

THE OXFORD COLLEGE OF ENGINEERING (Recognized by the Govt. of Karnataka, Affiliated to Visvesvaraya Technological University, Belagavi Approved by A.I.C.T.E. New Delhi, Accredited by NAAC & NBA New Delhi and Recognized by UGC under section 2(f)) Bommanahalli, Hosur Road, Bengaluru –560068. ⁽²⁾: 080 -30219601/602/604/736, Fax: 080 - 25730551/30219629 E-mail: <u>engprincipal@theoxford.edu</u> Web: www.theoxford.edu

CHILDREN'S EDUCATION SOCIETY (Regd.)

Over the span of 2020 to 2023, The Oxford College of Engineering in Bangalore witnessed the submission and successful approval of several noteworthy research proposals. These proposals, embodying cutting-edge ideas and innovative methodologies, have been granted, paving the way for significant advancements in various domains of academia. The dynamic research landscape at the institution reflects a commitment to fostering intellectual exploration and contributing to the broader scientific community. Through these approved proposals, The Oxford College of Engineering demonstrates its dedication to pushing the boundaries of knowledge and fostering an environment that nurtures ground-breaking research initiatives.

In the academic year 2020-21, a total of 62 research proposals were diligently submitted, marking a robust engagement with scholarly endeavours. Notably, 14 of these proposals received the coveted approval, underscoring the institution's commitment to fostering impactful research. The subsequent year, 2021-22, saw a shift in dynamics as, despite the submission of 6 research proposals to various funding agencies, 1 proposal is granted during that period. This phase signifies the resilience and continuous pursuit of excellence by researchers within the academic community.

Undeterred, in the academic year 2022-23, the spirit of inquiry persisted with the submission of 3 research proposals. Encouragingly, one of these proposals garnered sanction, illustrating a renewed success and a testament to the institution's dedication to advancing knowledge and scholarly pursuits. This journey of research endeavours exemplifies the dynamic and evolving nature of academic exploration at The Oxford College of Engineering.

2020-2021

Sl.No	Title of the Proposal	Funding Agency	PI	Amount	Department	Status
1	Investigation on Mechanical and Tribologial Behaviours of Nano Hybrid Composites for Agriculture Applications	AICTE- RPS	Dr. Raju B R	25,00,000	Automobile	Not- Granted

2	Advanced Materials Testing Laboratory-	AICTE- MODROB	Dr. Raju B R	20,00,000	Automobile	Not- Granted
3	Health Monitoring System for Indian Railway Track and Wheel Using Fibre Bragg Grating Sensor	AICTE	Dr. Preeta Sharan	15,52,941	ECE	Granted
4	Design and Development of Fibre Bragg Grating Sensing System Handgrip Muscle Fatigue	CISEE- VGST	Dr Preeta Sharan	25,00,000	ECE	Granted

KSCST Submitted Proposal

Sl.No	Title of the Project	Branch	Name of the Guide	Student Team Leader With USN
1	"Investigation on Mechanical and Tribological Characteristics of Fiber Reinforced Nano Hybrid Composites for Agricultural Applications"	AUTO	Dr. RAJU B R	Santhosh G 1OX19AU012
2	"Experimental Investigation on the Behaviour of Biodegradable Nano Hybrid Composites for Automotive Components"	AUTO	Dr. RAJU B R	Amrutha S D 1OX19AU001
3	"Experimental Investigation and Emission Properties of Compression Ignition Engine Fuelled with Two Bio-Diesel Blend."	AUTO	Dr. RAJU B R	Jashwanth R M 1OX19AU004
4	Early Detection of Onion Spoilage using IoT	CSE	Dr. E. Saravana Kumar	Thrupthi P 1OX19CS111
5	smart lock system using facial detection	CSE	Ms. Asha Kumari A	Prathiksha S 10X19CS071
6	Autonomous Air caliber detection using IoT adns Android	CSE	Ms. Shruthy K	Suhas K 1OX19CS103
7	IOT Based Fault Location And Detection of Underground Cables Using Enhanced Deep Learning Approach	CSE	Mrs.Lenish Pramiee	Arjun R 1OX19CS010

