

(A Deemed University) **Jakkur P.O., Bangalore - 560 064**

Phone: 080-2208 2776 Email: srfp@jncasr.ac.in Website: http://www.jncasr.ac.in/fe/srfp.php

INFORMATION SHEET - SUMMER RESEARCH FELLOWSHIPS - 2016

In association with the Department of Science and Technology and the Rajiv Gandhi Foundation, New Delhi.

For motivated and talented Indian students in Science and Engineering.

AREAS OF RESEARCH:

Life Sciences: Infectious and non-infectious diseases, bioinformatics, developmental biology, biochemistry, molecular biology, immunology, genetics, life-history evolution, circadian biology, animal behaviour, behavioural ecology, evolutionary genetics, experimental evolution, population dynamics, phylogeography, neurophysiology, behavioural neurobiology and behavioural genetics.

Materials Sciences: Nano sciences, energy and green materials.

Chemical Sciences: Solid state chemistry, theoretical and computational chemistry, organic, physical and inorganic chemistry, organic and asymmetric synthesis, medicinal and bio-organic chemistry, polymer chemistry, supramolecular chemistry and chemistry of nanomaterials.

Physical Sciences: Condensed matter theory and experiment, statistical physics, semiconductor materials physics, biophysics, nano physics, organic electronics, computational materials science, soft matter, semiconductor interfaces, heterostructures, physical metallurgy and transmission electron microscopy.

Engineering Sciences: Computational fluid dynamics using mesoscopic simulation techniques, Dynamics and rheology of complex microstructured fluids including suspensions, emulsions and polymer solutions, Flow of granular media, Active matter, Hydrodynamic stability of Newtonian and viscoelastic fluids, High Reynolds number flows and turbulence, Non-linear dynamics and chaos, vortex dynamics.

Mathematics

MINIMUM ACADEMIC REQUIREMENTS FOR APPLYING:

- Students who have secured not less than 80% in Maths and Science subjects in their 10th and 12th standard or
 equivalent examinations, and not less than first class in graduation and post graduation (if applicable).
- Students presently studying in I and II year of B.Sc., II, III & IV year of B.S., I, II & III year of B.E. /B.Tech., I year of M.Sc., and I-IV year of Integrated M.Sc. can apply for Life Sciences and Mathematics.
- Students presently studying in II & III year of B.Sc., II, III & IV year B.S., II, III & IV year of B.E/B.Tech., I year of M.Sc. and II-IV year of Integrated M.Sc. can apply for *Physical Sciences and Engineering Sciences*.
- · Students presently studying in I year of M.Sc. can apply for *Materials Sciences and Chemical Sciences*.

The students selected under this programme are placed with scientists at the Centre or elsewhere in India, for 2 continuous months with a stipend of **Rs. 6000** /- p.m and travel support as per Centre's norms. The summer research projects will be reviewed by a committee and the best will be chosen for the award of Rajiv Gandhi Science Talent Research Fellows. Detailed information and application form can be downloaded from http://www.jncasr.ac.in/fe/srfp.php. The filled in application form with attested documents should reach the address mentioned below:

Mailing address: The Academic Coordinator

Fellowships and Extension Programmes

Jawaharlal Nehru Centre for Advanced Scientific Research

Jakkur P.O., Bangalore - 560 064.

Important dates: Last date for downloading application form from website : 30 December 2015

Last date for receipt of completed application form: 5th January 2016

Selected candidates will be intimated by 1st April 2016 and the list will also be available on the link mentioned above.

NOTE: 1. Please ensure that your completed application includes:

- (a) Two confidential reports sealed by the referee and with the referees' signatures across the seals.
- (b) Attested Xerox copies of relevant mark sheets etc.
- Students who have already completed this programme earlier need not apply.
- 3. Your "Area of Research" on the left hand top corner of the mailing envelope.
- 4. Mere application to this programme does not warrant selection.



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APPLICATION FOR SUMMER RESEARCH FELLOWSHIPS - 2016 In association with the Department of Science and Technology and

the Rajiv Gandhi Foundation, New Delhi.

LAST DATE FOR RECEIPT OF COMPLETED APPLICATION FORM:

	5 th JANUA	RY 2016
Name		
Date of Bir	rth Day Month Year	
Address fo	or Correspondence:	4. Residential Address, if different from 3:
	Pin	Pin
	Fax	Phone Fax
Email:		Email
Current In	nstitutional Address, if different from 3 :	
		ail:
Present B.S	Educational Status (Tick the appropriate one# B.S. B.	
		E. / B.Tech M.Sc. Integrated M.Sc.
# Refer to the	e minium academic requirements mentioned in the information	n sheet carefully before putting a tick.
Branch of	f study	
	e of interest (Tick only one) : (If you wish you man to apply to more than one area, you will need to fi	ay choose an area different from what you are presently studill separate forms for each.
Physical S Life Scien		Engineering Sciences Mathematics
Specify a	rea of research interest (you may refer to the	information sheet).

Yes No

did not apply

9. Were you selected for this programme in earlier years?

kamination/	Institution	Year	Elective Subjects	% of marks*	Rank out o
Degree				or GPA	(Please fill) studer
				l	
	alent examinations give only the %		and Science subjects.		
minimum of 80% is req	alent examinations give only the % uired for Maths and Science subj	ect(s) separately.			
ninimum of 80% is req	uired for Maths and Science Subj	ect(s) separately.			
ninimum of 80% is req	uired for Maths and Science Subj	ect(s) separately.			
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ninimum of 80% is req	uired for Maths and Science Subj	ect(s) separately.			

