

## ANNA UNIVERSITY CHENNAI -25

## RECRUITMENT OF JRF & TA

Advt. No.: 6138/RUSA2.0/PD3/2020

Dated. 02.09.2020

Applications are invited from the eligible candidates for the temporary posts of **Junior Research Fellows (JRF)** and **Technical Assistants (TA)** to be engaged in various projects under RUSA at Anna University.

Post Code	Project Title	No of Po	ired
		JRF	TA
PO1	Grid Planning and restructuring for Grid Integration of Electric Vehicle Charging Station	1	1
PO2	Development of Energy Efficient motor drive systems for Electric Vehicle	1	1
PO3	Coordinated design and tuning of controllers for onboard/off board power electronic interfaces	1	1
PO4	Protection of electric vehicles and charging infrastructure against lightening and switching surges	1	1
PO5	Design and development of smart embedded controllers for electric vehicles	1	1
PO6	Improved SoH soft sensors and controls for battery management system of electric vehicles	1	1
PO7	Monitoring and analysis of power quality issues on to the distribution network due to electric vehicle infrastructure	1	2
PO8	Assessment of different hybrid vehicle technologies with high efficiency RCCI combustion engine and effective thermal management systems	2	1
PO9	Material Selection, Fabrication, Characterization and Components Manufacturing for Automotive Applications	1	0
PO10	Investigations on electromagnetic forming process of thermal spray coated AISI 316L sheets used to make metallic bipolar proton exchange fuel cells and forming of tubular and sheet metal components of aluminum alloys for automotive applications	2	0
PO11	Development of Renewable Energy System for Automotive Applications	1	0
PO12	Development of RuO <sub>2</sub> -MnO <sub>2</sub> /N-Doped Graphene Hybrid Nano Super capacitors as Energy Storage Devices for Electric Vehicles	2	2
PO13	Development of cathode materials in Lithium-Sulfur battery for electric vehicle applications	3	3
PO14	Development of fuel cell components for hybrid electric vehicle applications	2	0

Advt. No.: 6138/RUSA2.0/PD3/2020

#### **Salary:**

Junior Research Fellow (JRF): Rs. 32500/month (inclusive of HRA) Technical Assistant (TA) : Rs. 20000/month (inclusive of HRA)

#### **General Information:**

- 1. GATE/NET qualified candidates will be given preference and considered for JRF. If suitable candidates are not found in GATE/NET category, Non GATE/Non NET candidate will be considered for suitable post and salary will be fixed accordingly as per the CTDT norms of Anna University.
- 2 Only short-listed candidates will be called for interview.
- 3. The position is purely temporary for 6 months and may be extended based on the performance.
- 4. Separate Application should be sent for each post if required to apply for more than one post.
- 5. Any claim with regard to qualification & experience should have necessary certificates.

#### How to Apply:

Interested candidates possessing qualification & experience as mentioned in Annexure-I may send their filled-in application form (as per Annexure - II) to Coordinator, RUSA Project, Planning and Development Section, Anna University, Chennai -25 Email: <a href="mailto:dpdannauniv@gmail.com">dpdannauniv@gmail.com</a> along with self-attested photocopies of educational qualifications, date of birth certificate, any other experience certificates, Mark sheets, evidence of any other academic credentials on or before 18.09.2020. Kindly mention in the subject as "Application for the post of JRF/TA – RUSA2.0/AU" "Post code".

### Annexure - I

(Advt. No.: 6138/RUSA2.0/PD3/2020)

Post Code	JRF	TA
PO1	Essential B.E / B.Tech. and M.E / M.Tech.in Electrical and Electronics Engineering / M.E in Power Systems.  Desirable Candidates with Industrial Experience & apprenticeship training in TANGEDCO.  Essential B.E and M.E in Electrical and Electronics Engineering and M.E in Power Electronics and Drives / Electrical Drives and Control	Essential B.E in Electrical and Electronics Engineering Desirable Nil  Essential B.E in Electrical and Electronics Engineering Desirable
PO3	Desirable Candidates with Industrial Experience  Essential M.E Power Electronics and Drives (OR) M.E Power System Engineering Desirable 1. Hands on experience in power electronics hardware and instrumentation 2. Knowledge and experience in PS/CAD, MATLAB Simulation 3. Knowledge in modelling of solar pv, wind turbine generators 4. Knowledge in battery energy storage systems 5. Knowledge and Hands on experience in REAL Time Hardware	Ril  Essential B.E in Electrical and Electronics Engineering Desirable Hands on experience in power electronics instrumentation
PO4	Essential  ME/MTech. in High Voltage Engineering  Desirable  Basic knowledge in Electromagnetic fields, computation and modelling using computational softwares  Hands on experience in generation and measurement of high voltage transients	Essential Qualification:  B.E/B.Tech in Electrical and Electronics Engineering  Desirable  Basic knowledge in Electromagnetic fields, computation using computational software