8	Locating and Detecting Toxic Gases in Manholes	CSE	Ms. Manjula L	Chetana Panda 10X19CS023
9	High Quality Concrete Block Using Photovoltaic panels	CV	Mrs.Gayathri R	Abhishek patil 10X19CV002
10	Experimental study on mechanical and self2. project title: durability properties of natural lightweight cleaning concrete	CV	Mrs.Harshitha N	PURNASHREE.M 10X19CV023
11	Treatment of campus wastewater by column filtration using activated biochar"	CV	Ms. Kavya S K	ARUNA P 10X19CV006
12	Smart Security and Home assistive device for Physically challenged and aged people	ECE	Dr. A Chrispin Jiji	Rahul Reddy 1OX19EC060
13	Hand Balance Monitoring system for measuring amount of disorderness in stroke patient	ECE	Mr. Jayaraj N & Dr. Preeta Sharan	Divya G 1OX19EC017
14	Determining the Grip strength of different glove for various applications	ECE	Dr. Manju Devi	Divyashree C 1OX19EC018
15	Experimental Measurement of Limb Impairment for patients using sensors	ECE	Dr. Preeta Sharan & Mr. Jayaraj N	Preetam Ambukar 10X19EC057
16	Lower Extremity Pressure device	ECE	Dr. Preeta Sharan	Ajit Kumar Sah 10X19EC003
17	Design & Implementation of microfluidic device for the segregation of Bio particles	ECE	Ms. Iffat Fatima & Dr. Preeta Sharan	Ajay Kumar J 1OX19EC002
18	Smart Wearable Reading Assistance System	ECE	Dr. Vijayakumari V	Sathya S 1OX19EC070
19	Food Spoilage Prediction and Quality Monitoring System using IOT	ECE	Mr.Prajwala Simha	Qhader Pasha 1OX20EC404
20	Design & Development of a Cost Effective Dual Axis CNC Engraving Machine		Dr.B.Devi Vighneshwari	Mr.Shaun Jericho S 1OX19EE042
21	Density Based Traffic Signal System Using Arduino Uno	EEE	Mrs.Nisha C Rani	Ms.Shalini S C 1OX19EE029
22	Bladeless Wind Turbine by using Vortex Induced Vibration		Mrs.Sumitha T L	Mr.Jatothu Vamshi 1OX20EE400

23	Design and Development of Theft Detection System Using IoT		Mrs.Resna S R	Ms.Uzma Parveen H I 1OX19EE037
24	Design and Development of Agricultural Drone		Mrs.Raichel Ruby	Mr. Vivan Akash Kshatriya
25	Design and fabrication of charger unit run by wind energy for mobile charging application in two wheeler	ME	Mr. T V NAGARAJA	NAIMAN SHARIFF 10X19ME013
26	Fabrication of solar operated pesticides spray	ME	Mr. RAGHAVENDRA N	SANSON SANJITH 10X18ME042
27	Design and fabrication of air purifier and humidifier using water as a filter	ME	Dr. RAVIPRAKASH.M	MOHAMMED FAHEEM KHAN 1OX19ME011
28	Fabrication of remote controlled wall painting machine	ME	Dr. Varun K R	Mr. Vijay kumar G S 1OX18ME054
29	Fabrication of drowsyness detection system for automobile applications.	ME	Dr. VIDYADHAR PUJAR	Mr. Madhan K 1OX19ME008
30	Design and fabrication of Bluetooth controlled hydraulic jack for automobile purpose	ME	Dr. PRASAD H NAYAK	SRINIVASA REDDY B 10X19ME018
31	design and fabrication of unit by using arduino for child rescue system	ME	Dr. MADHU SUDAN REDDY	VIGNESH 1OX19ME021
32	Investigation and characterization of cold forged stainless steel for automobile application	ME	Dr. VIDYADHAR PUJAR	SHREYAS D.V 1OX18ME046
33	Muscle joint load recording device for clinical assessment of orthopedic problems	ME	Mr. ANUP U	YATENDER TEOTIYA 10X19ME022
34	Fabrication of condition monitoring test rig for rural railway transportation	ME	Mr. ANUP U	KUSHAL J 1OX20ME400
35	Robotic Arm (Gesture Control)	MTE	Mr.JAIDEEP R	Giridhar P M 1OX20MT403

