







RASHTRIYA UCHCHATAR SHIKSHA ABHIYAN (RUSA) Entrepreneurial, Innovation, Skill and Career Hub

# Internship opportunity for PG students

Madurai Kamaraj University-RUSA presents an internship opportunity. MKU provides opportunity for the aspiring Postgraduate students to gain hands-on experience to boost their academic profile.

- **Y** I & II year PG students from Universities and Colleges can apply.
- 🗰 Internship period 27 May 2024 28 June 2024
- 💼 Highlights
- ✓ To utilize the expertise and facilities available within our esteemed Faculty & Departments.
- ✓ Enhance your skills and knowledge in your field of interest.
- ✓ Receive an internship stipend of Rs.4,000/- for a month and working expenses of upto Rs.10,000/-
- Obtain a internship certificate from Madurai Kamaraj University RUSA Skill Hub.

This Internship Program aims to bridge the gap between theoretical knowledge and practical application by offering 4 weeks internship in various Departments of our University. Go through the following pages and MKU Department links to find out the Department and Faculty member to suit your interest. For other information about Faculty and Departments, visit MKU website (mkuniversity.ac.in).

Please use this opportunity to kickstart your career journey and stand out. Make your summer break count! Apply now and pave the way for a bright future.

To register - https://forms.gle/3YhGaPUqg1GbV8hx9

Timeline : 14.05.2024

## School of Biological Sciences

S.No	Faculty	Department	Area of Expertise for		Facility available in the	
	Member			Internship		Department/School/Lab
1	Prof.	Genetics / Biological		Cancer Genomics		Cell Culture Labs
	G.Kumaresan	Sciences		Drug Discovery	≻	Ancient Genomics Lab
			$\succ$	Ancient Genomics	$\succ$	High Content Drug Screening Facility
					$\succ$	High Performance Computing system
2	Dr. M.	Immunology	$\succ$	Immunology	$\triangleright$	Nucleic acid extraction laboratory
	Jayalakshmi		≻	Microbiology	$\succ$	PCR, RT-PCR
			≻	Bioinformatics	$\succ$	Electrophoresis
			≻	Phytochemistry	≻	Equipped Microbiology & Phytochemistry
				5		lab
3	Dr. S.	Plant Science	≻	Ecology	≻	Facilities to carry out ecological research
	Chandrasekaran					
4	Dr. K. Jayakumar	Animal Behavior	$\triangleright$	Coral Identification,	$\blacktriangleright$	Molecular biology laboratory
			$\triangleright$	Coral Reef Genomics	$\triangleright$	Coral SCUBA diving facility
			≻	Marine Bioprospecting,		
			≻	Marine Genomics		
5	Dr. A. Justin	Biochemistry	≻	Natural products	$\triangleright$	Immunoblotting
	Thenmozhi		≻	Antioxidants	$\triangleright$	Cell culture facility
			$\geq$	Neuro degenerative		Ş
			Í	diseases, Cell culture		
				Western blot		
6	Dr. J.	Genetics		Microbial Genomics	>	Molecular biology equipments
0	Rajendharan	Genetica	<b>1</b>			Computation facility
7	Dr. C. Amutha	Animal Behavior	>	Aquaculture		Soxhlet apparatus
/	DI. C. Alliutila	Allillai Dellavioi		Xenobiotics-molecular		PCR
				detoxification	>	Epifluorescent microscope
				mechanisms, Endocrine		Gel Doc
				disruption		
			$\succ$	Bioremediation using		
				microbial enzyme		
				nanoparticle conjugates		
			≻	Induced breeding		
				technology in shell and		
				fin fishes, Nutri-		
				genomics		
8	Dr. S. Ramasamy	Biochemistry	$\triangleright$	RNA Biology,	≻	RNA isolation and Characterization
0	Direrianabaniy	Dictionitienty	Í	Toxicological	>	Western-Blotting
				Biochemistry,	6	Gel electrophoresis
				Molecular cardiology		Cell cytotoxicity
9	Dr. V.	Microbial Technology		Microbial metabolites		PCR
2		Microbial recimology		Microbial metabolites		
10	Shanmugaiah	Microbial Tachnalage	$\succ$	Exopolysaccharide		Fermenter PCR
10 11	Dr. M. Murugan Dr. U. Ramesh	Microbial Technology Molecular Biology		Exopolysaccharide Fish Biology		PCR
11	וט. המווופאוו. ט. המוופ	molecular biology	1		Ĺ	
				Toxicology		Microtome
10		Dlaut California		Histo techniques	~	
12	Dr. T. Jebasingh	Plant Science		Plant virology	>	DNA, RNA, Protein Research
				Small RNA Biology		Small RNA Genomics
					≻	Transcriptomics
					≻	Recombinant protein expression and
	1	1				purification
					$\triangleright$	Protein-protein interaction
					$\triangleright$	Plant tissue culture
					A A	
						Plant protoplast isolation and transfection
					AAA	Plant protoplast isolation and transfection Plant Agrobacterium mediated
					ĺ	Plant protoplast isolation and transfection Plant Agrobacterium mediated transformation and infiltrations
12	Dr. D. Ashali	Conotic Engineering		Constin discussion	>	Plant protoplast isolation and transfection Plant Agrobacterium mediated transformation and infiltrations Metabolomics, Lateral flow device
13	Dr. B. Ashok	Genetic Engineering	~	Genetic disoreder	- 	Plant protoplast isolation and transfection Plant Agrobacterium mediated transformation and infiltrations Metabolomics, Lateral flow device DNA Mutational analysis
13	Dr. B. Ashok Kumar	Genetic Engineering /SBT		diagnosis	AAA	Plant protoplast isolation and transfection Plant Agrobacterium mediated transformation and infiltrations <u>Metabolomics, Lateral flow device</u> DNA Mutational analysis PCR
13			A A		AAAA	Plant protoplast isolation and transfection Plant Agrobacterium mediated transformation and infiltrations <u>Metabolomics, Lateral flow device</u> DNA Mutational analysis PCR RT-PCR
13				diagnosis	AAA	Plant protoplast isolation and transfection Plant Agrobacterium mediated transformation and infiltrations <u>Metabolomics, Lateral flow device</u> DNA Mutational analysis PCR