Post Code	JRF	TA
PO5	Essential  ME/MTech / MS in Embedded System technologies/ Control and Instrumentation/ Power Electronics &Drives/ Applied Electronics  Desirable  Experience in Automotive Embedded System preferably in the area of ECU development.  • Basic knowledge in Embedded Systems, SoC/SoB, Reprogrammable architecture and Matlab/SIMULINK-automotive modules /SPICE/Embedded IDEs.  • Knowledge in ECU development.  • Knowledge in Embedded C programming, python programming and Machine learning algorithm.  Knowledge in Automotive embedded systems and AUTOSAR	Essential  BE/BTech / BS in Electrical and  Electronics Engineering /  Electronics and Communication  Engineering / Electronics and Instrumentation Engineering  Desirable  Industrial experience in Automotive  Embedded System.  Skills required:  Basic knowledge in Embedded  Systems, SoC/SoB,  Reprogrammable architecture and  Matlab/SIMULINK-automotive  modules /SPICE/ Embedded IDEs.  Working Knowledge in Embedded  IDEs, Embedded c Programming and  Matlab
PO6	Essential M.E. in Computer Science Engineering or M.E. in Embedded System Technologies.  Desirable Experience in programming with C, Python or Matlab	Essential B.E. in Computer Science Or B.E. in Electrical and Electronics Engineering  Desirable Experience in C, Python or Matlab
PO7	Essential  ME/MTech in Power systems, Power Electronics, Control & Instrumentation  ME/MTech/MS in Electrical and Electronics Engineering, Electronics & Instrumentation Engineering Desirable Experience in power quality and power systems, hands on experience in ETAP or Digsilent power factory and rich experience in power station design, installation and commissioning.  • basic knowledge in Electric vehicles, Power quality, Electrical design (Single Line and Detailed engineering diagrams), PVSYST/PV Sketch, AutoCAD and Matlab/SIMULINK	Essential  BE/BTech /BS in Electrical and Electronics Engineering , Electronics and Instrumentation Engineering, Electronics and Communication Engineering  Desirable Experience in Handling practical power quality measurements at sites (Dranetz and Fluke power quality analyzers). Prior Experience with soldering is highly preferable.  • basic knowledge in Electric vehicles, Power quality, Electrical design (Single Line and Detailed engineering diagrams) • Working Knowledge on AutoCAD and Matlab/SIMULINK

## Advt. No.: 6138/RUSA2.0/PD3/2020

Post		
Code	JRF	ТА
PO8A	M.E./M.Tech. in Internal Combustion     Engineering / Thermal Engineering /     Refrigeration and Air Conditioning Engineering /     Energy Engineering with B.E in Mechanical     Engineering  Desirable  Experience in Thermal Engineering	B.E./B.Tech. in Mechanical     Engineering / Automobile     Engineering   Desirable  Nil
PO8B	M.E. /M.Tech.Engineering Design /     Manufacturing / Metallurgy with B.E/B.Tech in     Mechanical / Production / Manufacturing /     Materials Science and Engineering  Desirable     Knowledge in Tribology, Micro-Manufacturing,     Materials Characterisation and Engine Testing	NIL
PO9	Essential  B.E/B.Tech in Mechanical Engineering/Production Engineering/Manufacturing Engineering/Materials Science and Engineering/ Metallurgy With M.E/M.Tech in Manufacturing Engineering/Production Engineering/Metallurgy/Polymer Science and Engineering/Polymer Technology Or M.Sc. (Materials Science)  Desirable Experience in coating technologies such as laser cladding/energy storage device	NIL
PO10	Essential M.E/M.Tech in Engineering Design/Production/ Manufacturing / CIM / CAD / IC Engines / Automobile Engg  Desirable Nil	NIL
PO11	1. Essential M.E/ M.Tech in Energy Engineering / Solar Energy / Mechanical Engineering Desirable Exposure in related area	NIL

## Advt. No.: 6138/RUSA2.0/PD3/2020

Post Code	JRF	TA
PO12	Essential:	Essential:
	M.Sc Chemistry/ Physics/ Material Science,	B.Tech- Chemical
	M.E/M.Tech Nano science/ Nano Tech/	M.Sc Chemistry/Physics/Material
	Chemical/ Material Science/Energy Engg	Science
	Desirable:	
	Experience/Exposure in energy storage materials	
PO13	Essential	Essential
	M.Sc Chemistry/ Physics/ Material Science,	M.Sc Chemistry/Physics/Material
		Science
	M.E/M.Tech Nano science/ Nano Tech/	B.Tech- Chemical Engg
	Chemical/ Material Science/Energy Engg	
	Desirable	
	Working experience in energy storage materials	
PO14	Essential	
	M.Sc./MTech in Physics/Materials science	Nil
	/Chemistry/ Nanotechnology/ Nanoscience/ Ceramic	
	Technology/ Polymer Technology	
	Desirable	
	Experience in related research area	

### Annexure – II Advt. No.: 6138/RUSA2.0/PD3/2020



Application number

# ANNA UNIVERSITY CHENNAI -25

application

Date of Receipt of the

#### RUSA 2.0 - APPLICATION FORM (JRF/TA)

(To be filled by office)

rsonal Details:		
Full Name (In Capital)		
Date of Birth (DD/MM/YY)	Gender (Male/Female)	Affix Recent Passport Size
Marital Status (Married/Unmarried)	Nationality	Photo
Category (Gen/EWS/OBC/SC/S	T)	
Address for Communication	Permanent Address	
Mobile/Phone no.	E-mail	
Name of the post applied for 8 code (Separate application for post id required)	•	

Education Background (From Matriculation Onward; AttachScanned copies of the qualifying degree certificates and marksheets)

S. No.	Degree	Board / University	Regular/ Part time	Year	Division	% Marks /CGPA

#### **Qualifying Examination (GATE/CSIR/UGC/NET/Others)**

S. No.	Qualifying Examination	Branch	Year	Valid up to	Percentile	All India Rank	Any other information

#### **Professional Experience (AttachScanned Copies of experience certificates)**

S. No.	Designation N	Name of Organization	Period		Nature of Work
3. IVO.	Designation	Name of Organization	From	To	ivature of vvoik

Research Publications (if any) :
Awards, Patents, Prizes etc., (if any) :

Any other relevant information which is not covered above:

#### **DECLARATION**

I declare that the information furnished above is true and correct to the best of my knowledge and belief and that no related information is concealed. If any discrepancy is found at any stage, Anna University, Chennai, shall cancel my application / selection. I am aware that this application is only for temporary position.

Place:	
Date:	Signature of the Applicant