ਮਹਾਰਾਜਾ ਰਣਜੀਤ ਸਿੰਘ ਪੰਜਾਬ ਟੈਕਨੀਕਲ ਯੂਨੀਵਰਸਿਟੀ, ਬਠਿੰਡਾ

MAHARAJA RANJIT SINGH PUNJAB TECHNICAL UNIVERSITY (A State Univ. Estd. by Govt. of Punjab vide Punjab Act No. 5 of 2015 and Approved u/s 2(f) & 12 (B) of UGC; Member AIU)

Bathinda-151001 (Punjab), India

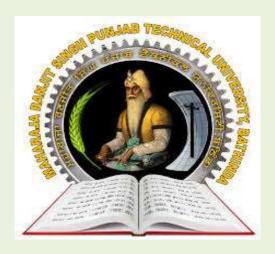
HANDBOOK ON ATTRACTING **VARIOUS RESEARCH GRANT RELATED SCHEMES**



MAHARAJA RANJIT SINGH PUNJAB TECHNICAL UNIVERSITY

Bathinda-151001 (Punjab), India

HANDBOOK ON ATTRACTING VARIOUS RESEARCH GRANT RELATED SCHEMES



2021

INTERNAL QUALITY ASSURANCE CELL MAHARAJA RANJIT SINGH PUNJAB TECHNICAL UNIVERSITY BATHINDA 151001

HANDBOOK ON ATTRACTING VARIOUS RESEARCH GRANT RELATED SCHEMES

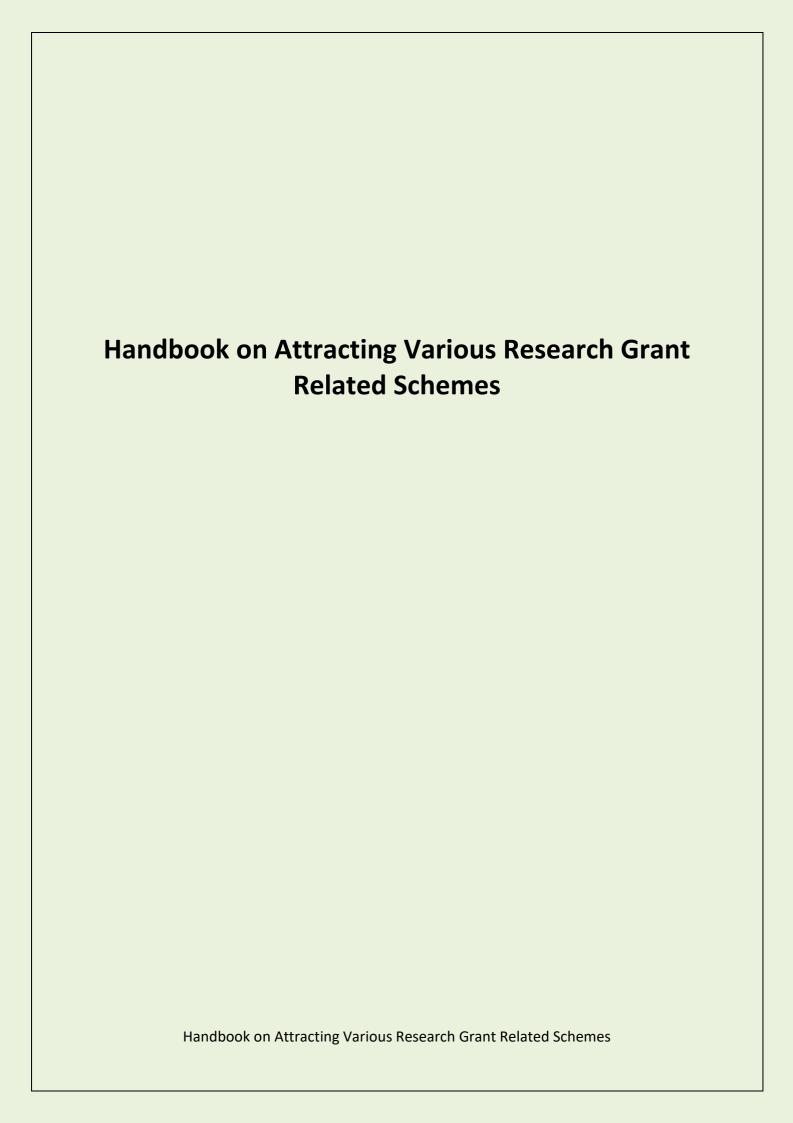
Prepared by:

- Dr. Kawaljit Singh Sandhu, Chairperson
- Dr. Ashish Baldi, MRSPTU, Bathinda
- Dr. Kamaljit Singh Boparai, MRSPTU, Bathinda
- Er. Navdeep Kaur Khiva, GZSCCET, MRSPTU, Bathinda
- Mr. Harpreet Singh, MRSPTU, Bathinda

All rights reserved with MRSPTU

Version 1 Year 2021

INTERNAL QUALITY ASSURANCE CELL



DISCLAIMER

The information in this handbook is based on public information uploaded on different websites. This booklet serves the purpose of guidance and information to simplify access to the relevant information on various funding sources according to the needs of the potential beneficiaries. Although great care was taken that the information in this handbook is correct at the time of its publication, the information contained herein is subject to change. Beneficiaries should also visit the concerned websites of the various funding agencies for any further updates and information. This booklet is for information purpose only.

PUBLISHER

Maharaja Ranjit Singh Punjab Technical University, Bathinda-151001, Punjab India

Preface to Handbook

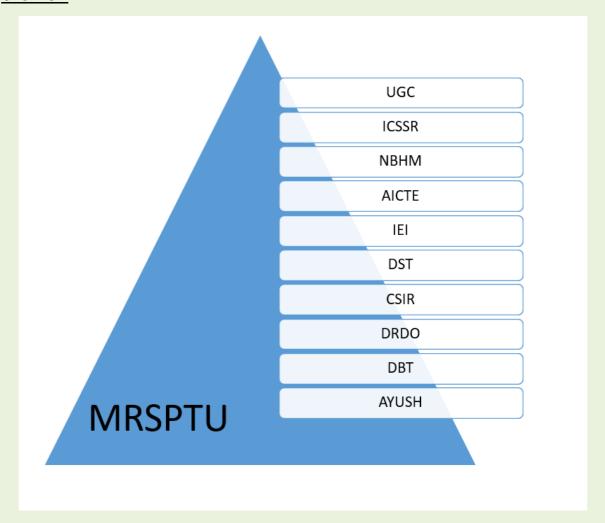
Research and Innovation is need of the hour. On common parlance, it is opined that the future of the planet depends on research ethics and focus of the research must be centered to Sustainable Development Goals. Although Research and Innovation exhibited a positive impact on our lives but at the same time created some risks and ethical issues. Research and innovation offers solutions to overcome various challenges globally which can be addressed effectively with funding opportunities and research infrastructure. This Handbook focuses over the regulations governing research grants and fellowships awarded by the various national and international research grant agencies. Besides, it highlights the application procedures and eligibility requirements along with the outlines the funding and facilities available to grant-holders and research organizations.

