

SARDAR SWARAN SINGH NATIONAL INSTITUTE OF RENEWABLE ENERGY
(Formerly Sardar Swaran Singh National Institute of Bio-Energy)
(An Autonomous Institute of the Ministry of New & Renewable Energy, GoI)
12 K.M. Stone, Jalandhar-Kapurthala Road, Wadala Kalan, Kapurthala (Punjab) - 144603

Rolling Advertisement for Recruitment of Junior Research Fellow; Senior Research Fellow and Research Associate at Sardar Swaran Singh National Institute of Renewable Energy, Kapurthala

Applications are invited from eligible candidates for Junior Research Fellow (JRF); Senior Research Fellow (SRF) and Research Associate (RA) in the field of Bio-Energy under "SSS-NIBE Bio-Energy Promotion Fellowship" at Sardar Swaran Singh National Institute of Renewable Energy, Kapurthala. The research positions for JRF; SRF and RA are purely on contractual basis. Screening of applications forms will be processed based on requirement and availability of seats twice a year.

Particulars of Academic Qualifications, Research experience and other requirements of the contractual post are given below:

Sl.	Contractual Post	Fellowship Honorarium	Qualification / Eligibility	Age limit
1.	Junior Research Fellow (JRF)	Rs. 37000/- per month + (admissible HRA or Hostel facility if available) as per rule	Candidate must either have 60% marks or equivalent CGPA in B.E./ B. Tech. (Degree in Chemical Engineering, Mechanical Engineering, Agricultural Engineering, Civil Engineering, Bio-Chemical Engineering, Energy Engineering, Environmental and allied engineering subjects or must have 60% marks in M.Sc. (Chemistry, Biochemistry, Biotechnology, Microbiology and allied science subjects) and GATE / NET qualification as applicable.	The upper age limit shall be 28 years, which is relaxed upto 5 years in the case of candidates belonging to Schedule Castes / Schedule Tribes, Physically Handicapped and OBC (NCL) applicants as per Govt. of India rules & regulations.
2.	Senior Research Fellow (SRF)	Rs. 42000/- per month + (admissible HRA or Hostel Facility if available) as per rule	M.E., M. Tech., or equivalent degree in Engineering / Technology (Chemical Engineering, Mechanical Engineering, Agricultural Engineering, Civil Engineering, Bio-Chemical Engineering, Bioenergy Engineering, Energy Science & Engg., Environmental Engg. etc.)	The upper age limit for SRF shall be 32 years, which may be relaxed upto 5 years in the case of candidates belonging to Schedule Castes / Schedule Tribes, Physically Handicapped and OBC (NCL) applicants as per Govt. of India rules & regulations.

			with minimum 60% marks and at least two years of post M.Sc., B.E. B. Tech research experience as evidence from fellowship / associateship and evidence of published papers in standard referred journal / patents from reputed R & D or academic institution	
3.	Research Associate (RA)	Rs. 58,000/- per month + (admissible HRA or Hostel facility if available) as per rule	Candidate must have Doctorate (Ph. D) degree or having 03 years research, teaching and design & development experience after M.E. / M. Tech. with published work in peer reviewed journals (SCI/ Engg.) / patents in the field of Renewable Energy or relevant field of science and engineering	The maximum/ upper age limit shall be 35 years, which is relaxed upto 5 years in the case of women scientist, for physically handicapped candidates and candidates belonging to Schedule Castes / Schedule Tribes, and OBC (NCL) candidates as per Govt. of India rules & regulations.

Eligible candidates can download the Advertisement, Application Form and Instructions from website <https://nibe.res.in/>. The candidate should fill the downloaded Application Form as per the instructions. Interview of screened candidates will be conducted both online and physical mode, but no TA/DA will be admissible for attending the interview. Those appeared in final examination for qualifying degree as required for the post may also apply for the post of JRF. There is a possibility for selected candidate(s) to be considered for the Ph. D. program with Indian Institute of Technology, Roorkee as per their admission guidelines. The research work shall be carried out at SSS-NIRE, Kapurthala and Ph. D degree shall be awarded by IIT, Roorkee for JRF Candidate(s).

