



**CSIR-Central Scientific Instruments Organisation (CSIR-CSIO)**  
**Council of Scientific and Industrial Research (CSIR)**  
 Sector 30-C, Chandigarh 160 030  
<http://www.csio.res.in>

**Advertisement No. 02/2018**  
**[Requirement of Project Staff (in R&D Projects)]**

Candidates who fulfill the under-mentioned criteria of age, educational qualifications, and experience etc. may step in for **WALK-IN-INTERVIEW at 8:45 a.m. at Auditorium, CSIR-CSIO, Sector-30 C, Chandigarh** on the dates mentioned below along with application form downloadable from our website together with testimonials of all the qualifications (original & attested copies of certificates including SC/ST/OBC/PH). Engagement will be purely on contract/temporary basis co-terminus with the completion of the project. The details of the present available positions are as follows:-

Sr. No.	Name of the Scheme/Project	Positions/ Stipend	No. of Positions	Tenure/ Project Duration	Essential Qualification	Date of walk-in interview
1.	GAP Project "Smartphone imaging aided point-of-care dipstick platform for heavy metals sensing in water"	JRF (in contract R&D Project)  (Rs. 25,000/- + 20% HRA pm for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs. 28,000/- + 20% HRA pm for 3 <sup>rd</sup> year)	01	Initially for a period of one year from the date of joining, extendable upto maximum three years depending on the performance of the candidate	<b>Essential Qualification:</b> B.E./ B.Tech./ B.Sc. in Electronics & Communication/ Computer Science or equivalent <sup>5</sup> with NET qualification  <b>OR</b> M.E./ M.Tech./ M.Sc. in Nanoscience and Nanotechnology/ Material Science or equivalent <sup>5</sup> ( <b>with NET qualification for M.Sc.</b> )  <b>Desirable:</b> Candidates with knowledge of electrochemical/optical sensors and with experience in chemosensors and imaging will be preferred.	<b>24.04.2018 (Tuesday)</b>
2.	GAP Project "Development of Non-Destructive Testing (NDT) Schlieren methodology for quantification of crazing in transparent samples"	PA Level-II  (Rs. 25,000/- + 20% HRA pm)	01	Initially for a period of six months from the date of joining, extendable upto maximum one year depending on the availability of funds	<b>Essential Qualification:</b> M.Sc. in Physics/ Applied Physics/ Photonics/ Optoelectronics or equivalent <sup>5</sup> with minimum 55% marks  <b>OR</b> B.E./B.Tech. in Engineering Physics/Photonics/Optoelectronics or equivalent <sup>5</sup> with minimum 55% marks	<b>24.04.2018 (Tuesday)</b>
3.	GAP Project "Development of Novel Fluorescent Platforms for the Detection of Heavy Metals in Water"	JRF (in contract R&D Project)  (Rs. 25,000/- + 20% HRA pm for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs. 28,000/- + 20% HRA pm for 3 <sup>rd</sup> year)	01	Upto 5 <sup>th</sup> February, 2021	<b>Essential Qualification:</b> M.Sc. in Biochemistry/Chemistry or equivalent <sup>5</sup> with NET qualification  <b>OR</b> M.E./M.Tech. in Nanotechnology/Biotechnology or equivalent <sup>5</sup>	<b>24.04.2018 (Tuesday)</b>
4.	GAP Project "Design Innovation Centre"	PA Level-II  (Rs. 25,000/- + 20% HRA pm)	01	Upto 31 <sup>st</sup> March, 2020	<b>Essential Qualification:</b> B.E./B.Tech. in Mechanical/ Production Engineering or equivalent <sup>5</sup> with minimum 55% marks	<b>23.04.2018 (Monday)</b>

