



**RAMAIAH
UNIVERSITY**
OF APPLIED SCIENCES

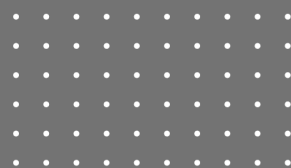
gnana manthana

Annual Research Report

2024



WWW.MSRUAS.AC.IN



Office of Research & Innovation
University House, New BEL Rd
M S R Nagar, Mathikere,
Bengaluru, Karnataka 560054

Contents

Foreword from Dean, Office of Research and Innovation	2
Executive Summary – Research and Innovation	3
A. PhD Scholars: Academic year 2023-2024 (July 2023- June 2024)	4
B. Intra-Mural Grants, Sponsored Research, Publications, Patents	6
C. Consultancy	12
D. Process optimization updates.....	12
E. Key activities- Glances	13
Glimpse of 2024 at the Office of Research and Innovation	15
PhD's Awarded 2024	18
PhD's Awarded 2023	20
Research Strategy and Road Map.....	18
Annexures.....	19

Foreword from Dean, Office of Research and Innovation

Greetings from the Office of Research and Innovation, with a Congratulatory note to each one of the graduating students, on the occasion of the 9th Convocation at the MS Ramaiah University of Applied Sciences.

A young University with a rich legacy of interdisciplinary research and innovation, MSRUEAS is leading engineering for the future of medicine, twinning medical sciences and engineering, in a uniquely poised, vibrant eco-system that fosters novel breakthroughs in sustainable development of our country. The University's research excellence is built upon several thrust areas of social relevance with subject matter experts in several fields such as food technology, medicine, management, chemistry, physics, social sciences, engineering disciplines and allied health sciences with an active participation in several National and International research collaborations, with academia, research laboratories and industry. One of the hallmarks of the research eco-system is being an enabler of translational research in bio-medical sciences via 'clinical research' to enable accelerated development of practical innovations, in diagnostics, therapeutics, drug development, with an outreach in community medicine, that emphasizes on bringing global remedies via lessons learnt from the local landscape. The University strongly encourages industry-academia partnerships and international collaborations of mutual interest aligned with the national mission of Make in India, Digital India, Atal Innovation Mission etc. to address several challenges to serve technology advancement for the Defense of the country via indigenous developments, by direct and indirect research partnerships towards new manufacturing technologies, via a research culture that is enterprising, dynamic and diverse, amongst the faculty and students.

The Office of Research and Innovation (ORI) plays an important nodal role at the heart of the University, in gluing in a culture of world class research, towards building the reputation, ranking of the University and forming relationships with government and private funding agencies. Various platforms and opportunities are created, in a dynamic manner for the research scholars and faculty, to embrace partnerships in cutting edge research topics that serve as an enabler of identifying and disseminating opportunities to collaboratively secure research funding, develop prototype technologies and systems that translate research into highly effective real-world solutions.

I am sure that eclectic R&D activities at the University will help in the growth of the country by contributing towards the Make in India initiative of the Government of India.

Dr. Dheepa Srinivasan

Dean, Office of Research and Innovation
MS Ramaiah University of Applied Sciences

Executive Summary – Research and Innovation

The **Annual Report for the academic year 2023-2024** of the Office of Research and Innovation (ORI) outlines the various research initiatives and outcomes at Ramaiah University of Applied Sciences (RUAS), with emphasis on the strategic road map to boosting research outputs, faculty development, and PhD programs. The Office of Research and Innovation serves as a nodal center to facilitate and implement the research strategies across 13 faculties and 80 departments, covering engineering and medical sciences, in managing and disseminating intra-mural and extra-mural grants, securing patents, and fostering a vibrant community of PhD research scholars. RUAS's state-of-the-art infrastructure, equipped with essential facilities and capital equipment, provides a solid foundation for researchers to secure external funding and explore cutting-edge research areas, with impactful publications.

Research Thrust Areas

RUAS aspires to be Asia's premier university, renowned for its focus on applied research in a creative and innovative environment. Towards this RUAS has identified key multidisciplinary thrust areas in engineering, basic sciences, health, and social sciences. These areas are aligned with national and global Sustainable Development Goals (SDGs) to ensure that research activities are relevant and impactful to society. Our strategic expertise is focused on four key thrust areas as shown in **Figure 1**.

- **Biomedical Research:** With a focus on biotechnology and healthcare innovations.
- **Digital Technologies:** Covering advancements in AI/ML, Big Data, Deep Tech, Robotics, antennae, and satellite communication.
- **Materials Research:** Including structural materials for aerospace and functional materials for healthcare.
- **Translational Research:** Leveraging the medical college, teaching hospital, and clinical expertise in dentistry, physiotherapy, and pharmacy.

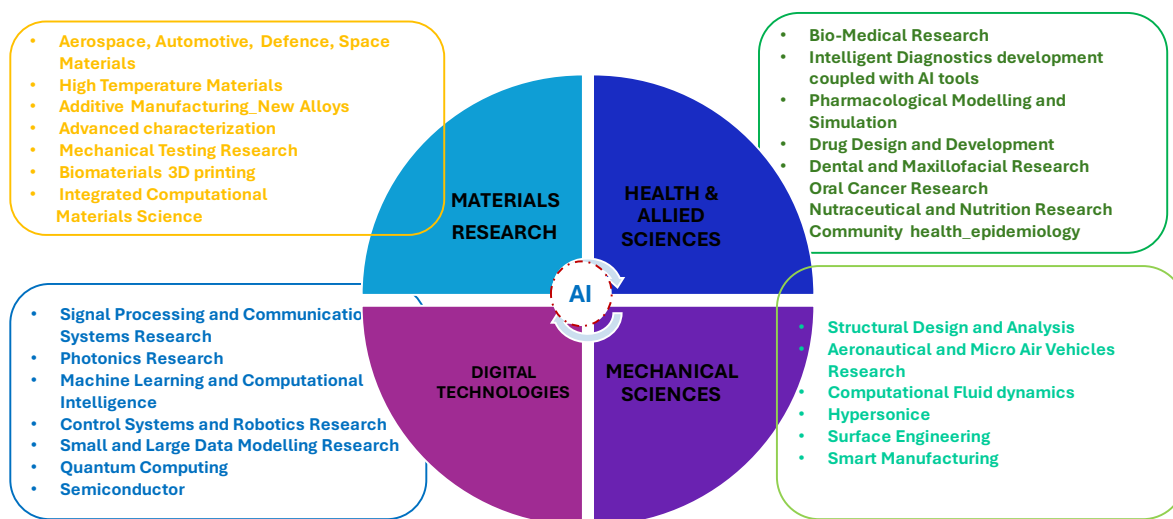


Figure 1: Research Thrust Areas

A. PhD Scholars: Academic year 2023-2024 (July 2023- June 2024)

A vibrant research eco-system is fostered in RUAS via the doctoral program. The PhD program at RUAS caters to diverse research topics aligned with the thrust areas and industry relevant topics. The total number of **PhD scholars** in 2023-2024 was **49**, out of which there were **24 Full time scholars** and **25 Part time scholars (Table 1a)**. The ratio of Women to Men scholars is roughly **50:50** of the part time scholars, 25% were external registrants, from Industries such as Bosch Ltd, Dell Technologies, Syngeneic International Limited etc., and 75% were Internal faculty members from RUAS, who were encouraged to pursue doctoral education to upskill their academic credentials. There was an equal distribution between Engineering and Medical Sciences, with the maximum number of Full-time scholars in the faculty of allied and health sciences and pharmacy, followed by engineering, chemistry and dental sciences. The scholar intake remained at a steady state from the previous academic year (2022-2023). RUAS offers scholarships for meritorious scholars. **23** scholars received junior research fellowships (**JRF**) while **01** scholar received senior research fellowship (**SRF**), and **03** scholars are receiving prestigious external fellowships from DBT funded projects. **24 PhDs were awarded in the Calendar Year 2023** calendar year and **32 will be awarded in the Calendar Year 2024. Table 1b** lists the research topics from the 2024 graduating scholars, comprising some contemporary areas as well fundamental blue skyed research. These include cutting edge research topics ranging from new material formulation for wound healing applications, new therapeutics for cancer, financial well-being management, conducting polymers, industry-academia model for enhanced careers for hotel industries, to name a few. Two of the graduates were awarded post-

doctoral fellowships in Japan, Hiroshima University, and in the Dresden laboratory, in Germany. The scholars were also actively involved in innovative contributions to publications and patents. The eco system for scholars has also been empowered further by inducting ~57 more eligible approved supervisors. Several measures were taken to enable the scholars to pursue research actively by facilitating external connections for characterization and testing, publications boot camp to ensure the correct choice of journals that are impactful and the recipe to technical writing.

