

## AICTE-INAE Teachers Research Fellowship Scheme

Labwise Vacancies for 2019-2020

### DAE

SI No.	Organisation	Total Seats	Engineering Discipline
1	BARC	1 1	Mechanical, Metallurgical

### DoS

The Annual intake will be restricted to 5

Sl. No.	Research area	Centre/Unit	No. of seat(s)
1.	Aerospace Engineering	LPSC/ URSC / VSSC	1
2.	Aerodynamics	IIST	1
4	MEMS/Material Science/ Thin Films	LEOS	1
5	Laser Spectroscopy/ Detectors/ Semiconductors / Semiconductor Device Physics		
6	VLSI / Microelectronics / Electronic devises	IIST / URSC	1
7	RF / Communication / Microwave Engineering	SAC / URSC / IIST	1
8	Control / Guidance	IIST / URSC / VSSC	1
9	Optics/Optical Engineering	LEOS / SAC	1
10	Structure	IIST / LPSC / URSC / VSSC	1
11	High Performance Computing	ADRIN	1
12	Big data analytics		
13	Computational Fluid Dynamics / Fluid Mechanics	IIST / LPSC	1
14	Planetary Sciences	IIRS	1
15	Oceanography		
15	Applied Geological Applications		
16	Microwave Remote Sensing		

ADRIN : Advanced Data Processing Research Institute, Secunderabad

IIRS: Indian Institute of Remote Sensing

IIST: Indian Institute of Space Science and Technology, Thiruvananthapuram

LEOS: Laboratory for Electro Optics

LPSC : Liquid Propulsion Systems Centre – Thiruvananthapuram and Mahendragiri

SAC : Space Applications Centre, Ahmedabad

URSC: UR Rao Satellite Centre

VSSC : Vikram Sarabhai Space Centre, Thiruvananthapuram

**CSIR**

S.No.	CSIR Lab Name	Tentative Intake	Engineering Discipline		Area of Research
1.	CSIR-CBRI	5	Civil Engineering Architecture		<ul style="list-style-type: none"> <li>• Structural Engineering</li> <li>• Geo-technical Engineering</li> <li>• Fire Engineering</li> <li>• Construction Materials i/c Concrete Technology</li> <li>• Green Buildings</li> <li>• Rural &amp; Urban Planning</li> </ul>
2.	CSIR-CECRI	5	<ol style="list-style-type: none"> <li>1. Chemical Engineering</li> <li>2. Electrochemical Engineering</li> <li>3. Civil Engineering</li> <li>4. Metallurgical Engineering</li> <li>5. Material Science</li> </ol>		<ol style="list-style-type: none"> <li>1. Batteries</li> <li>2. Corrosion &amp; Metal Protection</li> <li>3. Metal Finishing</li> </ol> Process Engineering
3.	CSIR-CEERI	02	Electronics, Instrumentation, Computer Science		(i) Cyber Physical Systems, (ii) Smart Sensors and  (iii) Microwave Devices with indicative specializations of IoT Technologies, Signal Analytics, Cognitive Computing, Integrated Systems, Control and Automation, Nano Bio-Sensors, Microelectronic Transducers and Actuators, Photonics, Optoelectronics, MEMS and MOEMS, Flexible and Non-Silicon Electronics, Microwave Beam Dynamics, Beam-wave Interaction, Microwave Device Technology, Vacuum Microelectronic Devices, Plasma-base Devices, THz Devices, Devices and components for 5G applications, etc.
4.	CSIR-CMERI	08	1	Mechanical/Electronics/ Mechatronics	Robotics-(Rigid body mechanics/Dynamics/Control system/ Navigation and Guidance/Image Processing/Communication/Optimization)

S.No.	CSIR Lab Name	Tentative Intake	Engineering Discipline		Area of Research
			1	Electrical/Electronics/Mechanical	Optimization of Regenerative braking system
			2	Electrical/Electronics/Instrumentation	Sensor Electronics, Instrumentation, Electrical Measurement
			4	Mechanical / Mechatronics / Electrical / Control System / Computer Science / Instrumentation	Design/Dynamics/CONTROL/ Artificial Intelligence applied to of Robotic/Mechatronic Systems
5.	CSIR-CSIO	05	Electronics/ Electronics and Control/ Metallurgy/ Instrumentation/Nanotechnology/ Electronics & Communication/ Computer Science Engineering/ Mechanical Engineering/ Aeronautics and Aerospace Engineering/Biomedical Engineering/ Biotechnology/ Electrical Engineering/ Electrical and Instrumentation Engineering or equivalent branches of Engineering		Avionics, Optics & Photonics, Nano-Science, Nano-technology & Nano-photonics, Advanced Materials & Sensors, Optical Devices & Systems Multi-sensors & Computational Instrumentation Seismic Sensors & Systems Ubiquitous Analytical Techniques Bio-medical Engineering & Instrumentation Agrionics, Precision Mechanical Systems
6.	CSIR-CSMCRI	10	Chemical Engineering, Environmental Engineering, Electrical Engineering, Electronics & Instrumentation Engineering		Process Engineering, Fermentation technology, Environmental impact assessment, Air Pollution, Water Pollution, Water Treatment technologies, Electro-dialysis, Electrochemical and Optical devices.
7.	CSIR-IICT	02	Chemical Engineering		Process Development and Process Systems Engineering
8.	CSIR-IIP	05	Chemical Engineering/ Mechanical Engineering		Catalysis, Catalytic processes, Advanced functional materials/nanomaterials, Biomass to chemicals and fuels, CO2 to fuels, Green chemistry, Waste to Wealth, Petro-refining processes, Heavy Oil

S.No.	CSIR Lab Name	Tentative Intake	Engineering Discipline	Area of Research
				processing and valorization, Reaction Engineering, Modelling and Simulation, Sustainability and Life Cycle Studies, Engine emissions studies, Electric Vehicle development
9.	CSIR-NEERI	02	Civil and Environmental Engineering	Air Pollution Control and Solid Waste Management
10.	CSIR-NML	04	Metallurgical and Materials Engineering	<ul style="list-style-type: none"> <li>- Material Beneficiation</li> <li>- Process Metallurgy</li> <li>- Material Processing</li> <li>- Physical Metallurgy</li> <li>- Mechanical Metallurgy</li> <li>- Advanced Structural Materials</li> <li>- Surface Engineering and Corrosion</li> <li>- Materials Modeling</li> </ul>
		01	Chemical Engineering	
<b>Total</b>		<b>49</b>		

**DRDO**

Sl No.	Organisation	Total Seats	Engineering Discipline
1	DIAT, Pune	1	Department of Computer Engineering

**Vacancies awaited**

**Total = 49(CSIR)+ 2(DAE) +1(DRDO)+ 5(DoS)**

**= 57 vacancies**