

# गणितीय विज्ञान संस्थान THE INSTITUTE OF MATHEMATICAL SCIENCES

(An Autonomous Institution, under Dept. of Atomic Energy, Govt. of India) 4<sup>th</sup> Cross Road, CIT Campus, Taramani, Chennai 600 113.



#### विज्ञापन संख्या / Advt No.16-R/IMSc/2023

# Dated: 2.1.2024

The Institute of Mathematical Sciences (IMSc), Chennai is a National Institute of higher learning which fosters high quality fundamental research in frontier disciplines of Mathematical Sciences. IMSc has intensive teaching programme for award of M.Sc (by Research) and Ph.D. Degree.

# **TABLE – I : PROJECT POSITIONS**

Applications are invited for filling up the following Project positions under the Apex Project of the Institute on consolidated salary from the eligible candidates who fulfill requisite qualifications/ specifications mentioned therein. The position indicated under the project, are proposed to be filled purely on contract basis only up o 25.11.2024 from the date of appointment and there is no scope of continuation / regularization / absorption under any circumstances.

SI. No	Title of the Sub Project	Name of the Project Position	Number of positions	Selection Method	Minimum Educational Qualifications & Experience	Consolidated Salary (all inclusive &no other allowances are allowed) p.m	Mail Id to which CV and a statement of research interest to be sent	Last date for submission of applications for each position through E- mail shown under col. (7)	Date of written test / interview
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1.	First passage of intermittent random walk searchers – applications to statistical physics, biological and chemical processes SERB Project (for five months)	JRF	01	Online Interview for final selection	Educational Qualification : B.Tech / B.E / MSc with 60% marks (first class) and sound background in Physics. Desirable : Candidates should have a good understanding of statistical physics and must know	Rs 46,500/-	fpur@imsc.res.in	26.1.2024	Will be informed later.

					programming languages such as c++, Matlab, or Phython. Preference will be given for NET / JEST / GATE qalified students.				
2	Management of IMSc IT Infrastructure : Computing Media and Web	Technical Assistant (Systems)	01	<ol> <li>Written test</li> <li>Hands-on Test for those who qualify in written test</li> <li>Personal interview</li> </ol>	Essential : Should have completed one of the degrees on a regular basis         Bachelor Degree in Science (Physics/ Mathematics / Computer Science / IT) (OR)         Bachelor Degree in Computer Applications         (OR)         Bachelor Degree in Engineering (Computer Science/ECE/ EEE/IT) (OR)         Master Degree in Science (Physics/Mathematics/ Computer Science/ IT) (OR)         Master Degree in Computer Applications from a reputed College/Institution/University with minimum of 60% marks aggregate of all years / semesters.         Experience : One year working experience in system administration, system support	Rs. 26,500/-  Rs. 46,500/-	https:// www.imsc.res.in/ ta_systems	26.1.2024	Will be informed later.

after acquiring the essential educational qualification. <b>Desirable :</b> • Knowledge of basic computer troubleshooting, Format , Installation & Configurations, Data Backup, Diagnosis of Hardware. • Experience in programming using C, MySQL, Perl, PHP, Python, Shell Scripting under Linux. • Completed I.T. courses covering Linux/Unix OS. Experience in programming using C, MySQL, Perl, PHP, Python, Shell Scripting, Networking . • Candidates possess at least one year work experience in maintaining Linux/Unix systems, Network equipments are
Preferred.         Nature of duties:         Day-to-day maintenance of         computer system components,         printers, scanners,modems,         switches, WiFi, OS installation,         configuration customization of

					desktops, first level of trouble shooting of system problems and fixing of the same, setting up for multimedia projection, Video- conferencing, web-casting, etc.,Monitoring the quality of LAN/Internet bandwidth in liaison with System Administrators of the Institute.				
3	Management of IMSc IT Infrastructure : Computing Media and Web	Technical Assistant (ERP)	02	<ol> <li>Written test</li> <li>Hands-on Test for those who qualify in written test</li> <li>Personal interview</li> </ol>	Essential : Should have completed one of the degrees on a regular basis Bachelor Degree in Science (Physics/ Mathematics / Computer Science / IT) (OR) Bachelor Degree in Computer Applications (OR) Bachelor Degree in Engineering (Computer Science/ECE/ EEE /IT) (OR) Master Degree in Science (Physics/Mathematics/Computer Science/ IT) (OR) Master Degree in Computer Applications from a reputed College / Institution with minimum of 60% marks in aggregate of all years / semesters.	Rs. 26,500/-  Rs. 46,500/-	https:// www.imsc.res.in/ ta_systems	26.1.2024	Will be informed later.