Table 1a		
PhD Scholars Details during Calendar Year	2023	2024
Full Time PhD - Research Scholars	52	58
a) Full Time Scholars (New enrolled+ existing scholars)	29	25
b) Part Time PhD (New enrolled+ existing scholars)	23	33
c) Number of Scholars receiving Scholarship from Institution	24	27
d) Number of Scholars receiving Scholarship from outside Funding agency	03	04
PhDs awarded	24	32

Table 1b	
Department	Title of PhD Thesis
Electrical Engineering	Analytical and Simulation Studies on ElectroHydroDynamic Based Flow Measurement System Model for Incompressible Newtonian Low Conductive Liquid in Circular Pipe
Aerospace and Automotive Engineering	Development and Evaluation of Novel Noise- Centric Computational Solution Procedures for Some Industrial Problems
Pharmacology	Unraveling Crucial Genes and Pathways Underpinning Hepatocellular Carcinoma Entwined with Drug Repurposing Through In Silico and In Vitro Investigations
Computer Science and Engineering	Application Oriented Secured Content Forwarding mechanism for Vehicular Named Data Network (VNDN)
Management Studies	Development of Consumer Purchase Behaviour Model for Organic Apparel
Chemistry	Studies on magnetic and Magnetostrictive properties of $Ni_{1-x}M_xFe_2O_4$ ($0 \leq x \leq 1$, $M = Mg, Cu, Co$ and Zn) ceramics derived through Nanocrystalline powders

Pharmaceutics	Fabrication and Standardization of Novel In-situ Superporous Hydrogels and Swellable Vaginal Tablet as Cervix Plugs for an Amplified Contraception Potential – A Comparative Study
Public Health Dentistry	Development of Oral Health Education Intervention Model for Expecting Mothers Towards Promotion of Oral Health of Self and the Child
Electronics and Communication	Evolving Self-Repair Embryonic Architecture for Flight Avionics
Implantology	Studies on In-vitro and In-vivo effects of Prophylactic antibiotic or Curcumin addition to Tissue Conditioners in Controlling Infection when used with immediate Post Surgical Treatment Dentures
Chemistry	Design, synthesis and biological evaluation of non-flavonoid polyphenol derivatives comprising stilbene unit as novel chemical entities for ER-positive breast cancer
Industrial Design	Development of System Design for Automation of groundnut Crop production
Pharmaceutics	Transdermal delivery of polymeric microneedles for the management of osteoarthritis

B. Intra-Mural Grants, Sponsored Research, Publications, Patents

The university encourages research via seed grants to enable early-career researchers to generate preliminary data that can lead to larger extramural grants. **44 research projects** worth **133 Lakhs** were initiated in 2023-2024, to support various faculties in engineering, management, and health sciences. They resulted in tangible outputs of **64 publications, 03 patents** and most importantly in engaging students, at the undergraduate and post-graduate level to carry out research. Nearly **275 students** were engaged with **44 faculty members** learning and contributing to areas such as 3D printing for novel prototypes, novel nano-bio polymer for targeted drug development, bio-polymer for food packaging, nano additives for treating contaminated water, addressing and facilitating needs of aging population with statistical analysis, systematic reviews and economic forecasts for communicable and non-communicable diseases, modeling to influence human organ donation, improved handloom apparels, stochastic modeling for architectural betterment in concrete beams, aerodynamic modeling for turbines, etc. The intra-mural grants also enabled procuring some capital equipment essential to the functional research groups, such as photocatalytic reactor, fused deposition molding 3D printer, etc. A summary of the intra-mural grant outcomes is listed in **Table 2**.

Table 2	
Out-comes of Seed Grants 2022-23 (Academic Year)	
# Papers Publications	64
# Patents Granted	03
# Students Involved	274
# External Projects Applied	17
# Equipment Procured	19

Faculty members have been very active and successful in obtaining sponsored research funding from Govt. of India organizations as well as industry sponsored projects. Sponsored research projects with a total sanctioned grant of **~4.9 Crores INR** were received by the University in the financial year **2022-2023** and **~6.6 Crores INR** in 2023-2024, from 96 and 66 projects, respectively, from faculty members from the engineering sciences and medical sciences, as shown in **Table 3a** and **Table 3b** respectively, from **68 and 36 funding agencies (Table 3c)**. As compared to the previous academic years, there was nearly a doubling of the number of proposals submitted. Some of the areas that resulted in grants are listed in **Table 3d**. The grants enabled building resources for the University, a few of the key equipment that were purchased using sponsored grants were, magnetostriction measurement equipment grant), thermal conductivity measurement equipment (DRDO grant), UV-visible spectrophotometer (VGST), VASP Software for density function theory calculations (DST), artificial limb printing 3D printer.

Table 3a				
Sponsored Research Grants Received (in Rupees)				
Fiscal Year	RUAS	RMC	Clinical Research	Total
2022-2023	22145726	19737253	7344708	4,92,27,687
2023-2024	37272942	21466209	7870713	6,66,09,864

Table 3b				
Number of Sponsored Projects				
Fiscal Year	RUAS	RMC	Clinical Research	Total
2022-2023	30	20	46	96
2023-2024	12	13	41	66

Table 3c				
Number of Funding Agencies				
Fiscal Year	RUAS	RMC	Clinical Research	Total
2022-2023	23	10	35	68
2023-2024	7	6	23	36

Table 3d Sponsored Research Projects
Targeted drug delivery system for metastatic cancer
Novel Nano calcium fortification to augment nutritional value
A peroral delivery system with a bisphosphonate drug for treatment of osteoporosis
Dexterity assessment device for novel rehabilitation
AI based diagnosis and prognostics for orthodontic lesions using histopathological images
System for Automation of Groundnut Crop Production
Development of EEG based biometric systems to identify friend and foe in defense applications
Improving the wireless power transmission system for performance of electric scooters
Development of fire-retardant paints for defense applications
Mathematical model for development of blood flow across cerebral aneurysm
Novel thermal management system using conducting polymers for efficient cooling for the soldiers clothing
Development of a Hall Thruster for efficient combustors
A Collapsible Shoring for Multistoried Building Construction
Model to assess the impact of Start-up schemes on the growth sustainability
Density function theory calculations of novel perovskite architectures for photonic applications
TiO ₂ -V ₂ O ₅ nanocomposites for photodegradation of Industrial dyes and advancing forensic investigation

The research funding (both intra-mural and extra-mural) resulted in tangible output in terms of publications and patents as well as brought in capital equipment and software for the use of researchers. There were **679** publications in 2023 of which **554 were from Scopus indexed** journals, with a **citation count of 21567, h-index at 57, and an average impact factor of 3.62.**

Notable publications include a paper in Nature, authored by Dr. Deepesh Nagarajan with an ongoing collaboration with researchers at the Indian Institute of Science. **Table 4a** lists the publication related output, in calendar year 2023, along with a comparison in the previous year (2022) and the current year, up to October 2024. The research publications were equally distributed from all the departments, in high impact journals, some of which are listed in **Table 4b**. **Table 4c** lists some of the Books written by the faculty.

Table 4a			
Publications	2022	2023	2024
Scopus indexed publication	547	540	484
Web of Science publication	344	368	143
UGC - CARE	475	522	306
Total	1366	1430	933
Other Indexed Journals (Google Scholar)	949	968	789
Citation (Scopus)	10397	21567	28478
h-index	52	57	58

Table 4b High Impact Journal Publications	Table 4c Books Written by Faculty
Nature	Paradigms of Titanate Centered Energy Materials
ACS Applied Materials and Interfaces	
Materials Chemistry and Physics	
Inorganic Chemistry Communications	Drug and Therapy Development for Triple Negative Breast Cancer
Ceramics International	
Journal of Physical Chemistry	
Materials Today Sustainability	Quantum Dots Emerging Materials for Versatile Applications
Journal of Rare Earths	
Journals of Science: Advanced Materials and Devices	
Applied Surface Science Advances	Trailblazing Contemporary Frameworks for Drug Repurposing: A Saga on Drugs' Expedition to Disinter the Veiled Destiny
Drug Development and Industrial Pharmacy	
Frontiers in Oncology	
European Journal of Medical Research	Smart Robot for Agriculture using Artificial Intelligence
Physics of Fluids	Explainable Artificial Intelligence (XAI)
Journal of Biomolecular Structure and Dynamics	

The researchers were very active in filing for the novel research outcomes via intellectual property (IP), contributing to the innovative eco-system, especially emphasizing on collaborations within the medical and engineering disciplines. There was a total of **26 patents filed, 37 granted and 26 published**, in 2023-2024, as listed in **Table 5a**.