5.	GAP Project	"Design and Development of Detection and Extinguishing Systems for Forest Fire using Sensor Networks, Aerial and ground Robots"	JRF (in contract R&D Project)  (Rs. 25,000/- + 30% HRA pm)  <b>(This position is for CSIR-CSIO, Delhi Centre)</b>	02	Initially upto January, 2020, extendable for six more months depending on the performance of the candidates/availability of funds	<p><b>Essential Qualification:</b> <b>For JRF (01 position):</b> M.E./M.Tech. in Instrumentation/ Electronics &amp; Communication Engineering or equivalent<sup>5</sup></p> <p><b>OR</b></p> <p>B.E./B.Tech. in Instrumentation/ Electronics &amp; Communication Engineering or equivalent<sup>5</sup> with GATE/NET qualification</p> <p><b>Desirable:</b></p> <ol style="list-style-type: none"> <li>1) Experience in programming and handling wireless sensor networks.</li> <li>2) Knowledge of microcontrollers and simulation software like MATLAB (programming/Simulink), LabVIEW.</li> </ol> <p><b>For JRF (01 position):</b> M.E./M.Tech. in Electrical/ Electrical &amp; Electronics Engineering or equivalent<sup>5</sup> with specialization in Control Systems</p> <p><b>OR</b></p> <p>B.E./B.Tech. in Electrical/ Electrical &amp; Electronics/ Instrumentation &amp; Control Engineering or equivalent<sup>5</sup> with GATE/NET qualification</p> <p><b>Desirable:</b></p> <ol style="list-style-type: none"> <li>1) Experience in the design and control of mobile robots/mechatronic systems.</li> <li>2) Knowledge of microcontrollers and simulation software like MATLAB (programming/Simulink).</li> </ol>	23.04.2018 (Monday)
6.	GAP Project	"Engineering a magnetically stimulated implantable hydrogel patch for localized tumor therapy"	PA Level-II  (Rs. 25,000/- pm + HRA as per rules)	01	Initially upto 31 <sup>st</sup> August, 2018, extendable for two more years depending on the performance of the candidates	<p><b>Essential Qualification:</b> B.E./ B.Tech. in Material Science/ Nanoscience/Nanotechnology/ Nano-biotechnology/ Biotechnology or equivalent<sup>5</sup> with minimum 55% marks</p>	24.04.2018 (Tuesday)
7.	GAP Project	"LED based Drogue light for LCA AF Mk-1"	PA Level-III  (Rs. 28,000/- pm + HRA as per rules)	03  (Area: Mechanical / Optics)	For a period of 18 months	<p><b>Essential Qualification:</b> <b>a)For PA Level-III (Mechanical):</b> M.E./M.Tech. in Mechanical Engineering or equivalent<sup>5</sup> with minimum 55% marks</p> <p><b>OR</b></p> <p>B.E./B.Tech. in Mechanical Engineering or equivalent<sup>5</sup> with minimum 55% marks plus two years experience in relevant field after acquiring essential educational qualification</p> <p><b>Desirable:</b> Experience in the field of design and fabrication</p>	23.04.2018 (Monday)