36	Human Body Fall detection and localization in industrial work places	ISE	PROF. R PREEJA MARY	Namitha C 1OX19IS061
37	IoT Deployed paralysis patient healthcare and requirement conveying system	ISE	Prof. Bindyashree	Ajay K S 1OX19IS005
38	Plant disease detection using deep learning	ISE	Prof. Bindyashree	Adarsh Tripathi 1OX19IS003
39	Crop yield prediction using machine learning and IoT	ISE	Prof.Yadhukrishna	Madhura D 1OX19IS046
40	Arduino based autonomous firefighting robot	ISE	Prof. Vidhya S	Roopashri 1OX19IS082
41	Design of optical sensor for the detection of presence of bacteria in water	ISE	Dr.Vanajaroselin E	Shrilaxmi V Chitguppi 1OX19IS095
42	Early detection of chronic kidney disease	ISE	Mrs. Kavya K R	Ruchitha P M 10X19IS083
43	Floating Robot for water quality monitoring and waste detection	ISE	Mrs. Kavya K R	Manasa M 1OX19IS049
44	An IoT Based smart waste management system (Smart bin)	ISE	Mrs.S.Vidhya	Bharath G 1OX19IS018
45	Grape Leaf disease identification using CNN and LoRA Technology	ISE	Mrs. Visalini S	Lakshmi G L 1OX19IS043
46	Gesture controlled virtual mouse	ISE	Mrs. Visalini S	Abhishek Setty M R 10X19IS002
47	Development of image analysis algorithm for early detection of ovarian cancer	ISE	Mrs.Riya Sanjesh	Sowjanya G 1OX19IS099
48	Design of wheel chair for physiotherapy rehabilitation treatment	ISE	Mrs.Riya Sanjesh	Akshaya T M 1OX19IS009

49	Travel Assistance for visually impaired person	ISE	Mr. Channappa Gowda D V	Likhith R Gowda 1OX19IS044
50	Eye pupil controlled wheelchair	ISE	Mr. Channappa Gowda D V	Syeda Noor Zaineb 10X19IS104
51	Low cost wireless footwear system for monitoring diabetic foot patient	ISE	Dr.R Kanagavalli	Prachi Choudhary 1OX19IS071
52	Convolutional Neural Network for diabetic retinopathy detection	ISE	Mr. Karthik S L	Simran G 1OX19IS097
53	Vehicle Violation detection system using Machine Learning	ISE	Mr. Indu K S	Kiran Kumar B R 1OX19IS040
54	Prediction of cervical cancer for PAP smear images using deep learning techniques	ISE	Mr. Karthik S L	Akash Holla P 1OX19IS007
55	Automatic HTML code generation from hand written patterns using deep learning	ISE	Mr.Ms.Diana	Nithin R 1OX19IS066
56	Optimization of Bioremediation of Polyaromatic Hydrocarbon with Special Reference to Anthracene, Fluorene, Acenaphthene, Fluoranthene.	BT	Mr. Divakara R	Vanam Vamshee Krishina1OX19BT027

KSCST Sanctioned Projects

PROJECT TITLE	COURSE	BRANCH	NAME OF THE GUIDE(S)	NAME OF THE STUDENT(S)	AMOUNT SANCTIONED (RS.)
INVESTIGATION ON MECHANICAL AND TRIBOLOGICAL CHARACTERISTICS OF FIBER REINFORCED NANO HYBRID COMPOSITES FOR AGRICULTURAL APPLICATIONS	B.E.	AUTOMOBILE ENGINEERING	Dr. RAJU B R	Mr. Santhosh G Mr. Nikshep S R Mr. Shreyas A Mr. Sai ganesh K	6,000.00
OPTIMIZATION OF BIOREMEDIATION OF POLYAROMATIC HYDROCARBONS WITH SPECIAL REFERENCE TO ANTHRACENE, FLUORENE, ACENAPHTHENE, FLUORANTHENE	B.E.	BIOTECHNOLOGY	Prof. DIVAKARA R	Mr. VANAM VAMSHEE KRISHINA Mr. KIRAN J REDDY Ms. MYTHILI S TAMBRAPARNI Ms. POOJITHA N G	6,000.00
HIGH QUALITY CONCRETE BLOCK USING PHOTOVOLTAIC PANELS	B.E.	CIVIL ENGINEERING	Mrs. GAYATHRI R	Mr. ABHISHEK PATIL Mr. SANGAMESH Mr. TIMMAYYA Mr. AKSHAYKUMAR	5,000.00
LOCATING AND DETECING TOXIC GASES IN MANHOLES	B.E.	COMPUTER SCIENCE AND ENGINEERING	Prof. MANJULA L	Ms. CHETANA PANDA Mr. HEMANT RAJ SINGH Mr. JAMPANA DARSH RAJU Mr. JINO THOMAS	4,000.00
DEVELOPMENT IN AGRICULTURAL DRONE (FRUIT HARVESTING AND PRUNING TREES)	B.E.	ELECTRICAL AND ELECTRONICS ENGINEERING	Prof. RAICHEL RUBY M	Mr. VIVAN AKASH KSHATRIYA Ms. H SHIVANI Mr. ROHAN JOHNSON M Ms. PRERANA R	6,000.00