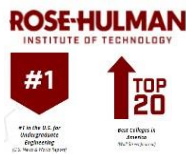
Table 5a			
Patents	2022	2023	2024
Published	11	22	26
Granted	18	33	46

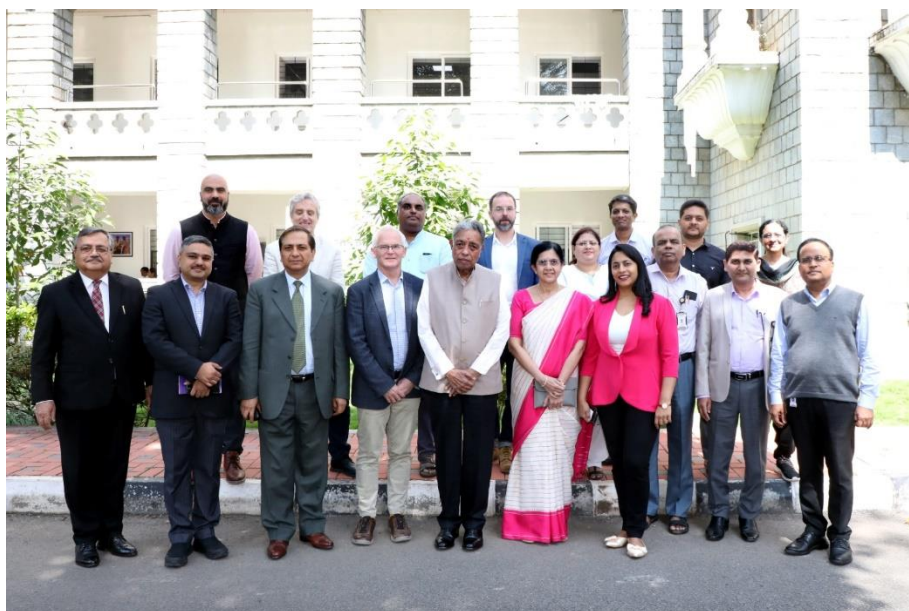
Table 5b Some of the Granted Patents in Innovative Technologies
Raft Forming System for Gastro-Retentive Delivery of Selected Anti-Epileptic Drug
Permanent Magnet Switched Repulsive Motor for High Torque and Autonomous Mobile Power Supply Unit
Method, system and apparatus for wireless streaming of ECG data
Method, system and apparatus for in-line pipe inspection
An analgesic coated surgical suture
Method, system and apparatus for motion detection and velocity estimation in visual navigation system
A communication device for people with speech and language impairment
Infrared based tomography device for finger fracture detection
Ornithopter with improved aerodynamics and control
Spherical spy robot for surveillance operations

External Collaborations

The faculty and students are actively engaged in collaborations at the National and International level, with Universities and Industries. Key MOU's and NDAs were signed to facilitate formal collaborations. These have led to proposals being written for external funding such as ISSR, ICMR, DST, BIRAC, DBT, VGST Indo-Australian, Indo-UK, and other calls for proposals as well as led to student internships (at Industries), consultancy with faculty members. Several dozens of International Universities visited to engage in research collaborations, student fellowships in complimentary areas of research.

Recent Collaborative Initiatives





Visit by Australian National University – Canberra



Visit by Stony Brook University, New York

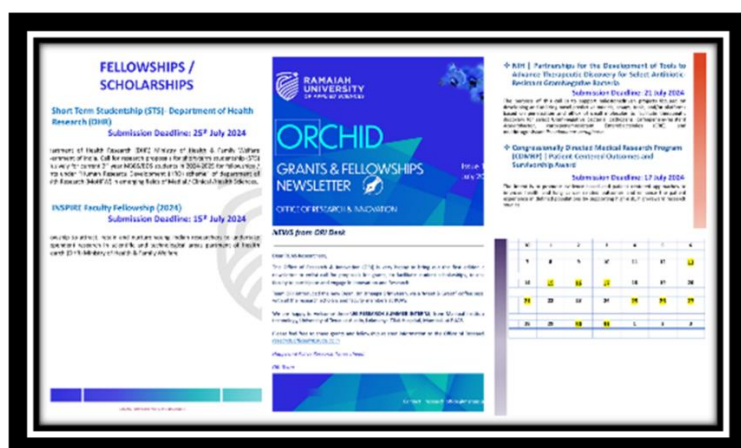
C. Consultancy

RUAS has a dynamic consultancy ecosystem, where faculty offer technical expertise to various government and industrial agencies. These consultancies strengthen industry-academia collaborations, enhancing the translational impact of research and innovation at the university. **These tend to be focused on Operations and management, engineering technical consultancy and medical research.**

D. Process optimization updates

The research department at RUAS has implemented several initiatives aimed at enhancing the efficiency of research processes and improving productivity. Key measures include organizing all research and innovation-related policies into a shared folder for easy access and transparency.

Office hours have been established to address frequently asked questions and provide systematic clarifications. Leaner administrative processes have been introduced, such as maintaining an Inward and Outward Register within the Office of Research and Innovation (ORI), achieving a remarkable two-hour turnaround time for signatures. Additionally, a weekly cadence has been set up to facilitate the efficient transfer of documents between the Peenya and Mathikere campuses. The PhD program is being streamlined through a plethora of efficiency measures. Regular dissemination of fellowships and grants through a **newsletter titled ORCHID** helps keep researchers informed about funding opportunities. An inventory of plant and equipment across RUAS, along with their utilization and contact details, was collated as a **Research Infrastructure** compendium to enable optimized resource usage and access to resources across the University.

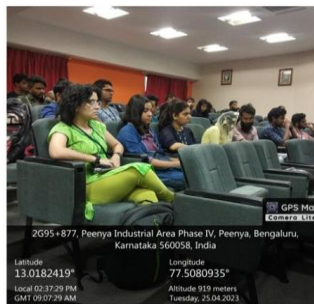


E. Key activities- Glimpses

A rhythm of activities has kept the Research Office Clock ticking away speedily every week and month of the year, disseminating research areas, organizing seminars, offering courses for the scholars in Bio-informatics, Intellectual Property Prior art, Grants Writing, Advanced Characterization, a workshop to un-learn and learn, casual ignition of research ideas over coffee, Research scholar's symposium, SHODH, courses to upgrade knowledge, industrial exposure, and many more. It also serves as a central office to enable quick connectivity between research facilities and facilitates knowledge sharing sessions. Technology transfer initiatives have been evaluated showcasing the research capabilities and encouraging internships and fellowships to enhance research processes. shares glimpses of the various activities that enable an integrated multi-disciplinary interaction amongst the researchers.

Quarter(s)	Activity
Jan - Mar	PhD 2024 Batch Commencement
	PhD January 2024 Batch JRF Applications
	Seed Grant Applications and Review of ongoing SEED Grants
	PhD Scholars Half Yearly Update
Apr - Jun	Innovation Day
	Open Exhibition of Research and Innovation
	Talk on Advanced Composites for Aerospace Applications by Prof. K Padmanabhan, Director, Vellore Institute of Technology, Vellore
	Vyuuha – AI based Tool Development for Cervical Cancer Screening and Early Detection by Mr. Madhusudhan
	Presentation of Research Road Map- Part I to the Leaders, Research Office Team
	Talk on Patenting and Technology Licensing by Prof. Suryasarathi Bose, Chairperson – Intellectual Property and Technology Licensing, Indian Institute of Science, Bangalore
	Talk on Ayushman Bharath Digital Mission - to integrate efforts at local Karnataka sites with Ramaiah eco system by Mr. Om Prakash, Foundation for Science Innovation development (FSID), IISc; Technical Advisor for Ayushman Bharath Digital mission
Jul - Sep	Non-Fatty alcoholic liver disease - A new name for an old disease by Dr. Arjun Venkataramani, Senior Gastroenterologist, Akron, Ohio
	Workshop on enablers of External funding
	Presentation to Mt. Sinai leadership on research collaborations
	JMP Bio-informatics Software Training
	Visit to VIT, Vellore, Center for Bio medical Research and Theragnostic
	A Compendium of All Research Facilities in RUAS, RMC, Central Labs and Ramaiah Advanced Technology Laboratory created - Towards establishing Central Research Laboratories for Bio-Medical Research
	Research and Innovation Council
	Visit to Art Park, IISc, for possible collaborations for AI in Healthcare
	Annual Research Scholars Symposium - SHODH
	Short Course on Materials and Manufacturing for Gas Turbines
	Course on Advanced Materials Characterization - Refresher course on Materials Characterization by Dr. Dheepa Srinivasan
	Intellectual Property Training by OMS Patents
Oct - Dec	Additive Manufacturing for Bio-Medical Innovations - Workshop on Advances in 3D Printing Innovations
	Visit by Australian National University, Canberra
	Advances in Battery Technologies by Dr. Srinath Chakravarthy, Director at Factorial Energy, Boston USA
	Grants writing Workshop by Prof. Vikram Jayaram Indian Institute of Science, Bangalore
	Opportunities at Stony Brook University, USA