						of mechanical/avionics systems/sub-systems with CAD/CAE software  <b>b) For PA Level-III (Optics):</b> M.E./M.Tech. in Optics/Optical Instrumentation or equivalent <sup>5</sup> with minimum 55% marks <b>OR</b> M.Sc./B.E./B.Tech. in Optics/Optical Instrumentation or equivalent <sup>5</sup> with minimum 55% marks plus two years experience in relevant field after acquiring essential educational qualification  <b>Desirable:</b> Experience in the field of design of optical components and optical design softwares	<b>24.04.2018 (Tuesday)</b>
8.	GAP Project (A.V.)	“Handheld FRET-APTACHIP : Monitoring of Pinnatoxins in food”  (A.V.)	JRF (in contract R&D Project)  (Rs. 25,000/- + 20% HRA pm for 1 <sup>st</sup> & 2 <sup>nd</sup> year and Rs. 28,000/- + 20% HRA pm for 3 <sup>rd</sup> year)  (A.V.)	01  (A.V.)	Upto 28 <sup>th</sup> December, 2020  (A.V.)	<b>Essential Qualification:</b> M.Sc. in Chemistry/ Biochemistry/ Biotechnology/ Microbiology/ Food Biotechnology/ Industrial Microbiology with NET qualification <b>OR</b> B.E./B.Tech. in Chemical Engineering/ Biotechnology/ Biochemistry/ Food Biotechnology or equivalent <sup>5</sup> with GATE/NET qualification <b>OR</b> M.E./M.Tech. in Nanotechnology/ Biotechnology/ Biochemistry/ Nano-biotechnology/ Food Biotechnology/ Industrial Microbiology or equivalent <sup>5</sup>	<b>24.04.2018 (Tuesday)</b>
9.	GAP Project	“Development of algorithm for river water quality index monitoring using fuzzified support vector machine technique”	RA-I  (Rs. 36,000/- + 20% HRA pm)	01	Upto 2 <sup>nd</sup> January, 2020	<b>Essential Qualification:</b> M.E./M.Tech. in Computer Science/ Electronics/ Remote Sensing/ Environmental Science or equivalent <sup>5</sup> with minimum 55% marks plus two years experience in relevant field after acquiring essential educational qualification  <b>Desirable:</b> 1) Experience in developing codes in high level languages such as Python, VC++, etc. 2) Exposure in working on Matlab, R, R-PI, Arduino, etc. 3) Hands-on image processing tools and softwares such as ENVI, geostatics and tools such as Geographical Information System (GIS), etc. 4) Knowledge of soft computing techniques, machine learning and artificial intelligence tools and optimisation techniques such as Genetic Algorithm (GA), particle swam optimisation (PSW), etc. 5) Experience in hyperspectral imaging data handling and remote sensing software tools.	<b>23.04.2018 (Monday)</b>

10.	GAP Project	"Graphene Based Electrochemical Detection of Breast Cancer Biomarkers"	SRF (in contract R&D Project) (Rs. 28,000/- pm consolidated)	01	Initially upto 31 <sup>st</sup> August, 2018, extendable for six more months	Essential Qualification: M.Sc. in Nanoscience and Nanotechnology/ Nanobiotechnology or equivalent <sup>5</sup> with NET qualification and 2 years of research experience in relevant field after acquiring essential educational qualification  Desirable: Research experience in graphene based nanoelectronics for device fabrication.	24.04.2018 (Tuesday)
11.	CSIR Project	"Nano-Biosensors and Microfluidics for Healthcare"	a) JRF (in contract R&D Project) (Rs. 25,000/- + HRA as per rules)  b) SRF (in contract R&D Project) (Rs. 28,000/- + HRA as per rules)	01 JRF & 01 SRF	Upto 31 <sup>st</sup> March, 2020	Essential Qualification: a) For JRF: BS-4 years program/ B.E./ B.Tech./ Integrated BS-MS/ M.Sc. or equivalent <sup>5</sup> degree/ B.Sc.(Hons) or equivalent <sup>5</sup> degree in Chemistry/ Biochemistry/ Biotechnology/ Pharmacy/ Microbiology/ Life-Science/ Food Biotechnology/ Industrial Microbiology/ Chemical Engg./ Nanotechnology/ Nano-Biotechnology with minimum 55% marks for General & OBC (50% for SC/ST candidates, Physically and Visually handicapped candidates) with NET qualification  b) For SRF: M.E./ M.Tech. in Instrumentation/ Electronics or equivalent <sup>5</sup> with minimum 60% marks  OR B.E./ B.Tech. in Electrical/ Electronics or equivalent <sup>5</sup> with minimum 60% marks and two years research experience  OR M.Sc./ B.E./ B.Tech. in Physics/ Electronics or equivalent <sup>5</sup> with minimum 55% marks and one publication in SCI Journal and should have completed at least two years of post M.Sc./ B.E./ B.Tech. research experience  Desirable (for SRF): Candidates with prior research experience will be preferred.	24.04.2018 (Tuesday)  23.04.2018 (Monday)
Total vacancies			--	15	--	--	