### School of Biotechnology

S. No	Name of Faculty Member	Department	Area of Expertise for Internship	Facility available in the Department/School/Lab
1	Dr.N.Sivakumar	Molecular Microbiology	<ul> <li>Probiotics,</li> <li>Prebiotics – aquaculture nutrition</li> </ul>	Yes (required facility)
2	Dr. G. Sridevi	Plant Biotechnology	<ul> <li>Plant Genetic Engineering</li> <li>Plant Functional Genomics,</li> <li>RNA silencing</li> </ul>	<ul> <li>Plant tissue culture,</li> <li>transformation,</li> <li>Recombinant DNA technology,</li> <li>NGS analysis</li> </ul>
3	Dr. P.VARALAKSH MI	Molecular Microbiology	<ul> <li>Bioactive Metabolites from Algae for cancer, Diabetes, obesity.</li> <li>Neurological disorders</li> <li>Renewable energy from Algae</li> </ul>	<ul> <li>PCR</li> <li>Chem Doc system</li> <li>Lyophilizer</li> <li>Cell culture facility</li> <li>Algal culture facility</li> <li>Microplate reader</li> <li>Sonicator</li> </ul>

#### School of Chemistry

S.No	Name of Faculty Member	Department	Area of Expertise for Internship	Facility available in the Department/School/Lab
1	Dr. G. GNANA KUMAR	Physical Chemistry	Fuel Cells, Batteries, Electrochemical Sensors	3-Electrochemical work stations, 2- Fuel Cell Test Stations, Electrospinning, Chemical vapor Deposition, Muffle furnace, Laminar flow hood
2	Dr.M.Jeyanthinat h	Materials Science	Synthesis of Nanomaterials and thermo electric materials. Fabrication of Dye sensitized solar cell device. Fabrication of Supercapacitor and electrochemical studies. Dye and Drug Degradation using Photocatalytic materials. Electrochemical etching for nanostructure formation in various Silicon materials. High entropy alloy formation	Magnetic stirrers and Muffle furnace, Probe Sonicator, Autoclave. Solar cell fabrication and testing laboratory CH Instruments. UV – Visible. Spectroscopy. Electrochemical etching setup. Furnance, bellet press etc.
3	Dr.J.Annaraj	Materials Science	Drug Delivery, Biosensor, Bioinorganic chemistry, Photocatalysis, Nanocomposites	Probesonicator,Diode-Array, cyclic volbonetry
4	Dr.Sivakumar	Organic Chemistry	Organic Synthesis, photo chemistry	NMR, UVFloroscience, GC-MS
5	Prof.V.S.Vasantha	Natural Products Chemistry	Electro chemical optical biosensors, Photocatalyst	UV-VISIBLE NIR, UV – visible spectroscopy, Electrochemical work station (SP – 150,300)
6	Dr.P.Suresh	Organic Chemistry & Photo pysical studies of supermolecules	Medicinal Chemistry	NMR, GC-MS 7
7	Dr.V.Padmini	Organic Chemistry	<ol> <li>Synthesis of Heterocyclic compounds</li> <li>Chemosensor, Biosensor</li> </ol>	<ol> <li>1.UV-VIS spectroscopy, 2. Fluorescence Spectroscopy, 3. Nuclear Magnetic Resonance Spectroscopy, 4. GC-MS, 5.BET,</li> <li>6. Photoluminescence Spectroscopy</li> </ol>

