गणितीय विज्ञान संस्थान

THE INSTITUTE OF MATHEMATICAL SCIENCES

(An Autonomous Institution, under Dept. of Atomic Energy, Govt. of India)

4th Cross Road, CIT Campus, Taramani, Chennai 600 113.

TECHNOLOGIES FOR
NEW INDIA@75
आज़ादी का अमृत महोत्सव

विज्ञापन संख्या / **Advt No. 07-R/IMSc/2022**   **Dated : 21.9.2022**

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.

Applications are invited for filling up the following Project positions under the new Scientific / Academic Apex Projects of the Institute on consolidated salary from the eligible candidates who fulfill requisite qualifications/ specifications mentioned therein. The positions indicated under the projects concerned, are proposed to be filled purely on contract basis only initially for a period of one year from the date of appointment but extendable subject to performance & subject to approval of the competent authority up to 2 years & not beyond and there is no scope of continuation / regularization / absorption under any circumstances.

A] PROJECT POSITIONS:

Sl No	Title of the Apex Project &Sub Project	Name of the Project Positions	Number of positions	Selection Method	Minimum Educational Qualifications & Experience	Consolidated Salary (all inclusive &no other allowances are allowed) p.m	Unique email id to which soft copy of the application to be sent for each position separately (Only through email &no hard copies of applications are considered)	Last date for submission of applications for each position through email to unique email id shown under col. (8)	Date of written test / interview
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ADVANCED RESEARCH AND EDUCATION IN MATHEMATICAL SCIENCES AT IMSc									
1	Computational Biology at IMSc	*Project Assistant*	01	Interview (online)	B.E./B.Tech./M.Sc from a reputed institution with a good background in physical / mathematical / biological sciences or engineering. Experience in using analytical methods and/or computational techniques for solving scientific problems.	Rs. 39,000/- Rs 44,000/- for candidates with 2 or more years of research experience	*Online via Google form:* https://shorturl.at/KLOY0	30.09.2022 **Shortlisted candidates will be displayed on IMSc web-site on 03.10.2022**	10.10.2022
		Project Assistant	02	Shortlisting followed by Online Interview	**Minimum Qualifications:** (1) M. Sc. / M.Tech / B.Tech in Life Science or Computational Biology or Computer Science or allied disciplines from a	**Rs.39,000/-**	cbas1@imsc.res.in	30.09.2022	18.10.2022

S.No	Centre	Post	No.	Mode of selection	Qualification	Emoluments	Apply to	Last date	Date
					reputed university or institute. ***Desirable*** : Knowledge of network science and machine learning, or metabolic network reconstruction with microbiology and biochemistry expertise is desirable. Prior research experience is highly desirable. Qualification of GATE, NET or similar exam is preferrable.				
					B.Sc. degree in Life Science or Computational Biology or Computer Science or allied disciplines from a reputed university or institute. **Desirable :** Knowledge of network science and machine learning, or metabolic network reconstruction with microbiology and biochemistry expertise is desirable. Prior research experience is highly desirable.	Rs. 26,500/-	*cbas2@imsc.res.in*	30.09.2022	18.10.2022
2	Centre of Excellence in Complex Systems and Data Science	*Research Associate- I*	01	Online interviews for short-listed candidates	**Essential Qualification :** Ph. D. in Physical / Mathematical / Computational Sciences. Candidates having research experience in data science and / or machine learning will be given preference	Rs. 59,500/-	*https://shorturl.at/ gQW19*	30.9.2022	7.10.2022
		Project Assistant	01	Online interviews for short-listed candidates	**Essential Qualification :** B.E./B.Tech./M.Sc from a reputed institution with a good background in physical / mathematical / biological sciences, have some experience in using analytical & computational techniques.	Rs. 39,000/- Rs. 44,000/- for candidates with two or more years of research experience	*https://shorturl.at/ egW34*	30.9.2022	12.10.2022
3	IMSc Centre for Disease Modelling	*Project Assistant*	01	**Written test + interview (offline at IMSc)**	**Minimum qualifications:** MSc/BE/BTech in mathematical / physical/ bioscience/ engineering, at least one published paper in a recognized journal **Essential skills:** Familiarity with biological data, including next generation sequencing data analysis; programming in python and/or R **Desirable skills:** Experience in RNA-seq analysis Overview of project: Analysis of NGS data, evolution of gene regulation	Rs. 39,000/- Rs 44,000/- for candidates with 2 or more years of research experience	***Online via Google form:*** *https://forms.gle/V38 6UbTKozBY3rXG9*	30.09.2022 **Shortlisted candidates will be displayed on IMSc web-site on 03.10.2022**	10.10.2022
4	Centre for Science Communication and Outreach at IMSc	*Project Assistant (House Keeping & Catering)*	01	Written test followed by interview only short listed candidates on the same day. (or) Direct interview in case no. of candidates appeared for written test is five or less.	**Essential Qualifications :** Three year BSc Degree (after HSC) in Hotel & Catering Management from a reputed College/ Institution / University approved by the Government with minimum of 50% marks. **(or)** M.Sc with 50% marks with relevant experience. **Essential Experience :** Minimum of five (5) years of post qualification experience in the field of House Keeping management in reputed Institute / Hotel with familiarity in Computers, Customer care, cleaning of various surfaces with good communication skills.	Rs. 31,000/- for those with five or more years of experience for B.Sc Rs. 39,000/- for those with two or more years of experience for M.Sc	pahkone@imsc.res.in	5.10.2022	**Will be displayed on opportunities page of our website www.imsc.res.in along with list of candidates shortlisted who are meeting advertisement conditions for written test / interview later.** **The shortlisted candidates will be informed by email**