**Abbreviations used: A.V. - Anticipated Vacancies**

**Other Benefits:** Accommodation (subject to availability), food facility and other amenities in campus.

**Please note:**

- The candidates who have already served CSIR-CSIO or any other lab / institute of CSIR as any Project Assistant / Project Fellow / JRF (in contract R&D projects) / SRF (in contract R&D projects) / Research Associate etc. for a total period of 5 years or more are not eligible for these engagements. The candidates who have served for a period less than 5 years will have tenure upto remaining period till completion of five years.
- The upper age limit for Project Assistant Level-II (PA Level-II) (**at Sr. No. 2 & 4**) is 30 years, for Project Assistant Level-II (PA Level-II) (**at Sr. No. 6**) is 28 years, for Junior Research Fellow (JRF) (**at Sr. Nos. 1, 3, 5, 8 & 11**) is 28 years, for Project Assistant Level-III (PA Level-III) (**at Sr. No. 7**) is 35 years, for Research Associate-I (RA-I) (**at Sr. No. 9**) is 35 years and for Senior Research Fellow (SRF) (**at Sr. No. 10 & 11**) is 32 years.
- Relaxation in age limit for the candidates belonging to SC / ST / OBC / PH and Women shall be 5 years for the positions of Project Assistant Level-III (PA Level-III) (**at Sr. No. 7**), Junior Research Fellow (JRF) (**at Sr. No. 11**), Senior Research Fellow (SRF) (**at Sr. No. 11**) and Research Associate-I (RA-I) (**at Sr. No. 9**).

4. For the positions of Project Assistant Level-II (PA level-II) (**at Sr. Nos. 2, 4 & 6**), JRF (in contract R&D project) (**at Sr. Nos. 1, 3, 5 & 8**) and Senior Research Fellow (SRF) (**at Sr. No. 10**), relaxation of age for SC/ST - 5 years, OBC - 3 years, PH (SC/ST) – 10+5, PH (UR) - 10 years and Widows, Divorced women and women Judicially separated from their husband and who are not re-married and falls under the category of UR upto 35 years, OBC upto 38 years and SC/ST upto 40 years will be applicable as per GOI/CSIR instructions.
5. In case a large number of candidates turn up for Walk-in-interview, Selection/Screening Committee will have discretion to shortlist the candidates for interview based on written exam or percentage of marks. In respect of equivalence clause in Essential Qualifications, if a candidate is claiming a particular qualification as equivalent qualification for recruitment as per the requirement of advertisement, then the candidate is required to produce order/letter in this regard, indicating the Authority (with number and date) under which it has been so treated otherwise the Application is liable to be rejected.
6. **Medical Facilities** for self will be provided through CSIR-CSIO Dispensary only to the extent available as per rules. This will be limited to self only and not for family members/dependents.
7. **Reservation:** As regards reservation, if all things are equal, SC/ST/OBC/PH candidates may be given preference over General candidates so as to ensure their representation.
8. List of selected and panel of candidates will be displayed on website.
9. The selected candidates are expected to join within fifteen days from the date of receiving of offer of appointment, after completion of pre-appointment formalities like medical examination and character verification etc.
10. The selected candidates will have to deposit an amount equivalent to Fifteen Day's stipend as a Security Deposit (Refundable) with CSIR-CSIO, at the time of joining.
11. CSIR-CSIO reserve the right to cancel or withdraw the award in case of any discrepancy found, in the candidature of any selected candidate at any stage.
12. CSIR-CSIO reserves the right not to fill up a particular position, if it so desires. The number of vacancies indicated above may vary at the time of actual selection.
13. The waitlisted panel will be valid for one year and will be operated within stipulated period as and when required.
14. No TA/DA will be paid to the candidates for attending the interview.
15. The above positions of PA/JRF/RA/SRF (in contract R&D project) in CSIR-CSIO are contractual engagement co-terminus with the projects.
16. Other terms & conditions will be governed as per guidelines issued by the funding agency/CSIR Hqrs. for the engagement of above Project Staff as amended from time to time.

**Controller of Administration**