EXPERIMENTAL MEASUREMENT OF LIMB IMPAIRMENT FOR PATIENTS USING SENSORS	B.E.	ELECTRONICS AND COMMUNICATION ENGINEERING	Dr. PREETA SHARAN Mr. JAYARAJ N	Mr. PREETAM AMBUDKAR Mr. UTKARSH N Ms. TULASI RATHOD Ms. YUKTISHREE S	5,000.00
HAND BALANCE MONITORING SYSTEM FOR MEASURING AMOUNT OF DISORDERNESS IN STROKE PATIENTS	B.E.	ELECTRONICS AND COMMUNICATION ENGINEERING	Mr. JAYARAJ N Dr. PREETA SHARAN	Ms. DIVYA G Mr. ARUNACHALAM M Ms. BHOOMIKA B M	5,000.00
DESIGN AND FABRICATION OF MEDICINE DELIVERY ROBOTS	B.E.	INFORMATION SCIENCE AND ENGINEERING	Mrs. SANDHYA RANI V	Mr. Shreyas R Mr. Ruthvik C Mr. Rohan ganapati Revankar Mr. Shashi kumar S	5,000.00
LOW COST WIRELESS FOOTWEAR SYSTEM FOR MONITORING DIABETIC FOOT PATIENT	B.E.	INFORMATION SCIENCE AND ENGINEERING	dr. R. Kanagavalli Mrs. Vidhya Siddhan	Ms. PRACHI CHOUDHARY Mr. PAVAN KAPOOR Mr. RISHABH SAHU Ms. SUMERA MEHRAJ	4,000.00
GRAPE LEAF DISEASE IDENTIFICATION USING CNN AND LORA TECHNOLOGY	B.E.	INFORMATION SCIENCE AND ENGINEERING	Ms. VISALINI S	Ms. LAKSHMI G L Ms. M CAROLINE BLESSY Ms. MADHUSHREE C Ms. SANDHYA K S	4,000.00

2021-2022

Sl.No	Title of the Proposal	Funding Agency	Name of The PI	Department
	Studies on the efficiency of microbial consortium developed on the degradation of micro plastic with special reference to polyethylene	DBT - R&D proposal	Dr. BK Manjunatha, Dr. Indulekha John	ВТ
2	Integrated strategy for remediation of textile effluent and repurposing	SERB - Core research grant	Dr. K Valarmathy, Dr.	BT

	of spent water		BK Manjunatha		
3	In-vitro anticancer evaluation against lung cancer	SERB - special call for proposals	Dr. Nahiya T, Dr. Ajitha Gomathi	BT	
4	Innovation and development of Nano hybrid composites for agriculture applications	KSCST	Dr. Raju B R	MECHANICAL	
5	Design and Development of Flexible One-Dimensional Photonic crystal sensor for Pressure Measurement	SERB	Dr. Preeta Sharan	ECE	
6	Real Time Implementation of Optical Sensor Based Footwear for Diabetic Foot Amputation Management	SERB	Dr. Preeta Sharan, Anup M Upadhyaya	ECE	
7	Studies on Hot Corrosion and Erosion Behaviour of Thermally Sprayed Composite Coating for High Temperature Industrial Application	Behaviour of Thermally Dr. Madhu Composite Coating for VTU Sudana Reddy, mperature Industrial Anup M		11,00,000 (Granted)	

2022-2023

SI.No	Title of the Proposal	Funding Agency	PI	Amount	Department	Status
1	Advanced Materials & Processing of Nano Hybrid Composites for Agriculture Applications	DST	Dr. Raju B R	60,00,000	Mechanical	Not Granted
2	Sustainable Materials: Design, Synthesis, Characterization, Machining and Application.	VGST	Dr. Raju B R	2,00,000	Mechanical	Not-Granted
3	Biting Force Measuring Device for clinical evaluation of dental problems	VGST	Anup M Upadhyaya	3,00,000	Mechanical	Sanctioned
4	Development of Composite Coatings in Improving Resistance to Corrosion and Erosion for Agricultural Peeling Components using Hybrid Techniques	SERB	Dr. Madhu Sudana Reddy	28,63,696	Mechanical	Granted

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