Looking at the immense importance of research and development the present compilation entitled as "Handbook on attracting various grants related schemes" is an outcome of the cumulative effort of Team, MRSPTU, Bathinda. The idea of publishing the Handbook was put forward after comprehensive discussion with committee members and looking at the need of such an updated document covering all the aspects of funding resources in the form of booklet. Although plenty of information is available on the various websites, still this Handbook provides practical information to potential recipients of funding for research and innovation. This Handbook also provides decision-makers, researchers and faculty members with a picture of some of the funding opportunities available nationally and globally. The purpose of this Handbook is to present the relevant information in a simplified manner.

This handbook enables the potential applicants to identify the most suitable choices amongst the relevant programmes and directs to the relevant source of information for further details. The Handbook is divided into 10 chapters covering all the aspects of funding resources.

Maharaja Ranjit Singh Punjab Technical University, Bathinda, Punjab

<u>Overview</u>



Funding Opportunities at University Grant Commission (UGC)

1. Introduction

The University Grants Commission (UGC) came into existence on 28th December, 1953 and became a statutory Organization of the Government of India by an Act of Parliament in 1956, for the coordination, determination and maintenance of standards of teaching, examination and research in university education.

1.1 Categories of fellowships

- i. Emeritus Fellowship.
- ii. Post Graduate Indira Gandhi Scholarship Scheme for Single Girl Child.
- iii. Research Fellowship in Sciences for Meritorious Students.
- iv. Dr. D.S. Kothari Post-Doctoral Fellowships in Sciences, Medical Sciences & Engineering Sciences.
- v. Dr. S Radhakrishnan Post Doctoral Fellowship in Humanities and special Social Sciences.
- vi. Rajiv Gandhi National Fellowship for SC/ST Candidates.
- vii. Junior Research Fellowship (JRF) and Research Associateship (RA) for Foreign Nationals.
- viii. Junior Research Fellowship in Engineering & Technology.
- ix. Junior Research Fellowship (JRF) in Sciences, Humanities and Social Sciences.
- x. Post-Doctoral Fellowship to Women Candidates.
- xi. Maulana Azad National Fellowship for Minority Students.

1.1.1 Emeritus Fellowship

Introduction

The University Grants Commission floated the Scheme of "Emeritus Fellowship" in order to provide an opportunity to the superannuated teachers of universities, colleges and institutions approved under Section 2(f) and 12(B) of the UGC Act who have been actively engaged in research and teaching programs in the preceding years to undertake research, without any restriction of position or pay scales.

To provide an opportunity to superannuated teachers of all recognized universities and colleges approved under UGC Act, to pursue active research in their respective field of specialization.

Eligibility

The eligibility will be based on the quality of research and published work contributed by the

teacher in his/her service career. The awardee (superannuated) can work under this scheme

with a well-defined time bound action plan upto the age of 70 years or upto two years (non-

extendable) of the award whichever is earlier.

Support

Nature of assistance available under the scheme:

i.The number of slots available under the scheme is 100 for science streams and 100 for

Humanities, Social Sciences and Languages (total 200 Slots) at any one given time basis.

The assistance available under the scheme is:

ii.Honorarium of Rs. 20,000/- p.m. from UGC. for two years (non-extendable)

iii.Contingency grant (Non-lapsable) of Rs. 50,000/- per annum. However, books, journals and

equipments etc. procured out of the contingency grant will be the property of the

university/college/institute.

For further details: https://www.ugc.ac.in/oldpdf/xiplanpdf/emeritousfellowship16may09.pdf

1.1.2 Post Graduate Indira Gandhi Scholarship Scheme for Single Girl Child

Introduction

In order to achieve and promote girls education, UGC has introduced a Post Graduate Indira

Gandhi Scholarship for single girl child with an aim to compensate direct costs of girl

education to all levels especially for such girls who happen to be the only girl child in their

families.

Eligibility

Any single girl child of her parents. In a family if one son and one daughter is available then

girl child will not be considered for scholarship under the scheme. The scheme is applicable

to such a single girl child who has taken admission in regular, full-time 1st year Master's

Degree course in any recognized university or a post graduate college. This scholarship is

available to PG-I-year student only. Admission to PG Course in Distance education mode is

not covered under the scheme. Girl students up to the age of 30 years at the time of

admission in PG courses are eligible.

Support

i. Girl students up to the age of 30 years at the time of admission in PG courses are eligible.

ii. It is expected from the institutions where student has taken admission in the first year PG

course, no tuition fees will be charged by the institute from girl students to pursue PG

degree course in Universities/Colleges/Institutions covered under Sections 2(f) and 12(B)

of UGC Act.

iii. The value of Scholarship is Rs.2,000/- p.m for a period of two years only (10 months in

the year) i.e. full duration of a PG course.

iv. No other additional grant will be payable in lieu of hostel charges and medical charges

etc.

For further Details: https://www.ugc.ac.in/oldpdf/xiplanpdf/revisedIG_SGC_guideline24aug09.pdf

1.1.3. Research Fellowship in Sciences for Meritorious Students (RFSMS).

Introduction

This scheme is applicable to all Departments of Sciences, Bio-Sciences, Agricultural Sciences,

Engineering Sciences of the eligible universities. The objective of the RFSMS scheme is to

provide opportunities to meritorious candidates to undertake advanced studies and

research leading to Ph.D. degrees in sciences.

Eligibility

The candidates who have been registered for Ph.D. in Science subjects in Universities with

Potential for Excellence/Centers with Potential for Excellence / Centers of Advance Studies

and Department of Special Assistance identified by UGC.

Support

The tenure of fellowship is initially for two years under the RFSMS scheme. Upon expiry of

this period, the work of the Fellow will be evaluated by Experts Committee to be set up by

the university. If the research work is found satisfactory, his/her tenure will be extended for

a further period of three years. In case the work for the first two years is not found

satisfactory, an additional year will be given to him/her for improvement. In such cases work

will be evaluated again after three years, and if improvement is found, the fellow will get

two more years under the RFSMS. Thus, the total period of fellowship is five years, with no

further provision of extension.

Fellowship: @ Rs.8,000/-p.m. Contingency @ Rs.6,000/-p.a.

For further details: https://www.ugc.ac.in/oldpdf/xiplanpdf/meritorious%20students.pdf

1.1.4. Dr. D.S. Kothari Post-Doctoral Fellowships (pdfs) in Sciences, Medical Sciences &

Engineering Sciences

Introduction

This fellowship provides an opportunity to overcome the deficiencies at doctoral level

research as well as an opportunity to explore new areas of research in different settings.

Eligibility

Candidates who have either received a Ph. D degree or submitted their Ph. D thesis are

eligible to apply. When selected, those holding the Ph. D degree will be directly awarded the

named pdf. The fellowship will be awarded on a yearly basis with renewal/termination

clause on the basis of pdf mentor/peer group appraisal. However, the maximum duration of

the pdf award would be 3 years.

