



JAWAHARLAL NEHRU CENTRE FOR ADVANCED SCIENTIFIC RESEARCH

(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 - 2020

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, evolutionary biology, experimental evolution, population dynamics, phylogeography, neurophysiology, behavioural neurobiology and behavioural genetics and cell biology.

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, renewable energy and healthcare related materials chemistry.

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, heat and mass transfer, geophysical fluid dynamics, microfluidics, acoustofluidics, and microgravity science.

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., I, II & III 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**.
- 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 I-III year of Integrated M.Sc. can apply for **Physical Sciences, Engineering Sciences and Mathematics**.
- Students presently IV year of BS-MS, I year of M.Sc. and IV year of Int. 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. 10000 /-** p.m and travel support as per Centre's norms. 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 : 6 December 2019
Last date for receipt of completed application form : 13 December 2019

Selected candidates will be intimated by 28th February 2020 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.
2. 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 - 2020

LAST DATE FOR RECEIPT OF COMPLETED APPLICATION FORM:

13th December 2019

1. Name

2. Date of Birth
Day Month Year

3. Address for Correspondence:

4. Residential Address, if different from 3:

Pin
Phone Fax
Email:

Pin
Phone Fax
Email

5. Current Institutional Address, if different from 3 :

Pin
Phone: Email:

6. Present Educational Status (Tick the appropriate one#) :

B.Sc.	B.S.	B.E. / B.Tech	B.S. M.S.	Integrated M.Sc.	M.Sc.
<input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III	<input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV	<input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV	<input type="checkbox"/> IV	<input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV	<input type="checkbox"/> I

Refer to the minium academic requirement for the broad areas of research before ticking the boxes.

7. Present Branch of study

8. Discipline of interest (**Tick only one**): (If you wish you may choose an area different from what you are presently studying) If you wish to apply to more than one area, you will need to fill separate forms for each.

Physical Sciences	<input type="checkbox"/>	Chemical Sciences	<input type="checkbox"/>	Engineering Sciences	<input type="checkbox"/>
Life Sciences	<input type="checkbox"/>	Materials Sciences	<input type="checkbox"/>	Mathematics	<input type="checkbox"/>

Specify area of research interest (you may refer to the information sheet).

9. Were you selected for this programme in earlier years ? Yes No did not apply

10. Educational background (SSLC/10th Standard or equivalent onwards) (Attach attested copies of statement of marks)

Examination/ Degree	Institution	Year	Elective Subjects	% of marks or GPA out of.....	Rank out of out of students

* For 10th & 12th or equivalent examinations give only the % of marks for Maths and Science subjects.
A minimum of 80% is required for Maths and Science subject(s) separately.

11. Academic Awards/Scholarships/Distinctions received : (Attach copies of certificates)

12. Names and addresses of the two referees providing letters of recommendation

(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 form. If the recommendation letters are not sent, the application form will be incomplete and is liable to be rejected.)

_____ Pin <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>										
* Phone _____ Fax _____										
* Email: _____										

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* Phone _____ Fax _____										
* 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.

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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 **TEN DAYS** or else the offer will stand cancelled and will go to the next person in the waiting list. PLEASE CHECK THE JNCASR WEBSITE (www.jncasr.ac.in/fe/srfp.php) AFTER 01 MARCH 2020 TO ENSURE THAT YOU HAVE NOT MISSED THE SELECTED LIST DUE TO LOST EMAIL OR POSTAL DELAYS. Candidates whose name appears in the selected list on the JNCASR website may indicate their acceptance by email to srfp@jncasr.ac.in. If the candidate is offered a similar fellowship from any other institution/ Academy, the candidate has to opt for any one offer ONLY. 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 **mandatory period of EIGHT WEEKS** (including weekends and holidays). If the training is for a shorter period than eight weeks the candidate is not entitled to the certificate and fellowship dues.

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 as to reach us by 13th December 2019

To be filled in by the applicant

Referee's Name :

Title/Position :

Institution* :

Address* :

Phone* :

Email*:

(* mandatory information)

(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 ?

3. Please summarize your evaluation of the candidate by ticking the appropriate box in each of the categories (of evaluation) below, out of _____ students at your institution.

	Exceptional Top 2%	Very good Top 10%	Good Top 25%	Remaining 75%	Unable to judge
a. Breadth of scientific knowledge					
b. Comprehension of concepts					
c. Ability to reason logically and clearly					
d. Degree of motivation for research					

4. What is your overall ranking of the candidate as compared with students you have known over a few years at his/her educational level?

Top 2%
(Exceptional)

Top 10%
(Very Good)

Top 25%
(Good)

75%
(Remaining)

out of _____ students at your institution.

5. Describe any special skills [experimental, mathematical, computational or others] that the candidate has shown, which in your opinion makes him/her deserve this fellowship.

6. Any other comment you would like to make about the candidate (you may highlight here any incident where the candidate has impressed you).

7. Rank Order : If you are recommending more than one student

Place:

Date:

Signature of the referee



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CONFIDENTIAL RECOMMENDATION FORM - 2

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Title/Position :

Institution* :

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Email*:

(* mandatory information)

(a) Candidate's name :

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(Exceptional)

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(Very Good)

Top 25%
(Good)

75%
(Remaining)

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7. Rank Order : If you are recommending more than one student

Place:

Date:

Signature of the referee