					<b>Experience</b> : One year working experience in development of web applications and UX / UI development after acquiring the essential educational qualification.				
					<ul> <li>Desirable :</li> <li>Proficiency in Web Design, Web Application Development using PHP, AJAX, JQuery, JS, Postgre sql, Mysql.</li> <li>work experience in developing ERP/ MIS/ Office Automation application software for one of the Centrally Funded Institutes.</li> <li>work exposure in ERP / Open ERP and having background of accounting.</li> <li>Nature of duties:</li> <li>Design, development, and support of ERP/ Office automation applications.</li> </ul>				
4	Management of IMSc IT Infrastructure : Computing Media and Web	System Trainees	02	<ol> <li>Written test</li> <li>Hands-on Test for those who qualify in written test</li> <li>Personal interview</li> </ol>	Qualification: Essential : Should have completed one of the degrees Bachelor Degree in Science (Physics/ Mathematics /	Rs. 20000/-	<u>https://</u> <u>www.imsc.res.in/</u> <u>ta_systems</u>	26.1.2024	Will be informed later.

					Computer Science / IT) (OR) Bachelor Degree in Computer Applications (OR) Bachelor Degree in Engineering (Computer Science/ ECE/EEE/ IT) from a reputed College / Institution with minimum of 60% marks in aggregate of all years / semesters.				
5	Geometric Methods for Deep learning and Topological Characterization Of Complex networks	Project Assistant (House keeping & Catering)	01	interview only short listed candidates on the same day. (or)		Rs. 31,000/- for those with five or more years of experience after B.Sc (OR) Rs. 46,000/- for those with two or more years of experience after M.Sc	pahktwo@imsc.res. in	26.1.2024	Will be informed later.

					Registers, supervising duties of House Keeping cleaners, allotment of office rooms, Guest house rooms & hostel rooms, etc.				
6	IMSc Centre for Disease Modeling	<i>Research</i> <i>Associate</i>	01	submit a curriculum vitae, a research statement no longer than two pages, and arrange for two letters of recommendation from experts sent directly to the following email id: icdm_ra23@imsc.res.in . The applicants will be shortlisted initially based on their qualifications, expertise and experiences relevant to the project. The shortlisted candidates	or computational sciences. <b>Essential skills:</b> The candidate should have expertise in programming languages such as Python, and/or R. <b>Desirable skills:</b> Strong backgrounds in genomics	Rs.53,000/-	icdm_ra23@imsc.r es.in	26.1.2024	Will be informed later.

7	IMSc Center of Excellence in Complex Systems and Data Science (CoE-CSDS)	Research Associate	02	Online Interview of shortlisted candidates	Minimum qualification PhD in Physics / Mathematics / Computer Science / any branch of Engineering or Sciences with at least one year of post-doctoral experience.		http:// tinyurl.com/ 5yu4z4pn	26.1.2024	Date of online interview : 5.2.2024
8	Modelling of soft materials	<i>Research</i> <i>Associate</i>	01	Shortlisting of candidates followed by interview	Minimum qualifications: The candidate should have a PhD degree OR submitted his/her doctoral thesis in Physics, and at least 2 publications in indexed international journals. Desirable: (Specific requirements for the position) The selected candidate will work with Dr Satyavani Vemparala (and possibly other faculty within Soft Matter group) on a project whose goal is to do the modelling of polymers. The candidate should necessarily have excellent command over statistical mechanics, and molecular dynamics programming. A background in research in biological physics is strongly desirable.	<ul> <li>for 1 – 2 yrs of experience.</li> <li><b>Rs. 85,000/-</b> for 2 or more years of experience</li> </ul>	<u>vani@imsc.res.in</u>	26.1.2024	Date of interview will be announced later.
9	Design and Development of	Project Technical	01	Screening test on required skill sets to shortlist the	<b>Essential Qualification</b> : Masters in Library and	Rs. 53,000/- for those having	talibrary@imsc.re s.in	26.1.2024	Will be informed

