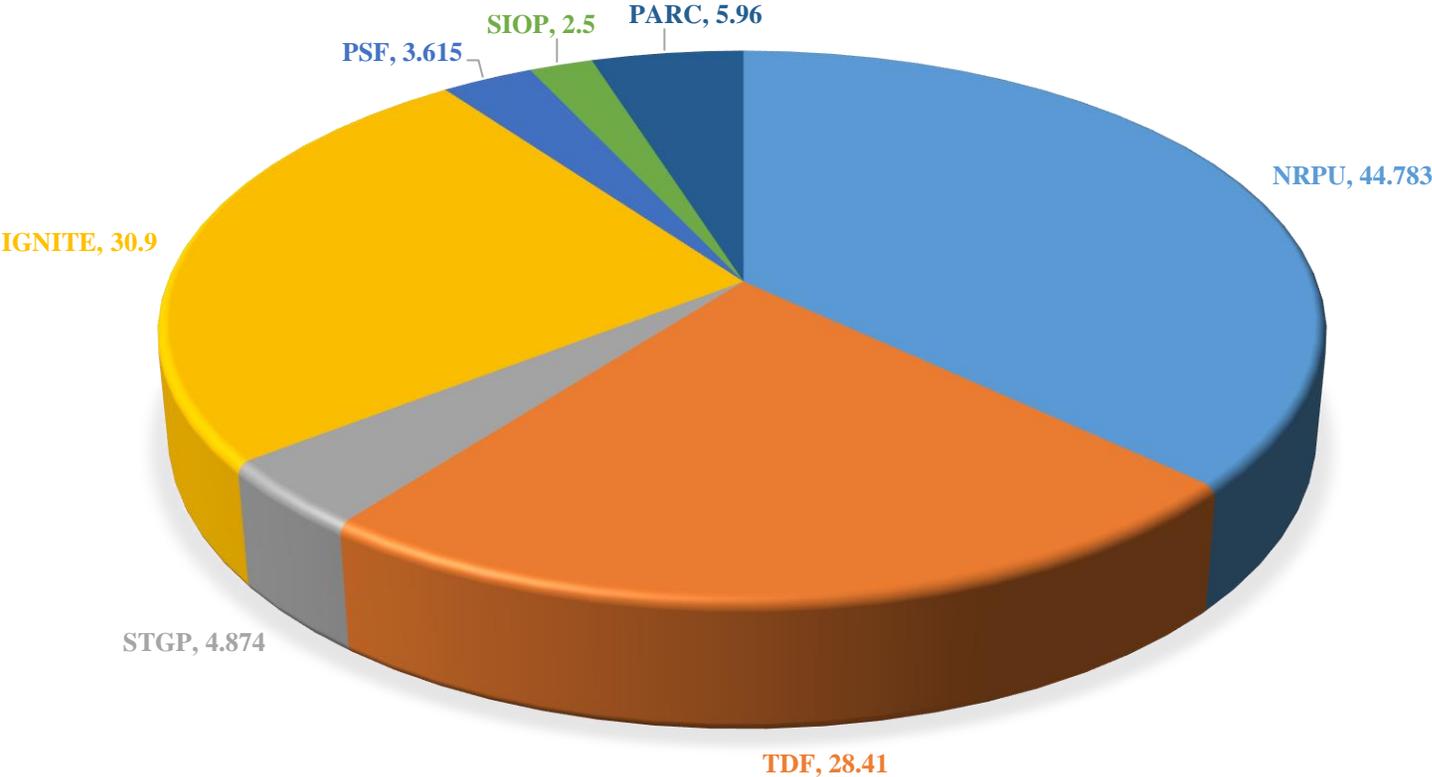


### NATIONAL COMPLETED PROJECTS (NUMBER)



**NATIONAL COMPLETED RESEARCH PROJECTS (PKR MILLIONS)**



## List of National Completed Research projects

S. No	Title of Research Proposal	Name of PI	Faculty	Amount Approved (Millions Rs.)	Duration of Project	Sponsoring Agency
1	Development and commercialization of transgenic potato lines tolerant to fungi and viruses	Dr. Anwar Khan, Assistant Professor, Department of Microbiology	Faculty of Life Sciences	8.282	2018-2021	TDF
2	Development and commercialization of broad-spectrum bio-formulated fungicide	Dr. Anwar Khan, Assistant Professor, Department of Microbiology	Faculty of Life Sciences	2.441	2018-2021	TDF
3	Study on the effects of silver nanoparticles (AgNPs) in epoxy monomers-based PDLC films (Smart glass)	Dr. Mujtaba Elahi, Assistant Professor, Department of Chemistry	Faculty of Basic Sciences	12.04	2018-2021	TDF
4	Development of a Non tracking Collector with Nano Fluids to Enhance the Thermal Capabilities of the Collector	Prof. Dr. Ali Nawaz Mengal, Faculty of Engineering and Architecture	Faculty of Engineering and Architecture	4.718	2018-2020	TDF