School	of Physics
--------	------------

S.	Name of	Depart	Area of Expertise for	Facility available in the Department/School/Lab
	Faculty	ment	Internship	
No	Member			
1	Member         Dr.Sujin P.         Jose         Assistant         Professor &         Head (i/c)	Comput ational Physics, School of Physics	Energy Materials, Supercapacitors, Batteries, Biomedical Applications, Environmental Remediation	Supercapacitor Fabrication Unit         ✓       Glove Box         ✓       Coin Cell Crimping Machine         ✓       Automatic Film Coater         ✓       Electric Hot rolling Press         ✓       Analytical Balance for electrode weighing         ✓       Electrochemical work station charge-discharge unit (Bio-Logic SAS -France)         ✓       Electrochemical workstation (CHI6008E)         •       High-temperature tubular furnace         •       Vacuum Oven         •       Workstation for Computational Study         •       Magnetic stirrer with hot plate         •       Ultrasonicator         •       Centrifuge
	Dr. A. Bach arr	Theorem		<ul> <li>Distillation unit</li> <li>Hot air oven</li> <li>Argon cylinder47 litr Argon-Hydrogen Mixture gas 47 Ltr. (94% -Ar &amp; 6%- H<sub>2</sub>) (</li> <li>Stainless Steel Argon Gas Cylinder (99.999%)</li> </ul>
2	Dr.A.Basherr ndin Mahmud Ahmed	Theoret ical Physics	Quantum INFORMATION, Quantum Computation	Theoretical Work

#### School of Information Technology

S.	Name of	Department	Area of Expertise for Internship	Facility available in the
N	Faculty			Department/School/Lab
No	Member			
1	Dr.R.Rathinas abapathy	Department of Computer Applications	Machine learning(using python), Image processing(using python and opencv), Web technology(using php,html,css,mysql,node js etc.), Data mining, text mining, NLP (using python), Distributed computing using Hadoop and Hadoop	The facilities are available in the department of computer applications and RUSA laboratory.
			ecosystems.	

#### School of Earth and Atmospheric Sciences

S.	Name of Faculty	Department	Area of Expertise for	Facility available in the
No	Member		Internship	Department/School/Lab
1	Dr.Suja Rosa	Environmental Remote Sensing and Catography	Remote sensing, GIS and GPS technologies	Maps as hard copies and soft copies, Census data, Digital Atlas for 10 southern districts of Tamilnadu, GIS software, GPS Equipment, Total station, GPR equipment.

#### School of Energy, Environment and Natural Resources

S. No	Name of Faculty Member	Department	Area of Expertise for Internship	Facility available in the Department/School/Lab
1	Dr.S.Kannan	Environmental Studies	Water ans waste water treatment, home gardening, medicinal plants probagation	Lab and Field facility
2	Dr.M.Anand	Marine and Coastal Studies	Aqua Culture, Climate change and Ocean acidification	Marine field research facility at Pudumandabam, Ramnad

#### School of Linguistics and Communication

S. No	Name of Faculty Member	Department	Area of Expertise for Internship	Facility available in the Department/School/Lab
1	Dr.S.Ngarathinam		Mobile Media Content Creation	Media Skill Lab
2	Dr.K.Umaraj	Linguistics	Translatrion, Natural Language Processing	Computer Lab
3	Dr.J.Balasubramani am	Journalism and Science Communication	Photography, Videography, Film Studies, Reporting and Editing, Media Economics, Media Management, New Media, Social Media and Film Editing	Computer Lab, Digital Camera, Video catching camera, Editing Facility

#### **School of Performing Arts**

S. No	Name of Faculty Member	Department	Area of Expertise for Internship	Facility available in the Department/School/Lab
1	Dr. C. Justin Selvaraj	Department of Fine Arts and Aesthetics	Visual Ethnography, E-Content Making, Entreprenerial Skills to Traditional Craftsmanship Kinship Studies, Socio-Cultural Anthropology, Folk Culture Studies, Palmyra Palm Leaft Arts, Aesthetics of Communication.	Platform for Content making, Provision for Coordinating Fieldwork and so on.
2	Dr.T.Gopinath	Folklore and Cultural Studies	Documentation culture items, Ethnography research and field methodology, Folklore field methodology	Lectures can be provided

#### **Centre for Tourism and Hotel Management**

S. No	Name of Faculty Member	Department	Area of Expertise for Internship	Facility available in the Department/School/Lab
1	Dr.S.Praveen	Tourism and	Entrepreneurship in Food	Hotel management Lab and Food Lab
	Kumar	Hotel	quality management & tourism	
		Management	management	

#### School of English and Foreign Languages

S.	Name of Faculty	Department	Area of Expertise for	Facility available in the
No	Member		Internship	Department/School/Lab
1	Dr.R.Rajesh	English Language Studies	Communicative Competence in English, English Language Teaching Methods, Techniques and Strategies, Language Lab, Spoken English, Technology got Teaching – Learning English, Micro-teaching Skills, English for Competitive Exams	Smart Classroom – 2 (Each with 18 Seating capacity) Language Lab (14 systems) Classroom with 30 movable chairs

#### **Centre for Film and Electronic Media Studies**

S.	Name of Faculty	Department	Area of Expertise for	Facility available in the
No	Member		Internship	Department/School/Lab
1	Dr.Ilamparithi	Film and Electronic Media Studies	Cinematography, Video Editing, Sound recording and DTS mixing, Photoshop, Color grading, Short film making, Ad film making	Available

# \*Note – For other Faculty members, Departments and Schools, please visit MKU website pages.