The candidate must send duly signed filled-in application form along-with all necessary self-attested documents through speed/registered post or on email (in single PDF file) with the subject mentioning "**APPLICATION FOR JRF**" or "**APPLICATION FOR SRF**" or "**APPLICATION FOR RA**" at the top of the envelop/ as subject-line in email to the following address and / or email ID:

**The Director General, Sardar Swaran Singh National Institute of Renewable Energy,
12 K.M. Stone, Jalandhar - Kapurthala Road, Wadala Kalan, Kapurthala (Punjab) – 144603.**

Email ID: sss.nibe@nibe.res.in

For any query please contact at 01822-507407 or email at sss.nibe@nibe.res.in

Director General

Rolling Advertisement for recruitment of Research Fellows at SSS-NIRE

Applications are invited from eligible candidates for Junior Research Fellow (JRF); Senior Research Fellow (SRF) and Research Associate (RA) under “**SSS-NIBE Bio-Energy Promotion Fellowship**” by the Sardar Swaran Singh National Institute of Renewable Energy, Kapurthala. Interested candidates should send their duly filled Application form (as per Instructions) within 21 days from the date of advertisement published in Employment News via Speed/Registered Post at given address with subject line as “**Application for JRF**” or “**Application for SRF**” or “**Application for RA**” or e-mail to sss.nibe@nibe.res.in with the subject line, along with the self-attested scanned copy of documents alongwith duly filled Application Form in single PDF file.

1. Introduction

Sardar Swaran Singh National Institute of Renewable Energy (Formerly known as Sardar Swaran Singh National Institute of Bio-Energy), an Autonomous Institute of the Ministry of New and Renewable Energy initiated “**SSS-NIBE Bio-Energy Promotion Fellowship**” to promote research activities in Bio-Energy and to attract competent researchers in this field under JRF/SRF/RA programme. The broad spectrum of Bio-Energy covers (a) Biomass resource assessment: Data analytics & Artificial Intelligence, supply chain management, LCA, techno economics, social impacts (b) Gasification of biomass and MSW to hydrogen, syngas to hydrogen (c) Pyrolysis and HTL of lignocellulosic and Algal Biomass (d) Lignin Valorisation and Biomass conversion to value added chemicals (e) Biochar/Activated carbons from biomass and Activated carbon to graphene – biomaterial for fuel cell, Supercapacitor (f) Biomass, pellets, briquettes, torrefied pellets, charcoal etc. (g) Fuel cell, Bio-hydrogen for fuel cells, materials from biomass (h) Biomass Cookstoves.

2. General

SSS-NIRE under Bio-Energy Promotion Fellowship scheme provide Research Fellowships to bright and enthusiastic young men and women for research under the expert guidance of scientists working at SSS-NIBE in the various fields of Bio- Energy. The SSS-NIBE Bio-Energy Promotion Fellowships are tenable in India. Only bonafide Indian citizens, residing in India are eligible for the award of research Fellowship. The programme is aimed at National Human Resource Development in the area of Bio-Energy.

The award of SSS-NIBE Bio-Energy Promotion Fellowship is temporary for a fixed tenure and does not imply any assurance or guarantee for subsequent employment by SSS-NIRE to the beneficiary. The authority to award / terminate Fellowship and relax any of the conditions vests with the Director General, SSS-NIRE. The awardees shall not lay claim to permanent absorption in SSS-NIRE, after the expiry of Fellowship.

The selection rules, amount of fellowship, etc. will be governed as per **SSS-NIBE Bio-Energy Promotion Fellowship** guidelines as amended from time to time.

Subject of Research: Preference is given to a subject / topic of research relevant to the research programmes of SSS-NIRE and importance in Bio-Energy areas like (a) Biomass resource assessment: Data analytics & Artificial Intelligence, supply chain management, LCA, techno economics, social impacts (b) Gasification of biomass and MSW to hydrogen, syngas to hydrogen (c) Pyrolysis and HTL of lignocellulosic and Algal Biomass (d) Lignin Valorisation and Biomass conversion to value added chemicals (e) Biochar/Activated carbons from biomass and Activated carbon to graphene – biomaterial for fuel cell, Supercapacitor (f) Biomass, pellets, briquettes, torrefied pellets, charcoal etc. (g) Fuel cell, Bio-hydrogen for fuel cells, materials from biomass (h) Biomass Cookstoves, etc.

3. **Junior Research Fellowship (JRF) under SSS-NIBE Bio-Energy Promotion Fellowship.**

Essential Qualifications: Candidates must either have 60% marks or equivalent CGPA in B.E./ B. Tech. (Degree in Chem. Engg., Mech. Engg., Agri. Engg., Civil Engg., Biochem. Engg., Energy Engg., Environmental and allied engineering subjects or must have 60% marks in M.Sc. (Chemistry, Biochemistry, Biotechnology, microbiology and allied science subjects) and GATE/NET qualification as applicable.

Age Limit: The upper age limit for JRF shall be 28 years as on last date of application, which is relaxed up to 5 years in the case of candidates belonging to Schedule Castes/Schedule Tribes, Physically Handicapped and OBC (NCL) applicants as per Govt. of India rules & regulations.