Glimpse of 2024 at the Office of Research and Innovation



July – Dec 2023



Innovation Day Celebrations at MSRUAS



IGNITE Research at Ramaiah – RMC





ANNUAL RESEARCH SCHOLARS SYMPOSIUM 2024

M S Ramaiah University of Applied Sciences

August 9-10, 2024
Ramaiah Medical College Council Hall
New BEL Road, Bangalore

ADVANCES IN SUSTAINABLE TECHNOLOGIES, DESIGN AND INNOVATIONS

ABOUT THE SYMPOSIUM
Please join us at our Annual Research Scholars Symposium to engage in pioneering research, participate in enlightening discussions with esteemed scholars, and connect with experts in the field of innovation.

THEMES FOR THE SYMPOSIUM

Innovations in Healthcare Biomaterials, Sensors, Biomedical Devices Diagnostic Advancements in Healthcare Personalized Medicine, Precision Health Sustainable Healthcare Design	Computational Sciences Augmented Reality, Virtual Reality Cyber Security, Internet of Things Mathematical Analysis, Fluid Dynamics AI, ML, Quantum Technology
Design and Technology Sustainable Construction Solutions Communication, Networking Sustainable Industrial Products and Textiles Nutrition, Food Technology	Multi-functional Materials Nano Technology, Composite Materials Emerging 2D Materials Sustainable Organic Synthesis Lightweight Solutions, Alloys

CALL FOR ABSTRACTS
Abstract submission open for all PhD Scholars, PG and UG Students.
Abstract submission deadline : **July 25th, 2024.**

For any queries : shodh.research@msruas.ac.in

Scan to Register






Office of Research & Innovation
MS Ramaiah University of Applied Sciences

Organizes

ANNUAL RESEARCH SCHOLARS SYMPOSIUM - 2024
"ADVANCES IN SUSTAINABLE TECHNOLOGY, DESIGN AND INNOVATIONS"

Invited Speakers

Prof. G. K. Ananthasuresh
Deputy Mechanical Engineering Sciences Division
Indian Institute of Science, Bangalore

Dr. Namrata Gundiah
Professor, Mechanical Engineering
Indian Institute of Science, Bangalore

Panel discussion on -
"Career Transition from PhD to Employment - What it Takes to Succeed?"

Panel Experts

Dr. Balaji Bandiyadhyay
Principal Scientist
Advanced Materials Division
IISc

Dr. Vishwas Puttipe
Business Head
Advanced Materials Division
IISc


Mr. Parasuraman TR
President and Deputy MD
Technical Management & Research India
IISc


Mr. Gopalakrishna Y Madhuskar
Lead Mechanical Engineer
Advanced Materials Division
IISc

AUGUST 9th & 10th, 2024
9:00 AM Onwards
Council Hall,
Ramaiah Medical College
New BEL Road, Bangalore


AUGUST 10th, 2024
12:00 PM Onwards

Research Scholars Symposium


RAMAIAH UNIVERSITY
 OF APPLIED SCIENCES


INSTITUTION'S INNOVATION COUNCIL
(Office of Education Initiatives)

Technical Resource Partner


 **OmS**

INTELLECTUAL PROPERTY RIGHTS (IPR) TRAINING

Hands on Session on Prior Art Search

SEP 27 | 9.30 AM

Registration Form for IPR Training Session on Prior Art Search



Office of Research & Innovation
IPR Cell- RUAS

Council Hall -Pharmacy college,
GG Campus

Contact:
Dr. Nagendra Pratap Singh
Associate Dean, R&I-RUAS


RAMAIAH UNIVERSITY
 OF APPLIED SCIENCES


INSTITUTION'S INNOVATION COUNCIL
(Office of Education Initiatives)

EXPERT LECTURE ON Research Proposal Writing

Writing a Research Proposal: Navigating the Funding Landscape

PROF. VIKRAM JAYARAM

ABOUT SPEAKER

- Honorary Professor, Indian Institute of Science, BLR
- Former Dean, Division of Mechanical Sciences, IISc
- Former Chair, Department of Materials Engineering, IISc

Key topics covered:

- Exploring funded research opportunities in India's growing academic landscape.
- Key steps in securing and executing research funding.
- Role of institutional support in ensuring success.

Saturday, 14 December, 2024

11:00 am - 12:00 pm

[HTTPS://FORMS.OFFICE.COM/R/SKID4TD6R1](https://forms.office.com/R/SKID4TD6R1)

Register Now

CALL FOR DETAILS
+91 9632027485

GG CAMPUS (SPECIFIC LOCATION) WILL BE COMMUNICATED



SCAN ME

OFFICE OF RESEARCH & INNOVATION, RUAS

Workshop on IPR


RAMAIAH UNIVERSITY
 OF APPLIED SCIENCES


INSTITUTION'S INNOVATION COUNCIL
(Office of Education Initiatives)

13th International Conference + Expo on 3D Printing - AM 24

24-25th October 2024, The Lalit Ashok, Bengaluru, INDIA

Pre-Conference Workshop on "3D Printing Advances in Bio-Medical Innovation"

Date: 23 October 2024
Venue: Ramaiah Medical College, Council Hall

Pre-Conference Topics

- 3D Medical Printing for Dental Applications
- Improved Surgical Results with 3D Printed Tools and Custom Implants in Ceramic, Plastic, and Metals
- Customized Medical Devices
- Academic Medical 3D Printing Software Solutions
- Bio-Printing Artificial Organs & Tissues

JOINTLY ORGANIZED BY


AMSI
 AMERICAN MEDICAL SOCIETY OF INDIAN


RAMAIAH UNIVERSITY
 OF APPLIED SCIENCES

SPEAKERS


Prof. GEETHA MANIVASAGAM
 Dean, School of Healthcare Science and Engineering
 Director, Centre for Biomaterials, Cellular and Molecular Theranostics


Dr. JOHN NESAN
 Director, Centre for Technology Assisted Reconstructive Surgery Private Limited


Prof. KAUSHIK CHATTERJEE
 Professor and Chair, Department of Bioengineering, Indian Institute of Science, Bangalore


Dr. VISHWAS PUTTIGE
 Director and CEO AMACE Solutions Private Limited


Mr. MALTESH SOMASEKHARA
 CEO & Co-Founder at Supercraft3D


Mr. ALOK MEDIKEPURA ANIL
 Co-Founder & Director of Next Big


ARUNKUMAR PALANIAPPAN
 B.Tech, M.Tech, PhD, MRSC.
 Assistant Professor,



SCAN TO REGISTER

Registration Details

- * Students/ Research Scholars - Rs. 250/- inclusive of GST
- * Academic Faculty Members - Rs. 500/- inclusive of GST
- * Industry Delegates - Rs.1,000/- inclusive of GST