Support

The stipend for these awards should be Rs.18.000-22,000 pm with annual increase of

Rs.1000 pm. The 'bridging fellowship' stipend should be Rs. 16, 000 pm. The pdf award

should carry a contingency grant of Rs .50, 000 pa.

For further details: https://www.ugc.ac.in/oldpdf/xiplanpdf/dskothari_fship.pdf

1.1.5. Dr. S Radha krishnan Post-Doctoral Fellowship (PDF) in Humanities and special

Social Sciences (including language)

Introduction

Dr. S. Radhakrisbnan Post-Doctoral Fellowship (PDF) in Humanities and Social Sciences

(including languages) is applicable for those candidates preferably below 35 years of age or

who have either received a Ph.D. degree or submitted their Ph.D. thesis. The main objective

of this award is to provide an opportunity to carry out the advanced studies and

independent research in Humanities and Social Sciences (including languages) in Indian

Universities and Colleges recognized under UGC Act 2 (f) and 12.

Eligibility

The candidate should not be more than 35 years of age as on 1st July of the year of award.

Support

Fellowship-Rs. 18000-2000/- p.m.

Contingency- Rs. 30,000/- p.a.

For further details: https://www.ugc.ac.in/oldpdf/xiplanpdf/postdrfellowshipsep.pdf

1.1.6. Rajiv Gandhi National Fellowship for SC/ST Candidates

Introduction

The objective of this award is to provide fellowships in the form of financial assistance to the students belonging to SC/ST to pursue higher studies leading to M.Phil and Ph.D. degrees (full-time) in Sciences, Humanities and Social Sciences and Engineering & Technology, in Indian Universities/Institutions/ Colleges approved under Section 2(f) and 12(B) of the UGC Act. and in Non-Universities/Institutions.

Eligibility

The candidate should belong to SC/ST and should have passed the Post Graduate examination. The selection will be made on the basis of merit of the candidates. The candidate must get himself/herself registered for M.Phil./Ph.D. at the first available opportunity but not later than within a period of two years from the receipt of award letter. This period is not extendable. However, the actual payment of fellowship will be made with effect from the date of joining only.

Support

Fellowship- 12000-14000/- p.m.

For further details: https://www.ugc.ac.in/oldpdf/xiplanpdf/modifyrgnfguidelinse09.pdf

1.1.7. Junior Research Fellowship (JRF) and Research Associateship (RA) for Foreign **Nationals**

Introduction

The objective of the scheme is to provide an opportunity to foreign students and teachers from developing countries to undertake advanced study and research leading to M.Phil/Ph.D. and postdoctoral research in sciences, humanities and social sciences at Indian Universities.

Eligibility

i. Students and teachers from developing countries of Asia/Africa and Latin America.

ii. For Junior Research Fellowship (JRF): 35 years for male candidates as on 1 July of the year of application and 40 years for female candidates. The candidates must have at least a

high-class master's degree with a second-class bachelor's degree, or second-class

master's degree with a first-class bachelor's degree.

Support

Fellowship- Rs. 12,000-14,000/-p.m.

For further details: https://www.ugc.ac.in/oldpdf/xiplanpdf/JRFSAforeignnational.pdf

1.1.8. Junior Research Fellowship in Engineering & Technology

Introduction

The scheme is meant for candidates who wish to pursue research leading to a Ph.D. degree

in engineering and technology. As of date, the University Grants Commission (UGC) or the

Council of Scientific and Industrial Research (CSIR) are not conducting National Education

Testing (NET) examinations in these fields. Therefore, M.Pharma and M.E., M.Tech. students

are given this opportunity, through direct interview conducted by the Commission. There

are 50 slots under this scheme per year.

Eligibility

All minimum qualifications are a master's degree in engineering/technology/pharmacy, with

55 per cent marks. GATE is not a mandatory condition for getting a research fellowship to

pursue Ph.D. Candidates need to hold an M.E./M.Tech. degree. The age limit is 40 years as

on 1 July of the year of award, extendable by five years for women and SC/ST candidates.

Support

The tenure of fellowship is initially for a period of two years as a Junior Research Fellowship

(JRF). After expiry of two years the work of fellow will be evaluated by experts and if found

satisfactory, his/her tenure will be extended for a further period of three years with

enhanced emoluments as a Senior Research Fellowship (SRF).

Fellowship- Rs. 14,000-15,000/- p.m.

For further Details: https://www.ugc.ac.in/oldpdf/xiplanpdf/JRFE-T.pdf

1.1.9. Junior Research Fellowship (JRF) in Sciences, Humanities and Social Sciences

Introduction

The JRF scheme aims to provide opportunities to NET-qualified candidates to undertake

advanced studies and research leading to M.Phil/Ph.D. Degrees in Humanities and Social

Sciences including Languages and Sciences.

Eligibility

Candidates who have qualified NET or the UGC-CSIR joint test. However, the selection for

the JRF is made by the universities/institutions/colleges.

Support

Fellowship-Rs.12,000-14,000/-p.m.

For further Details: https://www.ugc.ac.in/oldpdf/xiplanpdf/JRFsciencehumanities.pdf

1.1.10. Post-Doctoral Fellowship to Women Candidates

Introduction

The unemployed women candidates holding Ph.D. degree in their respective subject areas

with an aim to accelerate the talented instincts of the women candidates to carry out the

advanced studies and research.

Eliqibility

The candidate must have a doctorate degree in the relevant subject preferably with

published research work to their credit. In case of general/open category, 55% marks at UG

level and 60% of marks at PG level. For reserved categories (SC/ST/OBC/PH) candidates, 50%

at UG level and 55% at PG level.

Support

Fellowship-Rs.18,000-20,000/-p.m.

For further details

https://www.ugc.ac.in/oldpdf/xiplanpdf/guidelinespostdoctoral women.pdf

1.1.11. Maulana Azad National Fellowship for Minority Students

Introduction

The fellowship under Maulana Azad National Fellowship for Minority Students will be on the

pattern of UGC Fellowships awarded to research students pursuing regular and full time

M.Phil and Ph.D. courses. The fellowship holders under this scheme will be known as MOMA

scholars.

Eligibility

He/She should submit the minority community certificate on self-declaration basis on

a non-judicial stamp paper of rupees ten, until the State Government/ Union Territory

Administration starts to issue the minority community certificate.

- ii. He/She should get admission and registration for regular and full time M.Phil/Ph.D courses in University/Academic Institution at the first available opportunity not later then with in a period of 2 years from the receipt of award letter (this period is not extendable).
- iii. Not more than two students from one family can avail MOMA fellowship.
- iv. The annual income of the beneficiary/parents or guardian of the beneficiary should not exceed Rs. 4.5 lakh from all sources. He/she should submit his/her income or his/her parent's/guardian's income certificate issued by the appropriate authority.

Support

Fellowship- Rs. 16,000-18,000/-

For further details https://www.ugc.ac.in/oldpdf/xiplanpdf/guidelines_manf.pdf

Funding Opportunities at Indian Council of Social Science Research (ICSSR)

2. Introduction

Indian Council of Social Science Research (ICSSR) was established in the year of 1969 by the Government of India to promote research in social sciences in the country. ICSSR provide grants for projects, fellowships, international collaboration, capacity building, survey, publications etc. to promote research in social sciences in India.