5	Preparation and characterization of dl, tri and block co-polymers epoxy-based thin POLC films (smart glass)	Dr. Mujtaba Elahi, Assistant Professor, Department of Chemistry	Faculty of Basic Sciences	2.158	2019-2021	NRPU
6	Genetic analysis and functional studies of inherited skin disorder of Balochistan	Prof. Dr. Abdul Wali, Department of Biotechnology	Faculty of Life Sciences	7.825	(2017-2019)	NRPU
7	Molecular diagnostics of human pathogenic candida species for clinical specimens	Prof. Dr. Muhammad Mushtaq, Professor, Department of Biotechnology	Faculty of Life Sciences	8.948	(2017-2019)	NRPU
8	Removal of organic and inorganic pollutants	Dr. Muhammad Raheel, Assistant Professor, Department of Chemistry	Faculty of Basic Sciences	0.495	(2017-2019)	SRGP(HEC)
9	Computational studies of protein Tyrosine phosphatase1B	Dr. Asma Abro, Assistant Professor, Department of Biotechnology	Faculty of Life Sciences	0.44	(2017-2018)	SRGP(HEC)
10	Identification of Genes responsible for autosomal recessive monogenic disorders in the Pakistani Population; from candidate gene analysis to Next-generation Sequencing	Dr. Naseebullah Kakar, Assistant Professor, Department of Biotechnology	Faculty of Life Sciences	0.453	(2017-2019)	SRGP(HEC)
11	Dual nonmetals doped foam photocatalysis activity in different degradation systems and reaction pathway	Dr.Faheem Nawaz Assistant Professor, Department of Environmental Sciences	Faculty of Life Sciences	0.43	(2018-2019)	SRGP(HEC)

12	Fabrication of intrinsically conductive antimicrobial Nanomaterials for Health Care & Human Activity Monitoring	Dr. Saeullah Jan, Assistant Professor, Department of Civil Engineering	Faculty of Engineering and Architecture	0.4242	(2018-2019)	SRGP(HEC)
13	Energy harvesting and ambient backscatter enabled relays future IoT network	Dr. Syed Tariq Shah Assistant Professor, Department of Telecom Engineering	Faculty of Information and Communication Technology	0.362	(2018-2019)	SRGP(HEC)
14	Absorption of Hazardous Pollutants: Reuse of Carwash Wastewater Treatment Using Diverse Sorbent	Dr. Azmatullah Khan Assistant Professor, Department of Mechanical Engineering	Faculty of Engineering and Architecture	0.44995	(2018-2019)	SRGP(HEC)
15	The evolvement of mental organic farm work nanofibers for flexible and lightweight supper capacitor	Dr. Kamran Sami Assistant Professor, Department of Chemical Engineering	Faculty of Engineering and Architecture	0.4282	(2018-2019)	SRGP(HEC)
16	Identification of Mutation TYR Genes Causing Albinism in Patients of Balochistan	Dr. Shakeela Daud Assistant Professor, Department of Biotechnology	Faculty of Life Sciences	0.4367	(2018-2019)	SRGP(HEC)
17	Fine Mapping of QTLs linked with drought tolerance in rice genotypes at vegetative phase.	Dr. Nusrat Jahan Assistant Professor, Department of Biotechnology	Faculty of Life Sciences	0.484749	(2018-2019)	SRGP(HEC)
18	Logic Liquids catalytic conversion of waste cooking Oil into Biodiesel	Dr. Zahoor Ullah Assistant Professor Department of Chemistry	Faculty of Basic Sciences	0.475	2018-2019	SRGP(HEC)
19	Gender Disparities and cultural Barriers to Females for attaining higher education in Balochistan	Dr. Bashir Ahmed Kakar, Assistant Professor,	Faculty of Basic Sciences	2.5012	(2019-2021)	SIOP (HEC)