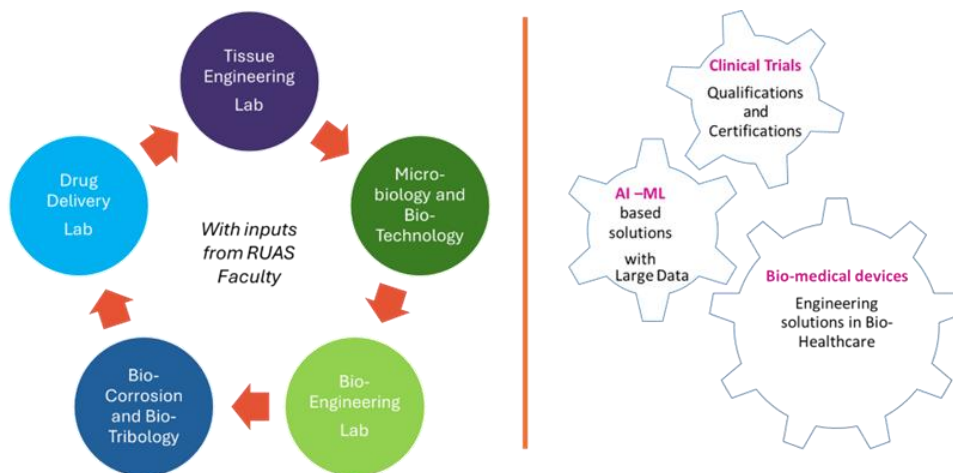
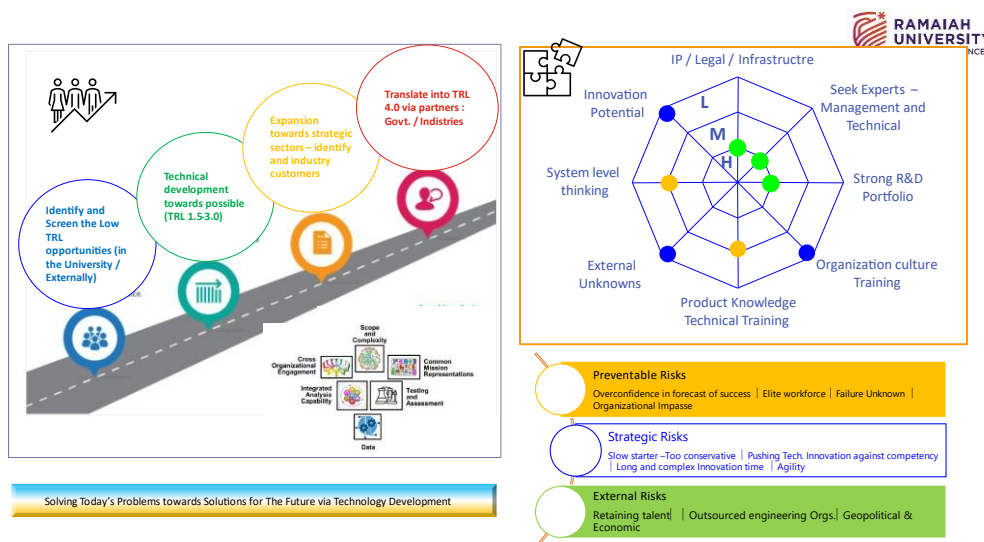
For registration please contact:-
am@amsi.org.in/ contact@amsi.org.in | www.amsi.org.in

Register before 20, October 2024

Workshop on Biomedical Innovations

Research Strategy and Road Map

A road map was developed for the, immediate (1 year), intern (3 years), and long term (5 years), with emphasis on translational research in the Bio-medical and Bio-Sciences areas, keeping in mind, the overriding need for indigenous development. This was particularly chosen keeping the strong legacy of medical and clinical capabilities that RUAS can be seen to have as a national leader. Towards this goal, research infrastructure will be created, both in terms of central facilities (Central Research Laboratories), organically as well as via external grants, to equip and channel the resources (faculty and scholars) to carry out research seamlessly. **The overall goal is to at least double the PhD intake, to be able to recruit post-doctoral fellows, to have the scholars and faculty participate in engaging research initiatives, and to be seen as a go-to place for carrying out research and innovation that will have a far-reaching technological impact.**



Annexures

PhD's Awarded 2024

S.No	Reg. No	Name	Faculty	Department
1	16ETDP729002	Ms. Anusha Vadde	FET	Electrical Engineering
2	14ETET079004	Mr. Gnaneshwara. N	FET	Aerospace Engineering
3	17PHDP730003	Mrs. Gouri Nair	FPH	Pharmacology
4	17ETDP729003	Mr. Hari Krishna S M	FET	Computer Science and Engineering
5	17ETDP720009	Mr. P Kiran Rao	FET	Computer Science and Engineering
6	17ETDP729009	Mr. Nithin Rao R	FET	Computer Science and Engineering
7	17MCDP731007	Ms. Prachi Mishra	FMC	Management Studies
8	14ETET091016	Mr. Saravanan S	FET	Electronics and Communication
9	19MPRP726001	Mr. Satish M	FET	Chemistry
10	14ETET079023	Mr. Shivakumar B B	FET	Aerospace Engineering
11	18PHDP730002	Ms. Swaroopa H M	FPH	Pharmaceutical Chemistry
12	16MCDP731006	Ms. Shireen Rosoria	FMC	Management Studies
13	18PHDP725004	Ms. Shwetha K	FPH	Pharmaceutics
14	17DSDP722002	Dr. Dhanya R. S	FDS	Public Health Dentistry
15	19ETRP729001	Ms. Gayatri Malhotra	FET	Electronics and Communication
16	16DSDP732005	Dr. Vibha Marla Shetty	FDS	Implantology
17	14ETET091012	Mr. Siva Manohar Reddy Kesu	FET	Electronics and Communication
18	14ETET079013	Mr. Sameer Ahamed	FET	Electronics and Communication
19	14ETET091001	Mr. Narasimha Murthy	FET	Electronics and Communication
20	19MPRP706002	Mr. Lairikyengbam Deepti Roy	FMPS	Department of Chemistry
21	17DSDP732001	Dr. Anadha N Gujar	FDS	Department of Orthodontics
22	15ETET091004	Mr. Dhanasekaran Radhakrishnan	FET	Aerospace and Automotive Engineering

S.No	Reg. No	Name	Faculty	Department
23	17SHDP726002	Ms. Kalpana S	FNS	Chemistry
24	16ADDP728001	Mr. Srinivasa	FAD	Industrial Design
25	21PHRP705002	Mrs. Jithu Jerin James	FPH	Pharmaceutics
26	15MCMC081004	Ms. Megha B	FMC	Management Studies
27	17ETDP720004	Ms. Deepti Rai	FET	Computer Science and Engineering
28	18ETDP729002	Mr. Prajwal K T	FET	Electrical Engineering
29	17ETDP709002	Ms. Nandana Narayana	FET	Electronics and Communication
30	20PHRP713003	Dr. Manisha Devi	FPH	Pharmacology
31	14ETET091013	Mr. SUBBARAMU S.	FET	Aerospace and Automotive Engineering
32	20MPRP712006	Mr. Akshay Arjun	FMPS	Physics

PhD's Awarded 2023

S.No	Reg. No	Name	Faculty
1	14DSDS083005	B N Rajaratnam	FDS
2	16ETDP720001	Anuradha Yenikar	FET
3	17SHDP706001	Geeta Krishnamurthy	FMPS
4	18PHDP725005	Tanmoy Ghosh	FPH
5	14PHPH082004	Ramya Krishna P S	FPH
6	14ETET091008	Padma Priya Dharshini	FET - CSE
7	15ETET079004	Santoshi Kumari	FET - CSE
8	17MCDP731002	Ankita Sakhuja Sharma	FHMCT/ FMC
9	15SHSH080001	Maya Pai M	FMPS
10	15MCMC081005	Shobha T S	FMC
11	15MCMC081005	Vijay Bhanu P	FPH
12	14ETET079001	B K Swati Prasad	FET
13	14ETET091015	Soma Pandey	FET

S.No	Reg. No	Name	Faculty
14	19PHRP725001	Jabeen	FPH
15	16DSDP732001	Dr Ashmitha K Shetty	FDS
16	16ETDP720006	Pranupa S	FET
17	20MPRP712005	Shashanka H M	FMPS
18	17SHDP726003	Umesh B G	FMPS
19	15ETET079003	Sachin S	FET
20	20ETRP951002	Harsh Kumar Dashora	FET
21	14ETET091003	J Siva Ramakrishna	FET
22	17DSDP722005	Dr. Shruthy Eshwar	FDS
23	14ETET079018	Praveen L.S	FET
24	19LARP755001	Aileen J	FLAHS

Sponsored Research Projects (Overall)

Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Project	Sanctioned Amount
Faculty of Dental Sciences			
Chatura Mohan	ICMR	Use of Antimicrobial peptide GF17 and its Combination with Calcium hydroxide for Endodontic Disinfection	1,969,813.00
Faculty of Engineering Technology			
Divya B S	VGST	Development of computer Aided Diagnostic and Prognosis of common odontogenic jar lesions	2,000,000.00
Faculty of Life and Allied Sciences			
Tushar Shaw	ICMR	Development and validation of multiplex lateral flow assay for simultaneous detection of common bacterial pathogens of community acquired pneumonia among pediatric population	7,200,000.00
Denny John	(HTAi)	‘Hospital-Based Health Technology Assessment in India: Possibilities, Challenges, and Future Implications for Decision-Making’	3,64.250
Faculty of Pharmacy			
Sindhu Abraham	DST	“Nano Fortification of Flour for the Effective Management of Nutritional Deficiencies”	99,197.00
Tanmoy Ghosh	ICMR	Development of Antimicrobial polymer-based scaffolds loaded with Rhbmp 2 for Bone Regeneration in Extraction Tooth Sockets	2,873,493.00
Jithujerin Jame	DST	Repurposed drug loaded, Mof Nano plastic targeting a GPCR against breast cancer metastasis	2,908,800.00
School of Social Sciences			

Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Project	Sanctioned Amount
Indria	ICSSR	Intimate Partner Violence Community Intervention through awareness, Advocacy and Action	1,900,000.00
Prathistha Bhattacharya	ICMR	"The Impact of Positive Aging Intervention on Flourishing of Elderly in India: A Pan-India Cluster Randomized Controlled Trial	28,000,000.00
T L S Baskar	ICSSR	Intimate Partner Violence Community Intervention through awareness, Advocacy and Action	925,000.00
Ramaiah Medical College			
Chitra Selvan	CDRC	"Evaluation of growth factors and stem cell combination, novel formulation synergize to accelerate wound healing in diabetic foot ulcer models."	2,030,000.00
Pramila Kalra	SARC	An Intelligent Artificial Pancreas System for Type-1 Diabetic Patients of India	93,000.00
Dr Pramila Kalra	BIRAC	Multicentric diabetes registry -CTN 7 sites across India -Our site lead site	2,290,000.00
Dr Pramila Kalra	Padmavathi Foundation	Development of an Insulin pump -Artificial Pancreas	1,560,000.00
Dr Pramila Kalra	DBT	Artificial Pancreas system development of an algorithm	-
Dr Chitra S	ICMR	EVANESCENT -DPN -RCT	2,345,000.00
Dr. Uma Maheswar	Endocrine Society	Urinary iodine levels in subjects with thyroid nodules compared to controls	98,936.00
Dr. Pooja K	Endocrine Society	Assessment of sexual dysfunction in individuals with gender incongruence	99,800.00

Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Project	Sanctioned Amount
Dr. Abhijit	Karnataka Endocrine Society	Correlation of androgen levels with metabolic profile and OSA in women with polycystic ovarian syndrome.	100,000.00
Dr. Shilpa	Karnataka Endocrine Society	Cardiovascular risk profile in women with type 2 diabetes mellitus.	100,000.00
Ms Chinmay	ICMR	cognition in Type 2 DM and correlation with NT ProBNP	50,000.00
Dr. Rachana	Endocrine Society	Non-Alcoholic fatty liver disease in type 1 diabetes mellitus.	100,000.00
Dr. Sanjana	Endocrine Society	Effect of GAHT on bone health and Joint Flexibility in Individuals with Gender Incongruence.	100,000.00
Dr. Suyash	Endocrine Society	Effect of GAHT on NAFLD in gender incongruent woman	143,000.00
Dr. Siddarth	Endocrine Society	Electrogastrography changes in individuals with and without type 2 diabetes mellitus	118,300.00
Ms. Noynika Shukla	ICMR	Pattern of ambulatory blood pressure in normotensive patients of type 2 diabetes mellitus attending a tertiary care hospital in south India	50,000.00
Community Medicine	UNIDO	Environmentally Sound Management of Medical Waste in India	193,000.00
Chitra Selvan	CDRC	“Evaluation of growth factors and stem cell combination, novel formulation synergize to accelerate wound healing in diabetic foot ulcer models.”	125,000.00
Pramila Kalra	SARC	An Intelligent Artificial Pancreas System for Type-1 Diabetic Patients of India	9,300,000.00

Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Project	Sanctioned Amount
Community Medicine	WHO	Making state action plan for biomedical and vaccine waste management by involving district level administrators and staff through district level workshops in one state	3,020,840.00

Ramaiah Clinical Trials

Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Trial	Sanctioned Amount
Dr Rajni Uday	Serum institute of India pvt ltd	SII-qhvpv/IN-02	229,750.00
Dr Avinash Balekuduru	IQVIA RDS (India) Private Ltd.	16T-MC-AMBG	24,645.00
Dr Satya Prakash/Dr Avinash Balekuduru	Klin era Global Services (KEGS)	GS-US-418-3899&3895	476,086.00
Dr Satya Prakash/Dr Avinash Balekuduru	Klin era Global Services (KEGS)	GS-US-418-3895	50,000.00
Dr Avinash Balekuduru	Siro Clinopharm pvt ltd	CT/P016/IBD/17-02	30,000.00
Dr Santosh Kumar D	Amgen Technology Pvt Ltd	20160372	227,110.00
Dr Gayathri Devi H J	Boehringer Ingelheim India pvt ltd	1199.225	121,892.00
Dr Santosh Kumar D	PPD Pharmaceutical Development India Pvt Ltd	G042784	30,000.00
Dr Gireesh M S	Novonordisk India Pvt Ltd	NN9535 4321	151,100.00

Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Trial	Sanctioned Amount
Dr Avinash Balekuduru	IQVIA RDS (India) Private Ltd.	GA28951	37,896.00
Dr Nagamalesh	India Medtronic Ltd	MDT19003	247,497.00
Dr Pramila Kalra	IPCA Laboratories Ltd	IPCA/HYQP/PII-18	30,000.00
Dr Naresh Shetty	Ecorn Acunvoa Ltd	SRPL/OA/16-17/001	30,000.00
Dr Pramila Kalra	IQVIA RDS (India) Private Ltd.	CSOM230B2412	106,875.00
Dr Ashwin Kulkarni	Dianosearch Life Sciences Pvt Ltd	GBL/HCG019/2021/01	50,000.00
Dr Vijay Kumar H M	PARAXEL International Clinical Research Pvt Ltd	C3601002	42,950.00
Dr Ravi Shankar Shetty	Healthium Medtech Ltd	IND-HEALTHIUM-TRUWAX-2	347,500.00
Dr Sanjay C Desai	Meril life Sciences pvt ltd	CREDENCE™ BRS -1	46,875.00
Dr Sanjay C Desai	Meril life Sciences pvt ltd	CREDENCE™ Btk-1	9,375.00
Dr Avinash Balekuduru	AstraZeneca Pharma India pvt ltd	D5271C00001	97,500.00
Dr Avinash Balekuduru	AstraZeneca Pharma India pvt ltd	D5271C00001	141,875.00
Dr Surya Narayana K M	Novonordisk India Pvt Ltd	EX9924-4473	219,844.00
Dr Sanjay C Desai	Novalead pharma pvt ltd	NG A16	22,500.00

Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Trial	Sanctioned Amount
Dr Gurudev K C	George Clinical India pvt ltd	417-201-00007	50,000.00
Dr V S Prakash	Bayer Zydus Pharmaceutical Pvt Ltd	20387	50,000.00
Dr Chitra Selvan	Novonordisk India Pvt Ltd	NN98384609	851,969.00
Dr Avinash Balekuduru	IQVIA RDS (India) Private Ltd	ABX464-105	50,000.00
Dr Avinash Balekuduru	Eli Lilly company(l) pvt ltd	16T-MC-AMAP	39,084.00
Dr Pramila Kalra	Allucent (India) Pvt Ltd	CRN00808-08	421,815.00
Dr Vishwanath K	IQVIA RDS (India) Private Ltd.	MET 55	63,146.00
Dr Sumathy TK	Pharmaceutical Research Associates India pvt ltd	TV45779-IMB-30086	321,904.00
Dr Kirthi Kousik	Pharmaceutical Research Associates India pvt ltd	NANORAY 312	510,772.00
Dr Pramila Kalra	Novonordisk India Pvt Ltd	NN1535-4988	50,000.00
Dr Pramila Kalra	Novonordisk Service India Pvt Ltd	Education Module	2,025,000.00
Dr Pramila Kalra	Eli Lilly company(l) pvt ltd	J2A-MC-GZGT	250,000.00
Dr Avinash Balekuduru	Worldwide Clinical Trial India Pvt Ltd	PB016-03-01	50,000.00
Dr Avinash Balekuduru	PARAXEL International Clinical Research pvt Ltd	78934804CRD2001	50,000.00

Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Trial	Sanctioned Amount
Dr Avinash Balekuduru	PARAXEL International Clinical Research pvt Ltd	78934804UCO2001	50,000.00
Dr V S Prakash	India Medtronic Ltd	MICRA AV PSR	50,000.00
Dr Avinash Balekuduru	IQVIA RDS (India) Private Ltd.	ABX464-105	165,753.00
Dr Pramila Kalra	Novonordisk India Pvt Ltd	NN9838-4942	50,000.00