2.1. National Fellowships

Introduction

National Fellowships are awarded to eminent Indian social scientists in recognition to their scholarly contributions and providing opportunities to engage themselves in full-time research that have the potential to contribute in advancement of knowledge in social sciences.

Eligibility

- i. The nominees should have outstanding academic work and a significant amount of high-quality research publications to their credit.
- ii. Senior Government and defense officers of not less than 25 years of regular service

 Handbook on Attracting Various Research Grant Related Schemes

and demonstrable social science research experience through publications of books/research papers can also be nominated.

Support

- iii. National Fellowship is a full-time research work.
- iv. The duration of the fellowship is for two years only.
- v. The value of the fellowship is Rs.60, 000 p.m. and contingency grant is Rs.60, 000/-p.a.

For more details https://icssr.org/national-fellowships

2.2. Senior Fellowships

Introduction

Senior Fellowships are awarded to outstanding Indian Social Scientists for conducting full time research on themes and issues of national and social concern. These studies are expected to contribute to theoretical and conceptual advancement in different disciplines, help in generating field work based empirical data and contribute towards policy making.

Eligibility

- vi. The scholar should not be less than 45 and more than 70 years of age as on the last date of application.
- vii. The scholar must possess Ph.D. degree in any of the social science disciplines with outstanding research publications at the time of application.
- viii. Senior government and defense officers (not less than 25 years of regular service) and persons with proven Social Science expertise possessing a Ph.D. degree in any social science discipline and demonstrable research experience through publications of books/research papers/reports, can also apply.

Support

- ix. Senior Fellowship is a full-time research work.
- x. The duration of the fellowship is strictly for two years.
- xi. The value of the fellowship for unemployed and superannuated scholars is Rs.45,000 per month and contingency grant is Rs.40,000/- per annum irrespective of the pensionary benefit.

For further details https://icssr.org/senior-fellowships

2.3. Post-Doctoral Fellowships

Introduction

The main objective of ICSSR Post-Doctoral Fellowship is to encourage and retain young Indian Social Science scholars who have completed their Ph.D. and wish to pursue a regular career in teaching and research. They should have a high potential and promise for conducting full time research on specific themes and issues. These studies are expected to contribute to theoretical and conceptual advancement in different disciplines, help to generate field work based empirical data and contribute towards policy making.

Eligibility

- xii. The scholar should not be more than 45 years of age as on the last date of application. There shall be an age relaxation of 5 years for SC/ST/Persons with Benchmark Disability candidates.
- xiii. The scholar must possess Ph.D. degree in any of the social science disciplines at the time of application.

Support

- xiv. Post-Doctoral Fellowship is a full-time research work.
- xv. The duration of the fellowship is strictly for two years.
- xvi. The value of the fellowship is Rs.31,000 per month and contingency grant is Rs.25,000/- per annum.
- xvii. Under Salary protection, a fellow is entitled to salary and allowances admissible as per rules and contingency grant of Rs.25,000/-p.a. However, special allowances like children education allowance, medical reimbursement, LTC, etc. are not admissible from ICSSR. The parent institution may, however, pay/reimburse the same as per its rule.

For further details https://icssr.org/post-doctoral-fellowships

2.4. Senior Fellowships

Introduction

Doctoral Fellowships are awarded to selected scholars, who are registered for Ph.D. in UGC recognized institutes of national importance, universities/ deemed universities, ICSSR research institutes and colleges having approved Ph.D. programme with requisite infrastructure as defined by MoE /UGC to pursue and complete their doctoral research in any social science discipline.

Eligibility

- xviii. The candidate must have a confirmed Ph.D. registration (Research Degree Committee (RDC) approved) at any of the institutions on the last date of application. It includes the requirements of clearance of Research Entrance Test (RET); The Ph.D. topic must have been confirmed.
- xix. The candidate must not be more than 40 years of age on the last date of application.

 There shall be an age relaxation of 5 years for SC/ST/Person with benchmark disability.
- xx. The candidate must have secured a minimum 45% marks in Graduation and 55% in Post-Graduation or equivalent grades in any social science discipline. Five per cent (5%) relaxation of marks will be given to the SC/ST candidates; The submission of Marks Sheet, particularly of Graduation and Post-Graduation are mandatory otherwise the candidate shall be considered as not eligible.

Support

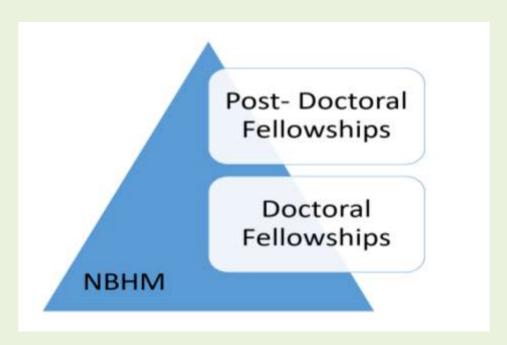
- i. The duration of the fellowship is strictly for two years or till the date of Ph.D. submission at the university, whichever is earlier.
- ii. The value of the fellowship is Rs.20,000/- per month and contingency grant is Rs.20,000 /- per annum.
- iii. Doctoral Fellow should be a full-time *bonafide* Ph. D student at the affiliating university throughout the fellowship tenure.

For further details https://icssr.org/doctoral-fellowship

Funding Opportunities at National Board for Higher Mathematics (NBHM)

3. Introduction

The National Board for Higher Mathematics (NBHM) was set up to foster the development of higher mathematics in the country, to formulate policies for the development of mathematics, help in the establishment and development of mathematical centres and give financial assistance to research projects and to doctoral and postdoctoral scholars.



3.1. Doctoral Fellowship

Introduction

Students possessing Master's degree in mathematics, physics or statistics and wishing to take up research work in any branch of mathematics (including mathematical statistics and mathematical physics) leading to a Ph.D. degree are eligible to apply for the Ph.D. scholarships awarded by NBHM.

Eligibility

Students possessing Master's degree in mathematics, physics or statistics and wishing to take up research work in any branch of mathematics (including mathematical statistics and mathematical physics) leading to a Ph.D. degree are eligible to apply for the Ph.D. scholarships awarded by NBHM.

Support

At present the scholarship amount is Rs. 25,000/- (Rs. Twenty five thousand only) per month

Handbook on Attracting Various Research Grant Related Schemes

for the first two years and Rs. 28,000/- (Rs. Twenty eight thousand only) per month for the next three years after a review of the work at the end of two years. The Ph.D. scholarship also carries a contingency grant of Rs. 32,000/- (Rs. Thirty thousand only) per year.

For further details Information on Ph.D. Scholarships | www.nbhm.dae.gov.in

3.2. Postdoctoral Fellowship

Introduction

Every year, NBHM offers postdoctoral fellowships to selected young mathematicians who have completed their Ph.D. degree in mathematics. A candidate can apply for the award of PDF any time. However, applications will be considered twice a year with deadlines of January 01, and July 01 of the year.