						Desirable skills & Responsibilities : Upkeep of buildings of the Institute, wash rooms, common places, High standards of customer care and performance, Maintaining the Registers, supervising duties of House Keeping cleaners, allotment of office rooms, Guest house rooms & hostel rooms, etc.				

ADVANCED RESEARCH AND EDUCATION IN MATHEMATICAL SCIENCES AT IMSc - II

5	Geometric Methods for Deep Learning and Topological Characterization of Complex networks	*Project Assistant (House Keeping & Catering)*	*01*	Written test followed by interview only short listed candidates on the same day. (or) Direct interview in case no. of candidates appeared for written test is five or less.	**Essential Qualifications :** Three year BSc Degree (after HSC) in Hotel & Catering Management from a reputed College/ Institution / University approved by the Government with minimum of 50% marks. **(or)** M.Sc with 50% marks with relevant experience. **Essential Experience :** Minimum of five (5) years of post qualification experience in the field of House Keeping management in reputed Institute / Hotel with familiarity in Computers, Customer care, cleaning of various surfaces with good communication skills. **Desirable skills & Responsibilities :** Upkeep of buildings of the Institute, wash rooms, common places, High standards of customer care and performance, Maintaining the Registers, supervising duties of House Keeping cleaners, allotment of office rooms, Guest house rooms & hostel rooms, etc.	Rs. 31,000/- for those with five or more years of experience for B.Sc Rs. 39,000/- for those with two or more years of experience for M.Sc	pahktwo@imsc.res.in	5.10.2022	**Will be displayed on opportunities page of our website www.imsc.res.in along with list of candidates shortlisted who are meeting advertisement conditions for written test / interview later.** **The shortlisted candidates will be informed by email**
6	Physics of debris covered Glaciers	*Research Associate*	01	Shortlisting of candidates followed by interview	**Minimum qualifications:** PhD degree or must have submitted his/her doctoral thesis in an Engineering subject or Physics, and should have at least 3 publications in indexed international journals. **Desirable :** The selected candidate will work on a project whose goal is to do modelling and experiments of ice rheology. The candidate should necessarily have excellent command over continuum mechanics, C programming and MATLAB. Background of research in composite materials is strongly desirable.	Rs. 59,500/- for Ph.d Degree Rs. 44,000/- for those who have submitted / defended their thesis.	rrajesh@imsc.res.in	28.9.2022	**The shortlisted candidates will be informed by email**
7	Management of IMSc IT Infrastructure Computing Media, Web	*Technical Assistant (HPC)*	*01*	*Practical test followed by interview for the shortlisted candidates*	**Essential Qualification :** Candidates should have completed any of the Master Degree in Science **[OR]** Bachelor Degree in Engineering (preferably Computer Science, ECE, EEE, IT) from a reputed College / Institution **AND** with the specified experience of minimum 4 years as described for the position. **Specific experiences :**	Rs. 44,000/-	*https://www.imsc.res. in/apply_tahpc*	5.10.2022	**The shortlisted candidates will be announced in one week after the deadline**

<table>
<tr><td colspan="5"></td><td>

Linux NW Server related:
Shell Scripting under LINUX O/S; Segmenting of IPv4 networks;
Configuring & maintaining NIS/LDAP, DNS, DHCP, IPTABLES, SMTP, etc.,
Generating email alerts from Server/Cluster H/Ws, Environments;
Trouble shooting of server/cluster H/Ws, O/Ss, & S/Ws problems and fixing of the same;
Interfacing of high speed networks using Ethernet, IB, Omnipath, etc., and Bonding/Cascading of interfaces Installation & Maintenance of HA servers, Virtual servers, Etc.;

Cluster related:
Cluster Topology, Installation, Configuration (Linux, Warwulf/ Rocks/xCat, Puppet, Slurm/PBSPro) and Updates, Performance tune of Clusters;

Cluster Job - Management, Monitor, Schedule
Cluster application monitoring / packaging / version controls; running benchmarks; virtualisation of servers (LXC, KVM, DOCKER);

Day-to-day monitoring of data-center UPS, AC, various Sensors, BMS, etc.