Ramaiah International Centre for Public Health Innovation

Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Project	Sanctioned Amount
Dr. Nandakumar B S	Meghalaya State Government	Providing Capacity Building Support for Health Staff including Nurses under the Meghalaya Health Systems Strengthening Project (MHSSP) to improve the efficiency and accountability in delivering day-to-day	66,826,305.00
Dr. Ruchi Vaidhya	Almond Board of California	Effect of almond supplementation on gut health and glycemic control in adults with prediabetes in rural settings of Karnataka, India: impact assessment in a cluster parallel randomized trial	32,191,164.44

Patent Published

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
202041031791	1. D.C. Sundaresh	Covid-19 Thermal Comfort Head Gear for Covid Suit	24/07/2020	5/31/2024	Journal No. 22/2024 Dated 31/05/2024 50748
202341005360	1. Basappa Veerabhadraiah Basavaraj 2. Darshan Gowda 3. Rajeev Jayateerth Mudakavi	Novel Composition for Oral Care and Other Applications	1/27/2023	8/9/2024	Journal No. 32/2024 Dated 09/08/2024 71996
202341005359	1. Aditi Rao 2. Ashwini S 3. R Deveswaran	Proanthocyanidin Based Dentifrice for Patients with Chronic periodontitis And Type 2 Diabetes Mellitus	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69738
202341005358	1. Sowmya S V 2. Dominic Augustine 3. Vanishri C Haragannavar 4. T Niranjana Prabhu 5. Akshatha Chandrashekar 6. Madhushree Hegde 7. Syeda Taniya Firoz 8. Upasana Das 9. Vijayalakshmi B V 10. Vyom Shukla	A Portable Electrolytic Device for Rapid Decalcification of Oral Hard Tissue	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69737
202341005357	1. Karishma Jagadeesh 2. Vaishali K Shettigar	A Measurement Device for An Intra Oral and An Extra Oral Measurement	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69736

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
	3. Dakshath Prasad Jembige 4. Parikshith Mallya				
202341005356	1. Rajanikanth B. R. 2. R. Deveswaran 3. Vanitha N	A Novel Tissue Expander for Maxillofacial Regions	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69735
202341005355	1. R. Deveswaran 2. J. Anbu 3. C. Priyanka	Gel Based Delivery System Containing Lignin and Tannin for Wound Healing	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69734
202341005354	1. Sejal Kumarpal Munoyath 2. Harini Palanivelu 3. Sindhu Abraham	Mucoadhesive Aceclofenac Microspheres for Post Operative Pain Relief in Surgically Impacted Molar Sites	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69733
202341005353	1. N. C. Mahendra Babu 2. Manjunath M Ullegaddi 3. Goutham T S 4. Dilip Kumar D. Rathod 5. Gautham Kumar Rana 6. Mahesh R	Mulberry Leaves Separation and Chopping Machine	1/27/2023	8/9/2024	Journal No. 32/2024 Dated 09/08/2024 71995
202341005352	1. Basappa Veerabhadraiah Basavaraj 2. Vidya K	Topical Formulation Loaded with Pomegranate Seed Oil for The Treatment of Psoriasis	1/27/2023	8/9/2024	Journal No. 32/2024 Dated 09/08/2024 71994
202341005351	1. Sandhya K V 2. J Anbu 3. Khushboo Kumari	Oral Suspension of Diosmin Microparticle for The Treatment of Angina Pectoris	1/27/2023	8/9/2024	Journal No. 32/2024 Dated 09/08/2024 71993

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
202341005281	1. Shruthi Nagaraja 2. Sylvia Mathew 3. R. Deveswaran 4. Ayesha Najam	Drug Loaded Nano Sponge	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69729
202341005280	1. S Bharath 2. Shivani Srinivasan H 3. J Anbu	Intranasal In-Situ Gelling Drug Delivery System Targeting Brain for Treatment of Motion Sickness	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69728
202341005279	1. K Shwetha 2. R Deveswaran	Directly Compressible Pharmaceutical Excipients for Drug Delivery	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69727
202341005278	1. Vidyanand. S. Desai 2. Suhas S	Bathroom Commode for Arthritics Patients and Old Age People	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69726
202341005277	1. Lalitha S Jairam 2. R Deveswaran 3. Dinesh Kumar S 4. Eshwari D Naik 5. Faizan Ali Khan 6. Fathima Tanzeem 7. Hiba Haleema	An Oral Muco-Adhesive Patch Incorporating Amla Bark and Fruit Extract for Wound Healing in Oral Ulcers	27/01/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69725
202341005276	1. Kirthi Bhushan A 2. Damodar Nayak A	Rutin Entangled Folic Acid Conjugated Carboxyl Functionalized Multi-Walled Carbon Nanotubes Against Breast Cancer	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69724

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
202341005275	1. Gowri R 2. J Anbu 3. Sindhu Abraham	Rutin In Situ Gel for Conjunctivitis	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69723
202341005274	1. Sindhu Abraham 2. Sandhyashree S B 3. J Anbu	Nanostructured Lipid Carrier Based Gel of Tamanu Oil for Management Of Psoriasis	1/27/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69722
202341005273	1. Sylvia Mathew 2. Shruthi Nagaraja 3. R. Deveswaran 4. Anu Elsa Swaroop 5. Harshini P	A Local Drug Delivery System for Endodontic Disinfection	1/27/2023	8/9/2024	Journal No. 32/2024 Dated 09/08/2024 71992
202341005272	1. K Shwetha 2. Basappa Veerabhadraiah Basavaraj	A Ph Sensitive, Psyllium Based Super Porous Hydrogels for Smart Drug Delivery	27/01/2023	8/2/2024	Journal No. 31/2024 Dated 02/08/2024 69721
202341004840	1. R. Suresh 2. Ananth S. Iyengar	Emission Reduction Using Metallic Sintered Filters	1/25/2023	8/23/2024	Journal No. 34/2024 Dated 23/08/2024 75979
202341004839	1. Prajwal K T 2. K Manickavasagam 3. Nikita T 4. Swathy Nair	Vertical Coil-Magnet Stack Electromagnetic Energy Harvester	25/1/2023	8/23/2024	Journal No. 34/2024 Dated 23/08/2024 75978
202341004838	1. T. Christy Bobby 2. Vijaya Madhavi C M	Method, System and Apparatus for Early Detection of Breast Cancer Using Multimodal Images and Decision Fusion	1/25/2023	7/26/2024	Journal No. 30/2024 Dated 26/07/2024 66926

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
202341004837	1. M C Murugesh 2. Jagath.L. K 3. Marshall Matthews 4. Aditya K. 5. Iyli Mallikarjuna	Exoskeleton Arm for Rehabilitation	1/25/2023	7/26/2024	Journal No. 30/2024 Dated 26/07/2024 66925
'202341004836	1. Susan Ealias Attasseril 2. J Anbu 3. Tanmoy Ghosh	Enriched Topical Formulation for Hair Re-Growth And Vitality	1/25/2023	7/26/2024	Journal No. 30/2024 Dated 26/07/2024 66924

Patents Granted

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
824/CHE/2015	1) Aju Philip 2) C. S. Divya Darshan 3) C Gopinath	Method, System and Apparatus for Vegetable and Fruit Cleaning	21/02/2015	3/5/2024	536797
7056/CHE/2015	1) Dr. Rajanikanth B.R. 2) Dr. Kavitha Prasad	Device For Relieving Temporomandibular Joint Pain	30/12/2015	4/1/2024	494782
6874/CHE/2015	1) Sandhya Chilukuri 2) Varun D 3) Dr. Govind R. Kadambi 4) B.R. Karthikeyan	Horizontally And Vertically Polarized Omni Directional Planar Antenna for Polarization Reuse	23/12/2015	5/16/2024	538275

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
517/CHE/2012	1. Kishore Rajendran	Contour Extraction of Digital Image	13/02/2012	6/19/2024	542220
202041056807	1. Bharath Srinivasan 2. Vaishali Sharma	Raft Forming System for Gastro-Retentive Delivery of Selected Anti-Epileptic Drug	29/12/2020	9/4/2024	532336
202041056118	1. Vijaykumar. Vemali 2. B.V. Basavaraj	Anti-Fungal Niosomal Topical Spray of Voriconazole	23/12/2020	5/31/2024	540617
202041055905	1. Chindanur Narendra Babu 2. Soumya Jyoti Raychaudhuri 3. Soumya Manjunath 4. Chithra Priya Srinivasan 5. Swathi.N 6. S. Sushma 7. Nitin Bhushan K.N.	Smart Wearable Emotion Support System	22/12/2020	10/22/2024	552822
202041055632	1. Abhinandan U Naik 2. Anusha Vadde 3. K. Manickavasagam	Permanent Magnet Switched Repulsive Motor for High Torque and Autonomous Mobile Power Supply Unit	21/12/2020	12/8/2024	547529
463/CHE/2014	1) S. Srikari 2) S. Subbaramu 3) S. Prashanth Manvi	Method, System and Apparatus for An Efficient Floor Panel Material for Aircraft	1/2/2014	8/2/2024	508612