Eligibility

The postdoctoral fellowships (PDF) are intended for mathematicians below the age of 35 who have a doctoral degree or equivalent published research work. Persons who have submitted their dissertations for a Ph.D. degree are also eligible to apply.

Support

- i. Rs. 32,000/- per month for those who have submitted PhD thesis and yet to receive their official degree.
- ii. Rs. 36000/- per month for fresh PDF with Ph.D. degree,
- iii. Rs. 38000/- per month for PDF with Ph.D. degree & one year experience and
- iv. Rs. 40000/- per month for PDF with Ph.D. degree & two or more years' experience and a contingency grant of Rs. 32,000/- (Rs. Thirty-two Thousand only) per year.

For further details Postdoctoral Fellowships | www.nbhm.dae.gov.in

Funding Opportunities at All India Council for Technical Education, New Delhi

4. Introduction

The AICTE Act was constituted to provide for the establishment of an All-India Council for Technical Education with a view to proper planning and coordinated development of a technical education system throughout the country, the promotion of qualitative improvements of such education in relation to planned quantitative growth, and regulation & proper maintenance of norms and standards in the technical education system and for the matters connected therewith. All India Council for Technical Education (AICTE) was set up in November 1945 as a national-level apex advisory body to conduct a survey on the facilities available for technical education and to promote development in the country in a coordinated and integrated manner. And to ensure the same, as stipulated in the National Policy of Education (1986), AICTE was vested with:

- Statutory authority for planning, formulation, and maintenance of norms & standards.
- ii. Quality assurance through accreditation.
- iii. Funding in priority areas, monitoring, and evaluation.
- iv. Maintaining parity of certification & awards.
- v. The management of technical education in the country.



4.1 Faculty Development Schemes

- i. Quality improvement program.
- ii. Quality improvement programme (foreign university)
- iii. Faculty development programme (FDP)

- iv. Short term training programme (STTP)
- v. Training programs for physical education trainers/sport-games teachers/director of sports
- vi. AICTE- technical university joint training programs for teachers
- vii. AICTE- technical university joint training programs for librarians
- viii. Travel grant scheme for faculty
- ix. AICTE-INAE teachers research fellowship scheme for faculty
- x. AICTE-INAE- distinguished visiting professorship scheme
- xi. AICTE ISTE orientation/ refresher programme.
- xii. Technical book writing & translation
- xiii. Emeritus professor (distinguished practicing engineer

For further details https://www.aicte-india.org/schemes/staff-development-schemes)

4.2. Students Development schemes

- i. PG scholarship
- ii. National doctoral fellowship (NDF)
- iii. Pragati scholarship
- iv. Saksham scholarship
- v. Prerana scheme for preparing sc/st students for higher education
- vi. Samriddhi scheme for sc/st students for setting start-ups
- vii. Support to students for participating in competition abroad (SSPCA)
- viii. Prime minister's special scholarship scheme PMSSS
- ix. Aicte-inae travel grant scheme
- x. Smart india hackathon 2019
- xi. M. Tech projects as internship with small and medium enterprises (MSMES)

For further details https://www.aicte-india.org/schemes/students-development-schemes

4.3. Research and Innovation Development Schemes

- xii. Grant for organizing conference
- xiii. Research promotion scheme (RPS)
- xiv. E- shodhsindhu(subscription to e-journals)
- xv. Entrepreneurship development cell (EDC)
- For further details https://www.aicte-india.org/schemes/research-innovations-development-

schemes

4.4. Institutional Development Schemes

- i. Modernization and removal of obsolescence (MODROBS)
- ii. Hostels for SC/ST students
- iii. Margadarshak
- iv. Skill and personality development programme centre for SC/ST students

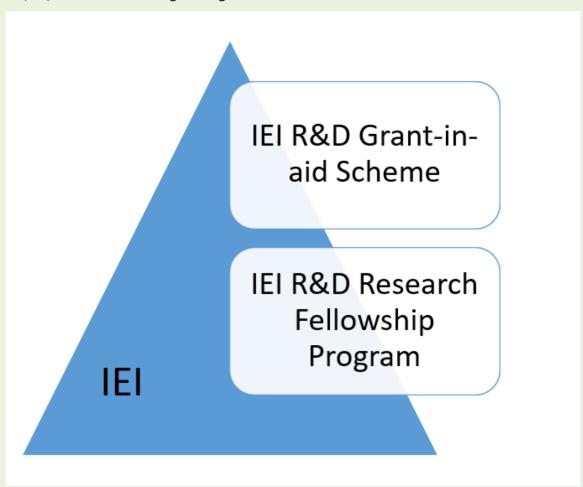
For further details https://www.aicte-india.org/schemes/institutional-development-schemes)

Funding Opportunities at Institution of Engineers (India) IEI

5. Introduction

The Institution of Engineers (India) [IEI] is the largest multi-disciplinary professional body of engineers, established in 1920 with its Headquarters located in Kolkata and incorporated under Royal Charter on 9th September, 1935 by the then His Majesty of King George V. The Royal Charter endowed the Institution with the responsibility to promote the general advancement of engineering amongst its members and persons attached to the Institution. After Independence, the Institution is a "Body Corporate" protected under Article 372 of the Constitution of India. The Institution of Engineers (India) is administered by a National Council with the President as its Head.

IEI has been recognized as Scientific and Industrial Research Organization (SIRO) by the Ministry of Science & Technology, Govt. of India and besides conducting its own research, provides Grant-in-Aid to UG/PG/ PhD students of Engineering Institutes & Universities.



5.1. IEI R&D Grant-in-aid Scheme

- i. The scheme is for the applicants pursuing full-time engineering courses [UG/PG/Ph.D] in NBA/NAAC accredited colleges/institutions/universities or institutions with valid NIRF rank.
- ii. For UG the grant is for 9 months and amount is 50,000/-.
- iii. For PG the grant is for 12 months and amount is 1,00,000/-.
- iv. For Ph. D the grant is for 24 months and amount is 1,50,000/-.

5.2. IEI R&D Research Fellowship Program

- i. The scheme is for the applicants pursuing full time M.Tech/ Ph.D. scholars of government & self-supporting engineering and technical institutions for financial support in the form of fellowship under grant-in-aid scheme.
- ii. The fellowship amount is 12,000/- PM.

For further details https://www.ieindia.org/webui/IEI-Activities.aspx

Funding Opportunities at Department of Science & Technology (DST)

6. Introduction

Department of Science & Technology (DST) was established in May 1971, with the objective of promoting new areas of Science & Technology and to play the role of a nodal department for organizing, coordinating and promoting S&T activities in the country.

6.1. Schemes

- i. Women Scientist Programs
- ii. Science and Engineering Research Board (SERB)
- iii. India Science and Research Fellowship (ISRF)
- iv. Swarnajayanti Fellowships Scheme
- v. Science, Technology, and Innovation Policy Fellowship Program (STI-PFP)
- vi. Scheme for Young Scientist and Technologist (SYST)

6.1.1. Women Scientist Programs

Introduction

The challenges faced by well qualified women are several but most often the "break in career" arises out of motherhood and family responsibilities. To address such issues, Department of Science and Technology (DST) launched "Women Scientists Scheme (WOS)" during 2002-03. This initiative primarily aimed at providing opportunities to women scientists and technologists between the age group of 27-57 years who had a break in their career but desired to return to mainstream.