Integrated Online Information Resource Management System, Library, Alumni, Annual Report & Publications	Assistant (Library)	candidates and have to face the personnel interview towards the final selection.	Information science ((MLISc / M.Sc Library and Information Science) with first class. Essential Experience: a. Minimum 2 years experience in academic / research libraries in handling all Library functions and services. b. Experience in handling research publications, citation databases and archiving. c. Knowledge of basic computer operations and office applications such as Word, Excel	two or more years of experience	later.
			etc. <b>Desirable</b> : Candidates should have working knowledge in library management software (koha/Libsys etc), Institutional repository software (DSpace/Eprints etc) in Linux environment and excellent technical & communication skills.		
			Deliverables: The incumbent will involve in Library and Information activities which include various library operations such as acquisition of content (both print and Digital), Classification, Cataloguing & Organization of Information Resources, Library Records Management,		

					Document Delivery Services, Digital Information Services, Research Support Services, Processing of research publications, RFID, Web based Information Services, Scanning and Organising Archival Materials such as Photographs, thesis, reports etc, using state of the art technologies and systems.				
10	Design and Development of Integrated Online Information	Project Technical Assistant (Computer)	01	Screening test on required skill set to shortlist the candidates followed by a personal interview.	Essential Qualification : Bachelors Degree in Science / Computer Applications	Rs. 26,500/-	<u>https://</u> <u>www.imsc.res.in/</u> <u>ta_systems</u>	26.1.2024	Date of interview will be intimated
	Resource Management System, Library, Alumni, Annual Report & Publications				OR Bachelors Degree in Engineering (Computer Science / ECE/ EEE/ M.Sc / M.Tech (computer science) / Computer Applications / Engineering (Computer Science / ECE / EEE/ IT) from a reputed and recognised College with minimum of 60% marks in aggregate of all years / semesters.	Rs. 46,500/- for candidates without any experience Rs. 53,000/- for candidates with two or more years of experience			later
					The position is expected to work on the IMSc Annual Report, IMSc Alumni and Library Management Systems which involves: a) Developing a new annual report system based on Linux, MySql/MariaDB, Python				

					and LaTeX b) Developing a new system with interface to capture alumni data such as profile with publications and employment history etc c)Assisting in design, development of new features in the library management and archives systems.				
					Proficiency in developing software in linux/unix OS using MySQL, PHP, Python <b>Desirable :</b> a) Completed I.T. courses covering HTML/PHP, Python, MySQL, LaTeX.				
					b) Experience in similar academic & research organisation				
11	Compilation, curation and exploration of the Phytochemicals space of Indian medicinal plants	Project Assistant	02	Shortlisting of candidates followed by Online Interview	Essential Qualification: Candidate should have: (1) Masters degree in Life Sciences or Bioinformatics or Computational Biology from a reputed university or institute,	Rs. 46,500/-	phyt1@imsc.res.in	26.1.2024 Shortlisted candidates will be intimated by 30.01.2024	Date of interview will be announced later.
					<ul> <li>(2) Qualified a national level examination CSIR JRF/NET or GATE or have research publications, and</li> <li>(3) Research work relevant to the project. Knowledge of</li> </ul>				

					manual curation of biological datasets, chemical spaces and/or network science is desirable. The selected candidate will work with the project investigator Prof. Areejit Samal.				
12	Compilation, curation and exploration of the Phytochemicals space of Indian medicinal plants	<b>Project</b> Assistant	01	Shortlisting of candidates followed by Online Interview	Essential Qualification: Candidate should have: (1) B.Sc., B.C.A. or B.Tech. degree or higher degree in Computer Science or Allied areas from a reputed university or institute, (2) Previous experience in software and/or web development. Prior experience of working in Linux environment, web development and database management is desirable. The selected candidate will work with the project investigator Prof. Areejit Samal.	Rs. 26,500/-	phyt1@imsc.res.in	26.1.2024 Shortlisted candidates will be intimated by 30.01.2024	Date of interview will be announced later.
13	Computational Biology at IMSc	Project Assistant	01	Shortlisting of candidates followed by Online Interview	Essential Qualification: Candidate should have: (1) Masters degree in Computational Biology or Bioinformatics or Life Sciences from a reputed university or institute, (2) Qualified a national level examination CSIR JRF/NET or GATE or have research	Rs. 46500/-	tox1@imsc.res.in	26.1.2024 Shortlisted candidates will be intimated by 30.01.2024	Date of interview will be announced later.

	publications, and (3) Research work relevant to the project. Knowledge of either network science, data science, chemical spaces, or manual curation of biological datasets is desirable. The selected candidate will work with the project investigator Prof. Areejit Samal.		
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**<u>B</u>** AGE LIMIT : The Candidates should be less than 40 years of age as on the last date of receipt of applications.