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
2273/CHE/2014	1) Muppala Kalyan 2) Venkatanatha Sarma Yerragudi 3) N. D. Gangadhar 4) Govind R. Kadambi	Method, System and Apparatus for Development Of Mimo Communication Node Using Gnu Radio	6/5/2014	12/2/2024	509589
202041055630	1. K. T. Prajwal 2. K Manickavasagam 3. T Naveen Kumar	Conical Shaped Electromagnetic Energy Harvester	21/12/2020	9/25/2024	551092
1167/CHE/2014	1) A S Rathan Kumar 2) N D Gangadhar 3) K R Narasimha Murthy	Method, System and Apparatus for Wireless Streaming Of ECG Data	7/3/2014	2/19/2024	512258
201941054267	1.Chiranjith Burui 2.Vidyanand Desai 3.Sanjay Subramanian	An Adaptive Self Lacing Footwear	27/12/2019	8/3/2024	522561
1833/CHE/2013	1.Ugra Mohan Roy 2. Dr. Govind R. Kadambi	Integrated Opto-Electronic Oscillators	25/04/2013	2/23/2024	514554
201941054072	1.Sujatha S 2.Tupakula Kumar Pavan 3.Nagaraju Rajesh	Dental Digital Image Receptor Holder with Dual Aiming Rings for Imaging	26/12/2019	6/14/2024	541836
201941054069	1.Lavanya R 2.Kranti K 3.Lohith H S 4.Saagar Bhargava 5.Gayathri K	Blade Guard – Device to Safely Load And Unload A Surgical Scalpel	26/12/2019	2/5/2024	536613

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
201941053799	1) Sujatha S 2) Suryaprakash 3) Aninditya Kaur	Disposable-Syringe Recycler	12/24/2019	5/30/2024	540129
201941053798	1. Narahari H. K 2. A.T. Sriram 3. M. Sivapragasam 4. Abdullah Ansari 5. Darshan Y. N 6. Mahesh M. 7. Manoj Mannari 8. Sachin Chavan 9. Tejaswini M. 10. Swasthika D. S 11. Srikari S 12. Mahesh K. Varpe 13. Abhilash S 14. Rakesh Mohan 15. Rajanikanth 16. Ramesh S	Ornithopter With Improved Aerodynamics and Control	24/12/2019	1/1/2024	492499
201941053793	1.B K Swathi Prasad 2.R Suresh	Spherical Spy Robot for Surveillance Operations	24/12/2019	1/5/2024	536490
2372/CHE/2014	1) Mumshad Mannambeth 2) Rinki Sharma 3) N D Gangadhar	Method, System and Apparatus for An Efficient Client-Side Load Balancing in A Cloud Computing Environment	12/5/2014	3/13/2024	524723

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
201941053790	1.Ranganath K 2.Parimala Sagar	Local Anesthesia Dispenser – A Portable Delivery System Without an Aide	24/12/2019	3/15/2024	527696
201841050040	1. H.s Lohit 2. Bala Vignesh 3.Rajat Saini	Airborne Floating Device for Commercial Applications	31/12/2018	3/15/2024	527236
201841050039	1.Rahul M Cadambi 2.Arun R Roa 3.Thejas S 4. Sunilpete M A 5. Nagarjun M A 6. Pavan Kumar N 7.Anurag B Hebballi	A Method and Device for Composite Filament Winding	31/12/2018	2/27/2024	515914
201841050035	1.Pushpalatha C 2.Deveswaran R 3.Kavitha Komandur	Intraoral Liquid Bandage for Sustained Drug Delivery	31/12/2018	9/24/2024	550856
4263/CHE/2013	1) Govind R. Kadambi 2) K. R. Narasimha Murthy 3) Rinki Sharma 4) Deepali R. Borade 5) C. H. Sandhya	Mobile Ad Hoc Networks	20/09/2013	3/15/2024	528171
201841049197	1. Nithin Venkataramana 2.Tejas S	Method, System and Apparatus for In-Line Pipe Inspection	26/12/2018	10/1/2024	497265
201841049193	1. Arun R. Rao 2.A Risheesh Kumar	Compact Pomegranate Aril Remover	26/12/2018	5/27/2024	539369

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
201841049192	1.Tupakula Kumar Pavan 2.Janardhan Sujatha 3.Nagaraju Rakesh	Oral X-Ray Film Holder for Easy Determination of Working Length in Endodontics	26/12/2018	3/15/2024	528101
201841049190	1.Pushpalatha C 2.Deveswaran R	Method And Composition to Improve Antibacterial Activity and Surface Micro-Hardness of Root Canal	26/12/2018	12/1/2024	498877
201841048761	1. Venkatesan Suchitra 2. Krishnan Manickavasagam 3.Thotakanam Kumar Naveen 4.Puttaraj Vineetha 5. M S Indira	Method, System and Apparatus to Extend Discharge Time of Battery Using Two-Chopper Circuit	22/12/2018	1/19/2024	501482
201841048759	1. Mahanthesha S 2. Ashwini S 3.Manjusha MV 4. Ramya Ganesh 5.Shivani Saxena 6.Deveshvaran R	An Analgesic Coated Surgical Suture	22/12/2018	2/19/2024	512134
201841048758	1. Suma 2. Shrestha Kumar Singania	Dentures With Chrysalis Fibers	22/12/2018	8/4/2024	532118
201741046757	1. Vineeth Lumar K 2. Kavitha Prasad	A Unified Power-Driven Medical Screw Fastener for Fixation of Bone Fractures	27/12/2017	5/3/2024	520156
201741046756	1. Swetha Venkataramana 2. Preetham Shamkapal 3. Lohit H. S	Device And Apparatus for Non-Invasive Oral Cancer Screening	27/12/2017	3/13/2024	524786

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
201741046754	1.Sivaranjani Gali	A Slide-In Syringe for Covering a Needle-Stick	27/12/2017	2/29/2024	517813
201741046750	1. Varun D 2. Peruvayila Vikram	A Dual-Band Dual Polarized Antenna with Beam Steering	27/12/2017	7/17/2024	545142
201741046744	1. Prajwal K. T 2. V.S. N Sitaram Gupta. V	Method And System for Continuous Power Supply from Multiple Energy Source Based On Demand Management	27/12/2017	4/30/2024	536077
201741046742	1. Shrinivasan S 2. Chethana R	Delignification Of Coir Pith and Fortification With Nitrogen	27/12/2017	1/25/2024	503577
2298/CHE/2014	1) Krushna Chandra Patel 2) R Hariharan	Method, System and Apparatus for Motion Detection and Velocity Estimation in Visual Navigation System	8/5/2014	9/8/2024	547410
201741046741	1. Sivaranjini Gali 2. Priyanka Aiyer 3. Anoop Sharma	Method And Apparatus for Thermoplastic Stock Trays with Custom Spacers for Edentulous Patients	27/12/2017	2/29/2024	517432
201741046737	1. Govind R. Kadambi 2. Sanket Desai	Method, System and Apparatus for Cordic Programmable Qam and Efficient Viterbi Decoder	27/12/2017	9/30/2024	551629
201641043533	1. Kaushik C.M 2. Lasitha Mikkayil 3. Hariharan Ramasangu	Method And System for A Discriminative Object Tracking with Sample Selection	20/12/2016	7/25/2024	545983

Patent Application No.	Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published / Granted Date	Patent Publication Number / Patent Granted Number
1155/CHE/2015	1) Sree Prasad K 2) C. S. Divya Darshan 3) M. N. Sudhindra Kumar	A Communication Device for People with Speech and Language Impairment	10/3/2015	5/1/2024	494995
202041055908	1. Chindanur Narendra Babu 2. Sudhir Kumar Patnaik	A Novel Adaptive Information Extraction System Using Deep Learning Technique and Neural Networks	22/12/2020	9/19/2024	550581
201641043799	1. K. Manickavasagam 2. N. Sivakumar 3. K. Kanthimath	Method And System for Permanent Magnet Linear Alternator	22/12/2016	2/21/2024	513129
7055/CHE/2015	1) Preetam Shankpal 2) Praveen L S 3) P. Siva Dinesh 4) Akashdeep Howladar 5) Ragith Rajan 6) S. Greeshma 7) S. Deepthi	Infrared Based Tomography Device for Finger Fracture Detection	30/12/2015	10/9/2024	552162