Category of Fellowships

Women Scientist Scheme-A(WOS-A): Research in Basic/Applied Science

Women Scientist Scheme-B (WOS-B): S&T interventions for Societal Benefit

Women Scientist Scheme-C (WOS-C): Internship in Intellectual Property Rights (IPRs) for the Self-Employment

Eligibility

The scheme is meant to encourage women in S&T domain, preferably those having a break in career and not having regular employment, to explore possibility of re-entry into the profession. The minimum age to apply in WOS-A & WOS-B is 27 years and maximum age is 57 years. Age relaxation of 5 years would be given to candidates belonging to SC/ST/OBC

and physically challenged category.

- WOS-A: Ph.D. in Basic or Applied Sciences/MD or equivalent degree
- WOS-B: M.Phil/M. Tech/ M.Pharm /M.VSc or equivalent degree
- M.Sc. in Basic or Applied Sciences/MBBS/B.Tech or equivalent degree
- WOS-C: Ph.D. in Basic or Applied Sciences/MD or equivalent degree
- M.Phil/M. Tech/M.Pharm/M.VSc or equivalent degree
- M.Sc. in Basic or Applied Sciences/MBBS/B.Tech or equivalent degree

Support

This scheme will provide a research grant for a well-defined project proposal (under WOS-A and WOS-B) for a period of maximum three years. This grant will cover the fellowship of the applicant and cost of small equipment's, contingencies, travel, consumables, etc. Institutional overhead charges will be extra.

WOS-A: 55000/- + HRA

WOS-B: 40,000/- + HRA

31,000/- + HRA

WOS-C: 35,000/-

30,000/-

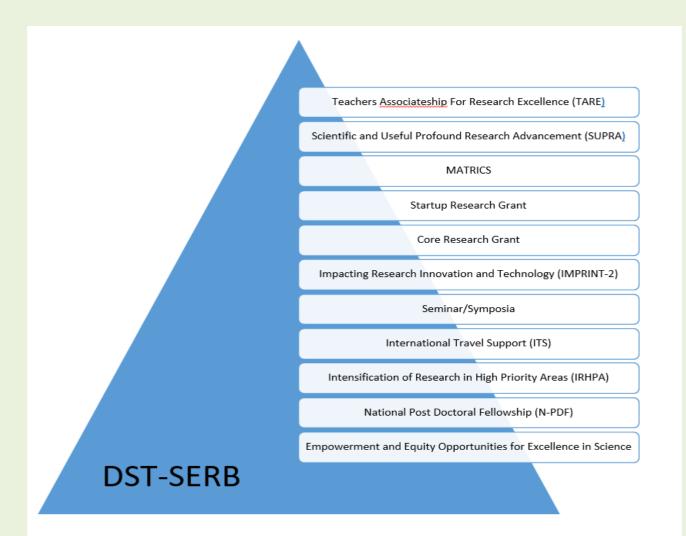
25,000/-

For further details https://dst.gov.in/scientific-programmes/scientific-engineering-research/women-scientists-programs

6.1.2. Science and Engineering Research Board (SERB)

Introduction

The Government of India established the Science and Engineering Research Board (SERB) through an Act of Parliament, viz. the Science and Engineering Research Board Act, 2008. Promoting basic research in emerging areas of Science & Engineering is one of the prime objectives of the Board. The objective of the scheme is to provide support to researchers belonging to SC/ST in undertaking research in the emerging and frontier areas of science and engineering.



Eligibility

- i. The scheme is open to Indian nationals only.
- ii. Should be an active researcher belonging to the Scheduled Caste or Scheduled Tribe category working on regular basis in academic institutions/national labs or any other recognized R&D institutions in the field of Science and Engineering.
- iii. The applicant should have at least four years of service remaining before superannuation as on the date of submission of the proposal.
- iv. Researchers who are running an ongoing project under this program as on the date of submission of the proposal are not eligible to apply

Support

- **i.** Funding is provided up to a maximum of Rs. 50 lakhs (excluding overhead charges).
- ii. Duration of the project shall be for a maximum of four years.

For further details https://www.serbonline.in/SERB/HomePage

6.1.3. India Science and Research Fellowship (ISRF)

Introduction

India Science and Research Fellowship is to provide opportunity to scientists and researchers from neighboring countries namely Afghanistan, Bangladesh, Bhutan, Maldives, Myanmar, Nepal, Sri Lanka and Thailand to work in contemporary research areas across all major disciplines of science and technology including engineering and medical sciences at premier research laboratories and academic institutions in India

Eligibility

- i. Applicant should be a citizen/permanent resident of the Afghanistan, Bangladesh, Bhutan, Maldives, Myanmar, Nepal, Sri Lanka and Thailand.
- ii. The applicant should be actively engaged in research at a university or research institution in their country in various areas of science and technology including engineering and medical sciences.
- iii. Minimum Qualifications: Ph.D. /M.Tech. /M.Sc. /MBBS with 3-5 years research or teaching experience. Applicants registered for a Ph.D. degree in home country may also apply.
- iv. Must be below 45 years of age (as on 31st December 2018).
- v. The applicant should possess a valid passport.
- vi. Must not hold any visa for temporary or permanent residency in India

Support

- vii. Rs. 50,000/- per month which includes accommodation and medical facilities as available to host institutes.
- viii. Rs. 10,000/- as one time contingency grant.
- ix. Round trip air ticket by economy class from the place of employment in their own country to the Indian host institute, through shortest route. Local transport by Road / rail between the nearest airport and the host institute in India.
- x. Visa fee will be reimbursed

For further details https://dst.gov.in/callforproposals/india-science-and-research-fellowship programme

6.1.4. Swarnajayanti Fellowships Scheme

Introduction

Govt. of India had instituted a scheme "The Swarnajayanti Fellowships" to commemorate India's fiftieth year of Independence. Under this scheme a selected number of young scientists, with proven track record, are provided special assistance and support to enable them to pursue basic research in frontier areas of science and technology. Scientists selected for the award will be allowed to pursue unfettered research with a freedom and flexibility in terms of expenditure as approved in the research plan. The project should contain innovative research idea and it should have a potential of making impact on R&D in the discipline. The fellowships are scientist specific and not institution specific, very selective and have close academic monitoring.

Duration

The duration of the fellowship will be for a period not exceeding five years.

Support

The award consists of a Fellowship of Rs 25000/- per month in addition to the salary drawn from the parent Institute for a period of 5 years, The fellows selected along with their projects will be considered for funding by the Science & Engineering Research Board (SERB) as per SERB norms, for fellowship, recurring and non-recurring heads.