Tenure: JRF will be tenable initially for a period of two years. The term is extendable for one more year on the basis of assessment of the progress made through publication and if not awarded the SRF. The combined tenure of JRF & SRF will not exceed more than five years in any case. On completion of two years as JRF and if the fellow is registered for Ph. D., the fellowship will be upgraded to SRF and stipend will be increased for the 3rd and subsequent years on the basis of assessment through

interview by a review committee consisting of scientists concerned, Head of Division and Expert member in the relevant field. Extension of tenure will be purely on the basis of progress report and recommendation of the review committee.

3A. Senior Research Fellow (SRF) under SSS-NIBE Bio-Energy Promotion Fellowship.

Essential Qualification: M.E., M. Tech., or equivalent degree in Engineering / Technology (Chemical Engineering, Mechanical Engineering, Agricultural Engineering, Civil Engineering, Bio-Chemical Engineering, Bioenergy Engineering, Energy Science & Engg., Environmental Engg. etc.) with minimum 60% marks and at least two years of post M.Sc., B.E. B. Tech research experience as evidence from fellowship / associateship and evidence of published papers in standard referred journal / patents from reputed R & D or academic institution.

Age Limit: The upper age limit for SRF shall be 32 years, which may be relaxed upto 5 years in the case of candidates belonging to Schedule Castes / Schedule Tribes, Physically Handicapped and OBC (NCL) applicants as per Govt. of India rules & regulations.

Tenure: SRF will be given for a period of three years. The term is extendable by one year on the basis of assessment of the progress made through publications. The combined tenure of JRF and SRF will not exceed five years. Extension of the tenure will be on receiving the recommendation of the three member Expert Committee Consisting of Scientist concerned, Head of the Division and external expert in the relevant field. The extension of the tenure will be purely on the basis of progress report and recommendations of review committee. SRF will be terminated from the date of Ph. D viva-voce or completion of tenure, whichever is earlier.

3B. Research Associate (RA) under SSS-NIBE Bio-Energy Promotion Fellowship.

Essential Qualifications: Candidate must have Doctorate (Ph. D) degree or having 2 years research, teaching and design & development experience after M.E. / M. Tech. with published work in peer reviewed journals (SCI / Engg.) / patents in the field of Renewable Energy or relevant field of science and engineering.

Age Limit: The maximum/ upper age limit shall be 35 years, as on the day on which the application is made. The upper age limit is relaxed upto 5 years in the case of women scientist, for physically handicapped candidates and candidates belonging to scheduled castes/tribes and OBC (NCL) candidates as per Govt. of India rules and regulations.

Tenure: RA/PDF will be awarded initially for one year. The fellowship can be extended for another two years (maximum) based on satisfactory performance.

4. **Stipend / Fellowship Amount:**

Sl. No.	Designation	Emoluments
1.	Junior Research Fellow (JRF)	INR 37,000 per Month + (HRA as admissible or Hostel facility if available)
2.	Senior Research Fellow (SRF)	INR 42,000 per Month + (HRA as admissible or Hostel facility if available)
3.	Research Associate (RA)	INR 58,000 per Month + (HRA as admissible or Hostel Facility if available)

5. **Service Conditions:**

Selection: Selection of the fellows would be strictly based on merit and through open advertisement. Both online and hardcopy application will be considered and reviewed from time to time as per requirement of the Institute. A committee under the Chairmanship of Director General, SSS-NIRE having subject expert will assess the applicants through personal interview. Successful applicants will be communicated as per procedure. NO TA / DA will be paid for attending for interview.

Tenure: The performance of the fellow will be reviewed through an appropriate review committee (three members) constituted by the Director General of the Institution before extending the tenure in terms of fellowship tenure. Research Fellow to submit annual progress report to Guide/Project Incharge/Scientist.

DA & CCA: JRFs/SRFs/PDFs/RAs will not be entitled to these allowances.

House Rent Allowance (HRA): All research fellows may be provided hostel accommodation wherever available and those residing in accommodation provided by the Institute will not be eligible for drawing HRA. Wherever provision of hostel accommodation is not possible, HRA may be allowed as per Central Government norms applicable for Kapurthala. The fellowship amount may be taken as basic for calculating the HRA.

Leave and other entitlement benefits: The fellows are eligible for Leave with stipend not exceeding 30 days for each completed calendar year. The leave will be

treated as part of the Fellow's tenure. During the first year of Fellowship or any uncompleted year, leave may be granted on pro-rata basis. In case Fellow proceeds on leave before termination of Fellowship, he/she must join back before the expiry of tenure; failing which the tenure will be deemed to have terminated with effect from the date he/she proceeded on leave. The fact of joining back from leave should be communicated to SSS-NIRE immediately. Participation of JRFs/SRFs/RAs in any scientific event/workshops in India or abroad will be treated as "on duty" and subject to prior approval of competent authority well in advance. The travel entitlement for Fellows for participation in scientific events/ workshops in India will be 2nd AC by rail. Maternity leaves as per Govt. of India instructions issued from time to time would be available to female candidates.