Desirable Experiences :
Completed I.T. courses [OR] Certifications covering Linux/ Unix O/S/APACHE/PHP/PyThon/HPC/etc.,
Experience in programming using C, MySQL, Perl, PHP, Python, Shell Scripting under LINUX O/S.
Work exposure in ERP / Open ERP and having background of accounting are added advantage.
Candidates possess work experience in maintaining LINUX / UNIX systems in the LAN environment are preferred.
Attended workshops on HPC.
Cluster design, install, administration and maintenance.
Parallel shell scripts, IP v4 sub-netting, booting/halting of multi-nodes, IPMI/KVM console operations; Exposure in Computational Sciences, MPI/GPU programming etc. Cluster Storage – I/O nodes with Parallel/Lustre File System, MDS, MDT etc., Disk array/ Enclosures, Configured with Fat-Tree & multi-path topology, Multi-volume configuration, Volumes mounted on Compute/Master cluster nodes; Monitoring the cluster usage per user, report generation, etc.,
Completed IT Projects including design / implementation.
Exposure of handling IT projects in the LINUX environments is added advantage.

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<tr><td></td><td></td><td>*Technical Assistant (Media)*</td><td>*01*</td><td>Written test followed by interview.</td><td>

Essential Qualification:
Completed 4 year regular Bachelor Degree of Visual Arts/ Equivalent other Bachelor Degree / Bachelor Degree with Engineering from a reputed College/Institution with specified experience of minimum 2 years as required for the position
(OR)

</td><td>Rs. 39,000/-</td><td>https:// www.imsc.res.in/ apply_tamedia</td><td>5.10.2022</td><td>The shortlisted candidates will be announced in one week after the deadline</td></tr>
</table>

					Completed 3 year regular any Bachelor Degree from a reputed College/ Institution with specified experience of minimum 4 years as required for the position.				
					(OR)				

Content of the top cell (item 7 continued):

Completed 3 year regular any Bachelor Degree from a reputed College/ Institution with specified experience of minimum 4 years as required for the position.
(OR)
Completed 3/4 year regular Diploma in Film & Television editing(other equivalent diploma) from a reputed College / Institution and with specified experience of minimum 4 years as required for the position.

Proficiency :
-- Handling professional video cameras, mixers, AV equipments. Experience with filming and editing video content (Online / Recorded).

-- Must have proficient editing skills in online and off-line video/multi-media productions.

-- Must have non-linear hands-on editing experience using various video editing software Final Cut Pro, Avid.

-- Highly organized, excellent data management and entry skills

-- Completed short films of interest

Desirable :
-- Candidates for this position need at least 2 year digital editing experience and must be proficient in Adobe Photoshop, Apple Final Cut Pro & Avid or equivalent.

-- Interest in outreach activity of physical sciences; Graphic design skills; Experience in web scripting in PHP; Hands on experience in on-line course management software like moodle;
-- Handling on-line video-conferencing/skype/ hangout etc.;
Should be comfortable with the OpenSource S/W environments

| 8 | Renovation of New Guest House Building | Technical Assistant (Electrical) | 01 | Written test followed by interview only short listed candidates on the same day. (or) Direct interview in case no. of candidates appeared for written test is five or less. | **ESSENTIAL :** Completed regular 3 years Diploma in Electrical / Electrical & Electronics Engineering with minimum of 55 % marks from a reputed College / Institution approved by AICTE New Delhi with specified experience of minimum 8 years as required for the position. **AND** Candidates should have valid Electrical supervisor competency certificate [C-License] issued by CEIG, Govt of Tamilnadu. **DESIRABLE** Must be proficient in handling Electrical, Electronics and Airconditioning maintenance works, operation and day to day maintenance of 11KV/433Volt Electrical substations, more than 1.25 MVA transformers, 500 KVA DG sets, Automatic power factor panels, 450 KVA UPS & network systems controlled by STS switches, centralized air conditioning Chilling plants, AHU | Rs. 39,000/- | taelecsep22@imsc.res.in | 5.10.2022 | **Will be displayed on opportunities page of our website www.imsc.res.in along with list of candidates shortlisted who are meeting advertisement conditions for written test / interview later.** **The shortlisted candidates will be informed by email** |

				units, Fire& Security system of smoke detectors and panels including FM 200 automatic fire suppression system, monitoring and handling of various AMC and Computer skills like AUTOCAD, MS OFFICE etc..				-

B] AGE LIMIT : **The Candidates should be less than 40 years of age as on the last date of receipt of applications.**

C] GENERAL INFORMATION :

Interested candidates are requested to send a brief e-mail by attaching therewith their latest resume to **unique e-mail id/fill in the google form** as mentioned at **Col (8)** against each Project position in the above table **on or before 2400 hrs on the date mentioned at Col (9)** against each project position mentioning the position details in the **subject** of the e-mail as **"Application for the Project Position at Sl.No. (   )   (Name of the Project Position in Capital Letters) of Advt No. 07-R/IMSc/2022 dtd 21.9.2022"**

Note :
1. Mails sent / web form submitted 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] immediately after the last date but within two working days. 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 as shown at Column (10) against each 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.

MPORTANT:
1. The candidates submitting e-mails / web forms for the above positions are requested to note the day and date of written test followed by 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 the written test 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 form the station of residence/ work place to Chennai & back on production of tickets.

3. Please visit "Opportunities Page" of our website www.imsc.res.in for full details of advertisement, screened list of candidates and visit "Getting here" page to know location information of our Institute.

Vinayalatha. S

REGISTRAR 21.9.2022