For further details https://dst.gov.in/scientific-programmes/scientific-engineering-research/human-resource-development-and-nurturing-young-talent-swarnajayantifellowships-scheme

6.1.5. Science, Technology, and Innovation Policy Fellowship Program (STI-PFP)

Introduction

As the country is lagging behind in terms of critical mass and proper structure of policy research institution(s), on the recommendation of the Committee of Experts, Policy Research Cell of DST proposes to launch DST-STI Policy Fellowship Programme at doctoral and post-doctoral levels to generate a critical mass of policy researchers. This programme aims to attract and encourage top-quality researchers to work on the issues pertaining to STI policy and contribute their knowledge and analytical skills in the policy realm.

Category of Fellowships

- i. Postdoctoral fellow
- ii. Junior research fellow

 Handbook on Attracting Various Research Grant Related Schemes

Eligibility

Postdoctoral fellow: Science/medicine/engineering/ social science (with a background of STI policy) academic scholars, STI policy researchers, with good academic record and holding a Ph.D. degree (within the last three years) are eligible to apply. Applicants must be capable of doing independent research work and have published at least 3 research papers in peer reviewed journals. At the time of application, applicant's age should be below 35 years.

Junior research fellow: Graduate students (B.E./B. Tech. or equivalent), Master's degree in natural science, medicine, engineering or social science with a background of STI policy research within the last two years. Applicants are required to provide a recommendation letter from their supervisors or advisors who may guarantee the quality of research result. At the time of application age of the applicant should be less than 30 years.

Support

The duly constituted Experts Committee will select candidates based on their research track record and the relevance, quality, and significance of their proposals. Once the Committee finalizes the selection, the programme office (Policy Research Cell, DST) will notify result to selectees via e-mail. The selected candidates will be awarded a fellowship of Rs. 80,000/- (consolidated) in the level of INSPIRE Faculty 5 for the Postdoctoral Fellows and Rs. 25000/- + HRA pm in case of Junior Research Fellows (at par with JRF). Based on the Committee's decision, an amount up to Rs. 200,000/- will be granted annually to the Postdoctoral Fellows and Rs. 50,000/- to the Junior Research Fellows to cover research-related costs and contingency.

For further details

https://dst.gov.in/sites/default/files/DST_STI_Policy_Fellowships%20Advts.pdf

6.1.6. Scheme for Young Scientist and Technologist (SYST)

Introduction

Department of Science and Technology (DST) launched Scheme for Young Scientists and Technologists (SYST) in the year 1991 with an aim to encourage young scientists to provide solution for society. Young Scientists having innovative invited to submit proposals under SYST encompassing scientific challenges.

Eligibility

- i. The applicant should possess at least Master's degree inany science and technology stream. Those having PhD will be given preference.
- ii. The candidate should be less than 35 years of age on the last date of submission of the DST. However, age relaxation of 5 years would be given to women and differently-abled (Divyangjan) applicants and those belonging to SC/ST/OBC category.
- iii. The applicant not in regular position should align themselves with an Academic Institution of repute, S&T based agencies including reputed Voluntary Organization with minimum 5 years in existence for implementation of S & T based project. These organizations must agree to facilitate smooth execution of the project and also provide necessary infrastructure/ facilities for this purpose.

For further details https://dst.gov.in/scheme-young-scientists-technologist-syst

Funding Opportunities at Council of Scientific & Industrial Research (CSIR)

7. Introduction

The Council of Scientific & Industrial Research (CSIR), known for its cutting-edge R&D knowledge base in diverse S&T areas, is a contemporary R&D organization. CSIR has a dynamic network of 37 national laboratories, 39 outreach centres, 3 Innovation Complexes, and five units with a pan-India presence. CSIR's R&D expertise and experience are embodied in about 3460 active scientists supported by about 4350 scientific and technical personnel as of June 2021. CSIR covers a wide spectrum of science and technology – from oceanography, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology to mining, aeronautics, instrumentation, environmental engineering and information technology. It provides significant technological intervention in many areas concerning societal efforts, which include environment, health, drinking water, food, housing, energy, farm and nonfarm sectors. Further, CSIR's role in S&T human resource development is noteworthy. Pioneer of India's intellectual property movement, CSIR today is strengthening its patent portfolio to carve out global niches for the country in select technology domains. CSIR filed about 225 Indian patents and 250 foreign patents per year during 2015-20. CSIR has a patent portfolio of 1,132 unique patents in force, out of which 140 patents have been commercialized. CSIR also has 2,587 in force patents granted abroad in multiple countries. Amongst its peers in publicly funded research organizations globally, CSIR is a leader in filing and securing patents worldwide.



7.1 Junior Research Fellowship (JRF)

Candidates holding BS-4 years program/BE/B. Tech/B. Pharma/MBBS/ Integrated BS-MS/M.Sc. or Equivalent degree/BSc (Hons) or equivalent degree holders or students enrolled in integrated MS-Ph.D. program with at least 55% marks for General & OBC (50% for SC/ST candidates, Physically and Visually handicapped candidates) after qualifying the National Eligibility Test (NET) conducted by CSIR twice a year June and December.

Candidates with bachelor's degree, whether Science, engineering or any other discipline, will be eligible for fellowship only after getting registered/enrolled for PhD/integrated Ph.D. program within the validity period of two years.

Candidate enrolled for M.Sc. or having completed 10+2+3 years of the above qualifying examination are also eligible to apply in the above subject under the Result Awaited (RA) category.

Age limits

28 years, which is relaxed up to 5 years in the case of candidates belonging to Schedule Castes/Schedule Tribes/, Physically Handicapped/Visually Handicapped and female applicants whereas 3 years in case of OBCs (Non-creamy layer candidates).

Stipend and tenure

i. Rs 31,000/ p.m for the first two years. In addition, annual contingent grant of Rs.20,000/- per fellow.

ii. SRF-NET: On Completion of two years Rs. 35,000/- p.m for the 3rd and subsequent

years.

For further details https://csirhrdg.res.in/Home/Index/1/Default/1886/60

7.2. Research Associateships (RA)

Ph.D. (in a science or engineering subject) or MD/MS/MDS (in medical science

subject) or ME/MTech/MPharm/MVSc with three years R&D experience as on the

last date of application, evidenced from RAship or associateship or from date of

registration of PhD.

ii. PhD (science/engineering) thesis submitted are also eligible for RA'ship. Selection in

such cases will be subject to the condition that PhD viva-voce done & declared

qualified for award of PhD/awarded PhD degree before the expiry of the validity of

the award offer.

iii. The candidate applying for Research Associateship must have at least one research

publication in standard refereed journal as listed in Journal Citation Reports (JCR).

Age limits: 35 Years

Tenure: Research Associateship (RA) will be tenable initially for a period of one year. It may

be extended further at the discretion of CSIR.

The consolidated stipend of RA will be one of the following.

i. Rs.47,000/- (fixed)

ii. Rs.49,000/- (fixed)

iii. Rs.54,000/- (fixed)

For further details https://csirhrdg.res.in/Home/Index/1/Default/1744/56

7.3. Nehru Science Postdoctoral Research Fellowship

Eligibility

Ph.D. degree holders within three years of award of Ph.D. degree, or those who have

submitted Ph.D. theses.