### <u>C] GENERAL INFORMATION :</u>

Interested candidates are requested to send a brief e-mail by attaching therewith their latest resume to <u>unique e-mail id</u> as mentioned at <u>Col (8)</u> against the Project positions in the above table on or before 2400 hrs on the date mentioned at Col (9) against the Project position mentioning the position details in the subject of the e-mail as "<u>Application for the Project Position (Name of the Project Position in Capital Letters) of Advt. No.16-R/IMSc/2023 dtd</u> 2.1.2024"

# <u>Note [A]</u> :

- 1. Mails sent after the above time & date will not be considered under any circumstances.
- 2. Indicating subject in the e-mail as explained above under General Information of the Project Position is very important.
- 3. Depending on the number of candidates who respond to this advertisement, the Institute will decide whether to conduct a brief objective type written test of about one and half hours or to go with direct interview.
- 4. Only those candidates who are meeting the minimum educational qualifications & experience mentioned in the advertisement will be eligible to appear for Written test / interview. Hence screened list of candidates will be displayed by us after verifying their candidature on the "**Opportunities page**" of the Institute's website [www.imsc.res.in]. Therefore, short listed candidates whose names are displayed by us on Opportunities page only need to come and appear for Written Test / Interview as per the Project position wise date already fixed by us for Project position in the above Table.
- 5. The candidates who have applied for the Project positions against this advertisement and whose names are shortlisted for written test/ interview and displayed by us on the opportunities page of IMSc website will only be allowed to appear for Written Test / Interview and they should bring one copy of valid proof of ID card with original (like AADHAR/Driving License/ Passport / VoterID).
- 6. Except displaying the shortlisted candidates on our website, no separate call letter / confirmation requesting the candidates to attend for Written Test (or) Interview will be sent by this Institute to those candidates who have submitted their applications in response to this advertisement.
- 7. The candidates who have applied for the Project positions against this advertisement and whose names are displayed in the screened list should bring

one copy of e-mail sent by them with photo pasted on it with clear header showing time and date of e-mail & Resume already sent by them at the time of reporting for Written Test / Interview. The candidates without e-mail or carrying the copies of e-mails without header or copy of e-mail sent after the last time and date (as indicated under column (9)) will not be allowed to appear for Written Test or Interview under any circumstances.

#### **IMPORTANT:**

- 1. The candidates submitting e-mails for the above positions are requested to note the day and date of interview shown at column (10) of the above table and visit the IMSc web-site periodically for any updates.
- 2. The candidates should on their own attend interview on the date mentioned, where necessary.
- 3. All those candidates who have been short listed for the Project positions are requested to report sharp at the designated time on the dates of written test / interview as indicated against each Project positions at column (10) at IMSc and sign the attendance statement without fail. The candidates also should bring along with them all original certificates and one set of copies of all certificates as to proof of age, educational qualification, and experience etc.
- 4. The list of successful candidates of the written test wherever conducted will be displayed on the notice board on the same day for which venue location will be announced at the time of written test. Only those candidates who clear the written test are required to appear for Interview, time for which will be announced at the written test venue. Wherever only interview is prescribed the candidates will be intimated about the mode of interview.
- 5. Hard copies of applications / resume received by hand / post / courier will not be considered under any circumstances.
- 6. E-mail received by us without attaching resume will not be considered under any circumstances.

#### **General Conditions:**

- 1. The prescribed qualifications are minimum and mere possession of the same does not entitle the candidate to be considered for the advertised position. The decision of the Director of this Institute in all matters will be final and no enquiry or correspondence will be entertained in this matter.
- 2. Only outstation candidates belonging to SC / ST appearing for the written test and selected for interview only will be reimbursed to and fro second class railway fare/ bus fare or actual fare incurred which ever is less by the shortest route from the station of residence / work place to Chennai & back on production of original tickets.
- 3. Please visit <u>"Opportunities Page</u>" of our website <u>www.imsc.res.in</u> for full details of advertisement, screened list of candidates and visit "Getting here" page to know location information of our Institute.