Bonus & Leave Travel Concession: JRFs/SRFs/PDFs/RAs will not be entitled to these allowances.

Retirement Benefits: JRFs/SRFs/PDFs/RAs will not be entitled to these benefits.

Publication/Patent: The results of JRFs/SRFs/PDFs/RAs research work may be published in standard refereed journals at the discretion of the Fellow or his Guide with prior approval of the Institute. It should be ensured by the fellow that the assistance provided by the Funding Agency / Institution of Government of India is acknowledged in all such publications and one copy of the published research papers should be sent to SSS-NIBE.

General Conditions - SSS-NIBE Bio-Energy Promotion Fellowship.

- This is a rolling advertisement and will remain active throughout the year, however, applications will be processed at least twice a year. There is no last date and applications will be processed periodically i.e. twice a year.
- Recruitment would be based on the need in a given areas of specializations within the Institute. The areas/specializations in which candidates will be recruited will be updated periodically in line with the Institute's requirements. During this rolling advertisement, if sufficient fellows are recruited in any particular area, further recruitment in the same area/department may not be conducted.
- SSS-NIBE Bio-Energy Promotion Fellowships are tenable in India. Only bonafide Indian citizens, residing in India are eligible for the award of research fellowship.
- The applications received will be screened by a committee for short listing the candidates for interview periodically. The eligible applicants would be interviewed by a duly constituted

committee. The committee would recommend the candidate(s), if found suitable, for consideration of the competent authority for engagement on Fellowship/Stipendiary basis.

- Detailed information about the research areas of Faculty Members in the above disciplines can be obtained from the Institute website at www.nibe.res.in. The applicants are strongly encouraged to go through profiles of Faculty Members and to get familiar with their specialization and research interest.
- The award of SSS-NIBE Bio-Energy Promotion Fellowship is temporary for a fixed tenure and does not imply any assurance or guarantee for subsequent employment by SSS-NIBE to the beneficiaries. The awardees shall not lay claim to the permanent absorption in SSS-NIRE after the expiry of fellowship.
- The selection rules, amount of fellowship, etc. will be governed by service condition rules of JRF/SRF/PDF of SSS-NIBE Bio-Energy Promotion Fellowship guidelines.
- The authority to award/terminate fellowship and relax any of the conditions vests with the Director General, SSS-NIRE.
- Selected Fellow has to be a full-time researcher and submit himself/herself to the disciplinary regulations of the Institute.
- Fellow shall be governed by the disciplinary regulations of the institute.
- Fellows must submit a detailed annual report as per prescribed format.
- Fellows must send a detailed consolidated report of the research work done during the entire period of fellowship on completion of the tenure/resignation of the fellowship as per prescribed format.
- In case fellow decided to appear for competitive examination, he/she would invariably seek permission from the guide and competent authority.
- Fellow is not to take any assignment other than related to his/her approved research programme, paid or unpaid. However, if required, the fellow may be asked to assist the institute in other activities as assigned by the competent authority. However, it should be ensured that these assignments should not hamper the progress of research work of the fellow.
- No fellow shall discontinue his/her fellowship without prior approval of Director General, SSS-NIRE. In case he/she wishes to discontinue the fellowship prior to completion of the tenure on attainment of original objectives of research, he/she must submit the resignation to Director General, SSS-NIRE through the guide one month in advance indicating specific reasons for not continuing the fellowship.

- The research fellow shall keep inform Director General, SSS-NIBE about his/her getting the higher degree if any, submission/acceptance/ publication of any research paper arising out of the research work done during the tenure of the fellowship.
- He / She must acknowledge the support of SSS-NIRE in the publication(s). One copy of each of all the research papers published must be sent to SSS-NIBE at each stage of manuscript/publication/reprint.

Patent: The commercial exploitation of the results and ownership of patent rights pertaining to investigations concerning the intellectual work of the SSS-NIBE research fellows/associates will be as follows: -

- (i) SSS-NIRE at its own cost may seek the patent rights and/or commercial exploitation of the results of the intellectual work of the fellow and all right would vest exclusively with SSS-NIRE.
- (ii) All matters concerning ownership of IP and its licensing/exploitation would be governed by the IP policy defined by the MNRE/SSS-NIBE.

Encouragement for pursuing higher degree: Students selected as JRFs/SRFs may be encouraged to register for Ph.D.