Age limits

32 years, relaxable up to 5 years in case of SC/ST/Physically handicapped and women

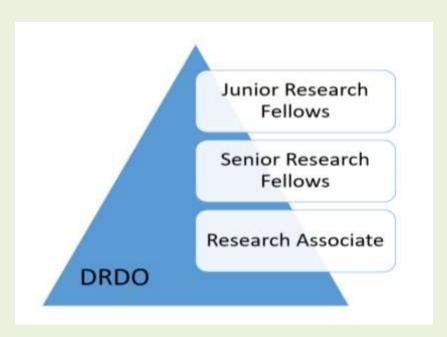
candidates and 3 years in case of OBC (Non-Creamy Layer) candidates.

Tenure	
	and extendable for maximum one more year based on outstanding performance
and recomn	nendation from the Director of the CSIR lab where working.
Fellowship	amount: Rs. 65,000/- per month
For further	details https://csirhrdg.res.in/Home/Index/1/Default/1745/55
	Handbook on Attracting Various Research Grant Related Schemes
	Hamabook on Attracting various research drant related schemes

Funding Opportunities at Defense Research and Development Organization (DRDO)

8. Introduction

DRDO was formed in 1958 from the amalgamation of the then already functioning Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defense Science Organization (DSO). DRDO was then a small organization with 10 establishments or laboratories. Over the years, it has grown multi-directionally in terms of the variety of subject disciplines, number of laboratories, achievements and stature. DRDO is the R&D wing of Ministry of Defense, Govt of India, with a vision to empower India with cutting-edge defense technologies and a mission to achieve self-reliance in critical defense technologies and systems, while equipping our armed forces with state-of-the-art weapon systems and equipment in accordance with requirements laid down by the three Services.



8.1. Junior Research Fellow

Eligibility

Graduate degree in Engg./ Technology, Post Graduate degree in Science, or Post Graduate degree in Psychology; in first division wherever Division or equivalent grading is awarded.

Age limit: 28 Years

Fellowship: Rs. 16000/-

8.2. Senior Research Fellow

Eligibility

Degree in Medical Science (MBBS), or Dental Science/Surgery (BDS), or Post-Graduate Degree in Eng./Technology; in First Division, both at Graduate and Post Graduate levels, wherever Division or equivalent grading is awarded.

Age limit: 32 Years

Fellowship: Rs. 18000/-

Eligibility

Ph.D. in Science subjects, or MD/MS in Medical Science, or M.Tech/ ME with 02 years experience in research, teaching. Design & Development. Degree should be in First Division wherever Division or equivalent grading is awarded.

Age limit: 30 Years

Fellowship: Rs. 24000/-

For further details https://www.drdo.gov.in/careers

Chapter 9

Funding Opportunities at Department of Biotechnology (DBT)

9. Introduction

The Department since its inception has been providing an enabling ecosystem to promote

biotechnology research and improve capacity building across the country. The emphasis has

been on fostering cutting edge-research and innovation, with strong emphasis on

translational research. Through its various initiatives towards promoting innovative

research, empowering people, building world class infrastructure, supporting public-private

partnership, Department has made a huge impact on Indian agriculture, healthcare, industry

and environment on one hand, while raising global standing of India in the sphere of

biotechnology on the other. The Department through its National Biotechnology

Development Strategy announced in 2015, lays major emphasis on generation of biotech

products, processes and technologies for enhanced efficiency, productivity and cost-

effectiveness in the areas of agriculture, food and nutritional security; affordable health care

and wellness; environmental safety; clean energy, biofuel, bio-manufacturing etc. Skill

development programmes have been developed in close coordination with State

Governments. The policies announced by the Government have strengthened the

institutional mechanisms for empowering innovation and ensuring scale up and

sustainability. The emphasis has been on technology-driven research aimed at improving

lives and living of millions by providing affordable solutions to public health problems

impacting the society at a large.

Eligibility

Fellows are selected through an online Biotechnology Eligibility Test (BET), Minimum 60%

marks for General, EWS & OBC category and 55% for SC/ ST/ Differently abled in aggregate

(or equivalent grade).

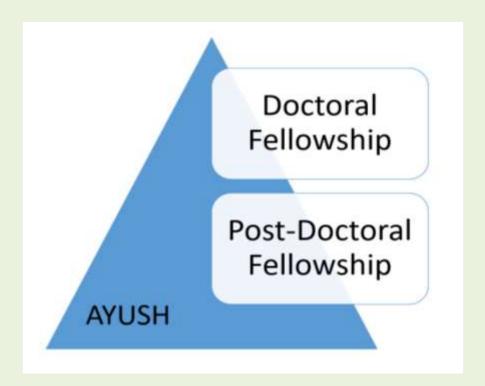
Age limit

Fellowship: Rs. 25000/month (JRF); Rs. 28000/month (SRF)

Funding Opportunities at AYUSH

10. FITM -AYUSH Research Fellowships Scheme

Subject of Research: Any subject of relevance to Indian Traditional Medicines.



Duration

- 2 Years (Doctoral Fellowships)
- 1 Year (Postdoctoral Fellowship)

Eligibility

Research Fellowships are open to scholars with educational backgrounds in any of AYUSH disciplines.

- i. Additional qualification in any other specialization especially IT is desirable.
- ii. Outstanding candidates from other disciplines may be considered.
- iii. Doctoral Research Fellowship applicant should be a full time PhD scholar in any UGC recognized Indian University, deemed University /Institute.
- iv. Postdoctoral Research Fellowship applicant should have obtained his/her PhD degree at the time of application for the Fellowship.

Age limit

The upper age limit for applicant for Doctoral Research Fellowship shall not be more than 28 years on the last date of application. The applicant for Post-Doctoral Fellow should not be more than 35 years of age on the last date of application. The upper age limit is relaxable up to 5 years in case of candidates belonging to scheduled castes/scheduled tribes/OBC, physically challenged and female applicants.

Amount of Fellowship

- i. Doctoral Research Fellowship: INR 5/- lakh per year.
- ii. Postdoctoral Fellowship: INR 7.5/- lakh per year.

For further details

https://www.fitm.ris.org.in/sites/default/files/Fellowship%20Scheme 0.pdf

References

- [1] http://dbtindia.gov.in
- [2] http://www.nbhm.dae.gov.in
- [3] http://www.serb.gov.in
- [4] https://dst.gov.in
- [5] https://icssr.org
- [6] https://www.aicte-india.org/
- [7] https://www.csir.res.in
- [8] https://www.drdo.gov.in
- [9] https://www.ieindia.org/webui/iei-home.aspx
- [10] https://www.ugc.ac.in



Dabwali Road, Bathinda (Pb.) - 151001 kd No. 5 of 2015) ONLY TECHNICAL UNIVERSITY OF PUNJAB HAVING UGC APPROVAL UNDER 2(f) AND 12 B OF UGC ACT, MEMBER AU.









INTERNAL QUALITY ASSURANCE CELL MAHARAJA RANJIT SINGH PUNJAB TECHNICAL UNIVERSITY (DABWALI ROAD, BATHINDA (PB.)- 151001)