		Faculty of Arts and Basic Sciences				
20	DNA based Biodiversity inventories of Juniper Forest ecosystems in Ziarat, Quetta, and Kalat districts (NR-010)	Prof. Dr. Nazeer Ahmed, Department of Biotechnology	Faculty of Life Sciences	5.96	(2016-2018)	PARC
21	Assessment of yeast species efficiency for the biological control of postharvest fungal disease of fresh fruits of Balochistan	Prof. Dr. Muhammad Mushtaq, Department of Biotechnology	Faculty of Life Sciences	3.615084	(2015-2018)	PSF
22	Development of Plant Stress Physiology Laboratory for screening/selection of indigenous germplasm of cereal crops from arid areas of Balochistan for abiotic stress tolerance.	Prof. Dr. Muhammad Naeem Shahwani, Department of Biotechnology	Faculty of Life Sciences	7.86726	(2014-2017)	NRPU
23	Active Screen Cate Pulse DC Plasma Discharge	Dr. Hamdullah Khan Tareen, Associate Professor, Department of Physics	Faculty of Basic Sciences	9.4299	(2014-2016)	NRPU
24	Genetic and Molecular Studies for Identification of genes responsible for Recessive Mental Retardation in Pakistani Population	Prof. Dr. Jamil Ahmed, Department of Biotechnology	Faculty of Life Sciences	3.0437	(2012-2014)	NRPU

25	Strengthening and Up-gradation of Laboratory for Molecular Studies of Recessive Disorders Prevailing in Balochistan.	Dr. Naseebullah Kakar, Assistant Professor, Department of Biotechnology	Faculty of Life Sciences	0.975	(2010-2011)	NRPU
26	Development of economical protocols for propagation of different varieties of carnation using tissue culture technology by of Pakistan	Dr. Muhammad Naeem Shahwani Assistant Professor, Department of Biotechnology	Faculty of Life Sciences	1.083	(2007-2009)	NRPU

## RESEARCH PROJECTS FUNDED BY IGNITE

S.No	Title of Research Proposal	Name of PI	Faculty	Amount Approved (Millions)	Duration of Project	Sponsoring Agency
1	Smart Glasses for Visually Impaired Using Deep Learning	Dr. Talha Mir Associate Professor, Department of Electronic Engineering	Faculty of Information and Communication Technology	0.064297	2021-2022	IGNITE
2	Brain-Computer Interface-based Smart Keyboard using Narosky Mind wave Headset	Dr. Muhammad Akram, Associate Professor, Department of Computer Engineering	Faculty of Information and Communication Technology	0.056633	2021-2022	IGNITE
3	Smart Atmospheric water generator for drinking water	Dr. Yousaf Khan, Assistant Professor, Department of Electronic Engineering	Faculty of Information and Communication Technology	0.065568	2021-2022	IGNITE
4	Electroencephalography Control Wheelchair Using Deep Learning	Engr. Zia Javed Lecturer, Department of Electrical Engineering	Faculty of Information and Communication Technology	0.064936	2021-2022	IGNITE

5	Vision-based Smart Decisions for Multi Terrain WhegRoach Robot	Dr. Jameel Ahmed Assistant Professor, Department of Electronic Engineering	Faculty of Information and Communication Technology	0.064969	2021-2022	IGNITE
6	Modeling and Analysis of Efficient Wireless Power Transmission System	Dr. Talha Mir Associate Professor, Department of Electronic Engineering	Faculty of Information and Communication Technology	0.057371	2021-2022	IGNITE
7	AR Home Designer	Engr. Zubair Zarland, Assistant Professor Software Engineering	Faculty of Information and Communication Technology	0.65568	2021-2022	IGNITE
8	Design of Sub 6 GHz Smart Glasses Antennas	Dr. Muhammad Bilal, Assistant Professor, Department of Telecom Engineering	Faculty of Information and Communication Technology	0.61814	2021-2022	IGNITE
9	Intelligent Reflecting surface vs. decode & forward relay in two-way communication	Dr. Syed Tariq Shah Associate Professor, Department of Telecom Engineering	Faculty of Information and Communication Technology	0.058191	2021-2022	IGNITE

10	Methane Gas Detection and Damage Prevention System	Prof. Dr. Jan Muhammad Department of Computer Engineering	Faculty of Information and Communication Technology	0.039677	2021-2022	IGNITE
11	Smart IoT-based healthcare support for remote patient monitoring during COVID-19 quarantine	Dr. Hamayoun Shahwani Associate Professor Department of Telecom Engineering	Faculty of Information and Communication Technology	0.058437	2021-2022	IGNITE
12	A Compact Milli-meter Wave Antenna for 5G Broadband Applications	Dr. Muhammad Bilal Assistant Professor Department of Telecom Engineering	Faculty of Information and Communication Technology	0.06065	2021-2022	IGNITE
13	UAV â€‘Based Air Quality Monitoring System	Engr. Najeebullah Lecturer Department of Telecom Engineering	Faculty of Information and Communication Technology	0.06024	2021-2022	IGNITE
14	Visual stabilization for snake-like robot	Dr. Anayatullah Associate Professor, Department of Electronic Engineering	Faculty of Information and Communication Technology	0.065568	2021-2022	IGNITE