(Please hand over the attached referees' report sheets to the referees. Please collect the filled reports from them in a sealed envelope signed by them across the seal. Mail these along with your completed application. If the recommendation letters are not sent, the application form will be incomplete and is liable to rejected.)
Pin
*Phone Fax *Phone Fax *Email: *Email
*mandatory information
13. (i) Give upto three sub-areas (in the order of preference) of the discipline in which you would like to work. If the sub-area of your choice is not mentioned in the information sheet, please specify it.
(ii) Describe briefly a project you would like to undertake. Please note that you could be assigned a project different from the ones you describe below.
T loade note that you sould be assigned a project amorem norm the chee you accombe below.

14. In the space below, mention any extra reading / general reading in your sub-area of interest that you have done (include author/s name/s, title, year of publication, publisher as appropriate).
15. Describe your career plans.
16. In your opinion 'What is Science all about'?
IMPORTANT: Candidates have to indicate their acceptance within 15 days or else the offer will stand cancelled and will go to the next person in the waiting list. If the candidate accepts the offer initially and then fails to join the programme, he/she is denying the wait listed candidate an opportunity to avail the fellowship. In case of non-reporting, we will be communicating this to the referees and the candidate's parent institution. If the candidate is offered a similar fellowship from any other institution/Academy, the candidate has to opt for any one offer. The candidate cannot accept more than one offer at the same time. Selected students will undertake to work at the institution they are placed for a minimum UNINTERRUPTED period of 2 months. SRFP Certificates will be issued only to students who complete a mandatory training period of 2 months.
DECLARATION: I hereby declare to understand and accept the above mentioned statements.
Place :

Date:

Signature of the candidate

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CONFIDENTIAL RECOMMENDATION FORM - 1

Note to Referee

The Summer Research Fellowship Programme is meant to introduce talented young students to the world of research. Apart from guided reading, laboratory work, etc., some involvement with current research will be attempted. You are requested to answer our queries below keeping this in mind. If you are recommending more than one candidate, please rank order them under item (7). The completed form may please be passed on to the candidate in a sealed envelope signed across the seal. This will enable the candidate to mail your confidential report along with his/her completed application form to:

The Academic Coordinator
Fellowships and Extension Programmes
Jawaharlal Nehru Centre for Advanced Scientific Research
Jakkur, Bangalore 560 064.

so a	as to reach us by 5 th January 2016	To be filled in by the applicant
Ref	eree's Name :	
Title	e/Position :	
Inst	itution* :	
Add	dress* :	
	one* : andatory information)	Email*:
(a)	Candidate's name :	
(b)	Candidate's discipline of interest :	
(c)	Sub-area of interest :	
		To be filled in by the referee
1.	How well do you know the candidate? (Checomology) as reported by others as my aday as a student in a class of	seestudents
2.	How long have you known the candidate?	

3.	Please summarize y (of evaluation) below,		-		riate box in each	of the categories
		Exceptional Top 2%	Very good Top 10%	Good Top 25%	Remaining 75%	Unable to judge
а	. Breadth of scientific knowledge					
b	. Comprehension of concepts					
С	. Ability to reason logically and clearly					
d	. Degree of motivation for research					
4.	What is your overall rai educational level?	nking of the candid	ate as compared w	ith students you hav	ve known over a fe	w years at his/her
		Г				
	Top 2% (Exceptional)		Fop 10% ery Good)	Top 25% (Good)	(F	75% Remaining)
		out of	stud	ents at your instituti	on.	
5.	Describe any special s in your opinion makes			putational or others] that the candidate	e has shown, which
6.	Any other comment yo candidate has impress		e about the candida	ate (you may highlig	ght here any incide	nt where the
7.	Rank Order : If you are	recommending mo	ore than one studer	nt		
Pla	ice:					
Da	te:				Signa	ature of the referee

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CONFIDENTIAL RECOMMENDATION FORM - 2

Note to Referee

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so	as to reach us by 5 th January 2016	To be filled in by the applicant
Ref	feree's Name :	
Title	e/Position :	
Inst	titution* :	
Add	dress* :	
	one* : Email*:	
(a)	Candidate's name :	
(b)	Candidate's discipline of interest :	
(c)	Sub-area of interest :	
		To be filled in by the referee
1.	How well do you know the candidate ? (Check as many boxes as applicable) as reported by others as my advisee as a student in a class ofstudents as a student engaged in independent study under my guidance any other (please specify)	
2.	How long have you known the candidate ?	

	Exceptional Top 2%	Very good Top 10%	Good Top 25%	Remaining 75%	Unable to judge
a. Breadth of scientific knowledge					
o. Comprehension of concepts					
Ability to reason logically and clearly					
I. Degree of motivation for research					
What is your overall ran	nking of the candi	date as compared	with students you hav	re known over a fe	ew years at his
Top 2% (Exceptional)	(Top 10% Very Good)	Top 25% (Good)	ا) (ا	75% Remaining)
	out of	st	udents at your instituti	on.	
Any other comment you candidate has impressed		ake about the cand	lidate (you may highlig	ht here any incide	ent where the
Rank Order : If you are	recommending n	nore than one stud	lent		
Rank Order : If you are	recommending n	nore than one stud	lent		