SI. No	Name of the traineeship	Educational and other Qualifications	No. of positio ns	Age limit	Selection procedure	Who should appear for written test, on which date & at which venue	Stipend during the Training period	Training areas after selection	Unique email ID
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
1.	Trainee	Essential : - Any bachelor degree with First Class & with good English knowledge. - Should have passed out during 2022 & 2023 only. - The candidate should possess good working knowledge in MS- Office tools & email operations & Accounting procedure.	04	Minimum 18 years and maximum 25 years as on last date of receipt of application	The Selection will be made on merit basis through a written test, typing test on Computer followed by interview, all of which will be conducted on the same day. Only those candidates who qualify in written test and typing test (held in the forenoon) will be called for interview (proposed for Afternoon) on the same day.	whose names are shortlisted & displayed by us on IMSc website under Opportunities page > Other Positions are to appear for written test, the date of which will also be announced along with the above list.	per month (Consoli-	To provide the basic input of confidence in the minds of fresh qualified youth and tune him/her to the practicalities of the Office clerical working environment (purely clerical nature of training). To undergo clerical training in various wings of IMSc office and other clerical assistance to IMSc Office staff on five day week basis.	
2		Essential : MLISc Degree with first class and with good English knowledge. - Should have passed out during 2022 & 2023 only. Desirable : - Preference will be given to those candidates who have pursued the degree as	01	years as on last date of receipt of	The Selection will be made on merit basis through a written test. Only those candidates who qualify in written test will be called for interview (proposed for Afternoon).	whose names are shortlisted & displayed by us on IMSc website under Opportunities page >	per month (Consoli-	To undergo training in Library including <b>RFID enabled library</b> <b>automation, technical</b> <b>processing,</b> arranging of books in the book racks, photocopying, binding, file management and other assistance to Library staff on six day week basis.	librarytrainee@imsc.res.in

# TABLE -II - Administrative Trainees & Library Trainees:

regular academic				
course.				

The period of training will be purely for ONE YEAR from the date of admission with no guarantee of regular employment (or) absorption (or) continuation (or) confirmation under any circumstances.

#### **Note [B] : Selection procedure :**

Call letters through email will be sent to the candidates who are shortlisted for written test, typing test. The names of the shortlisted candidates will also be displayed on opportunities page of our website <u>www.imsc.res.in</u> under Opportunities page > Other positions along with actual date of written test & typing test which will be followed by interview for those who successfully get qualified in written test & typing test.

Candidates meeting the above criteria are requested to send a brief e-mail by attaching therewith their latest resume to unique e-mail id as mentioned at Col. (10) against the trainee position in the above table **on or before 2400 hrs on 26.1.2024** along with scanned copies of relevant certificates for proof of date of birth, educational & computer qualifications, experience, if any, etc, mentioning the trainee position in the subject of the e-mail as <u>"Application for</u> <u>Administrative Trainee" of Advt No.16-R/IMSc/2023</u> Dtd <u>2.1.2024</u>"

#### **General Conditions :**

- > Mails sent after the above time & date will not be considered under any circumstances.
- > Indicating subject in the e-mail as explained above under General Information of the Trainee position is very important.
- The candidates submitting emails for the above positions are requested to note the date mentioned in Col. (7) above and visit the IMSc website periodically for any updates.
- > Emails received by us without attaching resume will not be considered under any circumstances.
- > Hard copies of applications / resume received by hand / post / courier will not be considered under any circumstances.
- The prescribed qualifications are minimum and mere possession of the same does not entitle the candidate to be considered for the advertised traineeship for shortlisting. The decision of the Director of this Institute in all matters will be final and no enquiry or correspondence will be entertained in this matter.
- Admission against this advertisement selection process will be purely as per terms and conditions mentioned therein and will terminate automatically without any notice or compensation on termination.
- The admitted candidate shall have no claim of appointment / absorption in IMSc, Chennai. No accommodation will be provided to the Selected Admn trainees / Library trainees during their association with IMSc.
- Only outstation candidates belonging to SC/ ST appearing for the written test and selected for interview only will be reimbursed to and fro second class railway fare / bus fare or actual fare incurred which ever is less by the shortest route from the station of residence / work place to Chennai & back on production of original tickets.

- > Selected candidates will have to join for training immediately on receipt of offer of admission.
- > No interim enquiries / correspondence / communications of any sort will be entertained on the matter.
- Canvassing in any form and / or bringing any influence, political or otherwise will be treated as a disqualification for the traineeship applied for.
- Please visit "Other positions" under "Opportunities Page" of our website <u>www.imsc.res.in</u> for full details of advertisement, shortlisted list of candidates to be displayed along with time and date of written test for each traineeship and visit "Getting here" page to know location information of our Institute.

Sd/-REGISTRAR