15	Ultrasonic adsorption of coloring dyes by using modified biochar from spent tea	Dr. Muhammad Amin Associate Professor, Department of Chemical Engineering	Faculty of Information and Communication Technology	0.065568	2021-2022	IGNITE
16	Prosthetic Hand with Expanded Gestures Using Sequential AI Models	Dr. Jameel Ahmed Assistant Professor, Department of Electronic Engineering	Faculty of Information and Communication Technology	0.065445	2021-2022	IGNITE
17	Symptoms checker	Engr. Zubair Zarland Assistant Professor Software Engineering	Faculty of Information and Communication Technology	0.057372	2021-2022	IGNITE
18	Design and Development of a Self-Balancing Robot Autonomous Vehicle Through the Application of PID Controller	Dr. Talha Mir Associate Professor, Department of Electronic Engineering	Faculty of Information and Communication Technology	0.055282	2021-2022	IGNITE
19	Saman	Engr. Zubair Zarland Assistant Professor Department of Software Engineering	Faculty of Information and Communication Technology	0.064604	2021-2022	IGNITE

20	Digital Marketing Automation	Engr. Arsalan Idrees, Lecturer Department of Computer Science	Faculty of Information and Communication Technology	0.036169	2021-2022	IGNITE
21	Design and fabrication of pilot-scale plant for biodiesel production from soybean	Dr. Syed Kamran Sami, Professor, Department of Chemical Engineering	Faculty of Information and Communication Technology	0.065568	2021-2022	IGNITE
22	A Charge Controller with Integrated Battery Management System for stand-alone Application	Engr. Muhammad Arif, Assistant Professor Department of Electronic Engineering	Faculty of Information and Communication Technology	0.050606	2021-2022	IGNITE
23	Power Development from Solar Wind Energy & Automation System	Ms. Mohdissa Barat Assistant Professor	Faculty of Information and Communication Technology	0.03706	(2012-2013)	IGNITE
24	PLC-based GSM & PC Controlled Industrial Model	Mr. Syed Aurangzeb Assistant Professor	Faculty of Information and Communication Technology	0.06503	(2012-2013)	IGNITE
25	Designing & Development of RF-based Entrance and Attendance Controlled System	Mr. Waheed Jabbar Assistant Professor	Faculty of Information and Communication Technology	0.06	(2012-2013)	IGNITE
26	PV Solar & Wind Hybrid Inventor System	Ms. Shanila Azhar Lecturer	Faculty of Information and Communication Technology	0.1	(2012-2013)	IGNITE

27	Remote Monitoring & Control System to Detect Theft of Energy	Ms. Shanila Azhar Lecturer	Faculty of Information and Communication Technology	0.07357	(2012-2013)	IGNITE
28	Distributed Agents ERP Based Cloud Computing Mobile App	Mr. Muhammad Adil Siddiqui Assistant Professor, Department of	Faculty of Information and Communication Technology	0.0661	(2012-2013)	IGNITE
29	Monitoring Generator Through Power Line Communication	Dr. Syed Mudassir Hussain Assistant Professor,	Faculty of Information and Communication Technology	0.0447	(2012-2013)	IGNITE
30	Automated Retailer Machine	Mr. Syed Aurangzaib Assistant Professor	Faculty of Information and Communication Technology	0.0724	(2012-2013)	IGNITE
31	Home Automation Through Internet & GSM Alerting System	Mr. Saeed Ahmed Magsi, Assistant Professor	Faculty of Information and Communication Technology	0.0666	(2012-2013)	IGNITE
32	Controlling Home/Office Appliances with Internet	Dr. Syed Tariq Shah Assistant Professor Department of Telecom Engineering	Faculty of Information and Communication Technology	0.0824	(2012-2013)	IGNITE
33	Wireless Energy Transfer	Dr. Syed Tariq Shah Assistant Professor Department of Telecom Engineering	Faculty of Information and Communication Technology	0.0797	(2012-2013)	IGNITE

34	Intelligent Wheel Chair	Dr. Saddique Ahmed Bugti Assistant Professor, Department of Computer Science	Faculty of Information and Communication Technology	0.0857	(2012-2013)	IGNITE
35	Digital Video Broadcasting over LAN	Mirza Amir Mahmood, Assistant Professor Department of Computer Science	Faculty of Information and Communication Technology	0.075	(2012-2013)	IGNITE
36	PLC Based Coal Crushing & Conveying Plant	Dr. Syed Mudassir Hussain, Assistant Professor, Department of	Faculty of Information and Communication Technology	0.09	(2012-2013)	IGNITE