## **APPLICATION FORM**

## AICTE-INAE TEACHERS RESEARCH FELLOWSHIP SCHEME for Engineering Teachers for Doctoral Research in Central Laboratories

I INSTITUTE DETAILS				
Name of the Institute				
Address of the Institute				
Contact Details		Email:		
		Telephone:		
		Fax:		
Permanent Id of the Institute (This Id is available on AICTE web porta	al)			
*Maximum of two candidates car		om one institute in	the academic year.	
II DETAILS OF CANDIDAT	TE UNDER CO	ONSIDERATIO	N FOR FELLOWSHIP	
Name				
Date of Birth (dd/mm/yyyy)				
Designation				
Date of joining				
Appointment Type				
Scale of Appointment				
Department				
Qualifications	UG (B.E	L/B.Tech)	PG (M.E./M.Tech)	
Year of Passing				
Engineering Discipline				
Engineering College/ Institution				
Overall CGPA/ % Marks				
Experience in years				
Field of study / specialization				
Contact details of the candidate	Address:			

	Tel:
	Mobile:
	Email:
	Fax:
GATE/ CSIR/ UGC-NET	
Score/Percentile, if available	
PG students guided	
UG Students guided	
OG Students guided	
Memberships of professional	
bodies/ fellowships awarded/	
awards received	
(Attach additional pages if necessary)	
Professional activities	
(Attach additional pages as necessary)	
Techno-commercial activities	
(Attach additional pages if necessary)	
Outstanding achievements at	
school level	
(Attach additional pages if necessary)	
Outstanding achievements at	
_	
college / University level	
(Attach additional pages if as necessary)	
III RESEARCH DETAILS	
Title of research proposal	
Technical Field - Nature of	
work to be undertaken under the	
scheme	
Abstract	
(Attach additional pages if as necessary)	
Objectives - Statement of the	
purpose (500 words) (Attach additional pages if as necessary)	
(Attach additional pages if as necessary)	
Engineering Discipline in	
which research will be carried	
(Please refer to Appendix-B to	
select discipline)	
Preferred laboratory of CSIR/DRDO/DAE/DOS identified	
for research	
(Please refer to Appendix-B to	
select lab)	
Project Impact - Expected	
outcome	
(Attach additional pages if as necessary)	
Publications	
(Attach additional pages if as necessary)	
IPR	
(Attach additional pages if as necessary)	
List of Research/Consultancy	
Projects completed	
(Attach additional pages if as necessary)	
Background/Current status of	
activities in the area	
(Attach additional pages if as necessary)	
1 3	

Declaration by Candidate:
a) I shall abide by the rules and regulations of the laboratory to which I will be offered admission, if selected.
<ul><li>b) I shall revert to my parent institution after completion of Doctoral programme and serve there for a minimum period of three years.</li></ul>
Signature of the Applicant
Place: Date:
Declaration by the Head of the Engineering College/Institution
Our institution in which the applicant Mr. /Ms is a permanent teaching faculty is approved by AICTE.
I have verified the particulars of the engineering teacher as given above and recommend him/her for consideration under the subject scheme. He/she is a worthy candidate for joining the doctoral programme.
Our institution will assist the candidate in pursuing the PhD programme. We also commit that we shall comply with the guidelines of the scheme and that the candidate will be relieved from his teaching duties for a period of 3 years and shall be paid 75% of full salary during his/her tenure under the subject scheme.
Iconfirm that the above information is true to the best of my knowledge.
Date:Name :
Place: Designation:
Signature and Seal:

Please Note: (Copy of AICTE letter of approval to be attached with the application)

Fax:

( Head of the Institution )

Postal Address

Phone/Mobile No.

#### **AICTE-INAE Teachers Research Fellowship Scheme**

Labwise Vacancies for 2019-2020

#### **DAE**

SI No.	Organisation	<b>Total Seats</b>	<b>Engineering Discipline</b>
1	BARC	1	Mechanical,
		1	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			
5	Laser Spectroscopy/ Detectors/ Semiconductors / Semiconductor Device Physics	LEOS	1	
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	ADRIN	1	
13	Computational Fluid Dynamics / Fluid Mechanics	IIST / LPSC	1	
14	Planetary Sciences			
15	Oceanography	HDC	1	
15	Applied Geological Applications	IIRS		
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	<b>Engineering Discipline</b>	Area of Research
1.	CSIR- CBRI	5	Civil Engineering Architecture	Structural Engineering     Geo-technical Engineering     Fire Engineering     Construction Materials i/c     Concrete Technology     Green Buildings     Rural & Urban Planning
2.	CSIR- CECRI	5	<ol> <li>Chemical Engineering</li> <li>Electrochemical         <ul> <li>Engineering</li> </ul> </li> <li>Civil Engineering</li> <li>Metallurgical         <ul> <li>Engineering</li> </ul> </li> <li>Material Science</li> </ol>	<ol> <li>Batteries</li> <li>Corrosion &amp; Metal Protection</li> <li>Metal Finishing</li> <li>Process Engineering</li> </ol>
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/Opt imization)

S.No.	CSIR Lab Name	Tentative Intake	Engineering Discipline	Area of Research
			1 Electrical/Electronics/Me chanical	Optimization of Regenerative braking system
			2 Electrical/Electronics/Inst rumentation	Sensor Electronics, Instrumentation, Electrical Measurement
			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/Nanotechnolog y/ 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
		04	Metallurgical and Materials Engineering	<ul><li>Material Beneficiation</li><li>Process Metallurgy</li></ul>
10.	CSIR- NML	01	Chemical Engineering	<ul> <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>
7	Γotal	49		

## **DRDO**

Sl No.	Organisation	<b>Total Seats</b>	<b>Engineering Discipline</b>
1	DIAT, Pune	1	Department of Computer Engineering

### Vacancies awaited

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

= 57 vacancies