

# COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH Anusandhan Bhawan, 2 Rafi Marg, New Delhi-110 001

# Opportunity to Lead CSIR's State-of-the-art National Laboratories/Institutes

Established in 1942, the Council of Scientific and Industrial Research (CSIR) is an autonomous Society whose President is the Prime Minister of India. CSIR today is amongst the foremost and largest publicly funded scientific and industrial research organizations in the world. It delivers cutting edge science on one hand and state-of-the-art technology on the other. CSIR has a dynamic network of 37 state-of-the-art national Laboratories/ Institutes, 6 Units, 3 Innovation Complexes and 38 Centres. CSIR has put in place CSIR@80: Vision & Strategy 2022 - New CSIR for New India. CSIR's Vision is to: "Pursue science which strives for global impact, technology that enables innovation-driven industry and nurture trans-disciplinary leadership thereby catalysing inclusive economic development for the people of India".

CSIR has played over the years, a pivotal role for advancement of science and technology covering diverse domains. It has spawned many organizations, many disciplines and most importantly has served as a nursery and training ground for most of India's distinguished scientists and technologists. CSIR has ushered India into the knowledge economy, creating and nurturing talent in science, innovation and technology. Pioneer of India's intellectual property movement, CSIR is granted 90% of US patents granted to any Indian publicly funded R&D organization. About 12% of CSIR patents are licensed, a number which is much above the global average. CSIR holds about 4500 Indian and Foreign patents. CSIR publishes yearly over 5700 papers in SCI journals & about 500 students get their Ph.D. annually from its institutions. The expertise and experience of CSIR is embodied in its more than 3800 Scientists and 8000 technical support personnel apart from about 8500 JRF/SRF/RA and project staff.

CSIR is looking for outstanding R&D professionals to head its prestigious national Laboratories/ Institutes. They would have opportunity to participate and contribute to achieve the objectives embodied in CSIR's mission, to "build a new CSIR for a new India" and its vision in place. The coveted top management positions of DIRECTOR of CSIR-CEERI, Pilani; CSIR-NEERI, Nagpur; CSIR-CLRI, Chennai; CSIR-NCL, Pune; CSIR-CSMCRI, Bhavnagar; CSIR-NISTADS, New Delhi; CSIR-CRRI, New Delhi; CSIR-CIMFR, Dhanbad; CSIR-CMERI, Durgapur and one position of Scientist 'H' at CSIR-4PI, Bengaluru are available. The details are as shown below:

## **Physical Sciences**

CSIR-Central Electronics Engineering Research Institute (CSIR-CEERI), Pilani is a multidisciplinary Institute carrying out R&D inter-alia in Electronic Systems (agrielectronics, embedded systems, digital systems, power electronics etc.); Specialized Electronic Tubes (gyrotron, klystron, magnetrons, plasma devices, travelling wave tubes etc.); Semiconductors (hybrid microcircuits, IC design, MEMS)

and microsensors, sensors and nanotechnology, photonics and optoelectronics, semiconductor materials and technology) etc.

For more details about the institute, visit <a href="http://www.ceeri.res.in">http://www.ceeri.res.in</a>

CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur has contributed significantly in the domain of environmental science and engineering with the focus on sustainable development. It is known for its pioneering work on environmental risk assessment and environmental biotechnology. CSIR-NEERI's focus of R&D includes: air pollution control; climate change; cleaner technology; environmental materials; environmental systems design & modelling; solid and hazardous waste management; and water technology and management etc. CSIR-NEERI has six zonal laboratories.

For more details about the institute, visit <a href="http://www.neeri.res.in">http://www.neeri.res.in</a>

#### **Chemical Sciences**

CSIR-Central Leather Research Institute (CSIR-CLRI), Chennai is engaged in leather and leather products related research and development, involving cutting edge use of chemical, biological, and engineering sciences. The institute provides education and training in leather and allied sciences at national and international levels and provides technology and knowledge based services to leather industry. CSIR-CLRI is a leader in developing the leather products, leather auxiliaries, leather goods, leather-based articles and foot wears. It carries out fundamental and applied research on hides, skins, collagens and tanning agents. The institute has made significant contributions in cleaner leather processing. Further, it has played a significant role in the development of human resource for this area of economic and societal importance. CSIR-CLRI conducts B.Tech. & M.Tech. (Footwear Science and Engineering) courses and Ph.D. in Leather Technology and in basic sciences.

For more details about the institute, visit <a href="http://www.clri.org">http://www.clri.org</a>

CSIR-National Chemical Laboratory (CSIR-NCL), Pune is a premier Laboratory working in the area of Chemical Sciences and Engineering. It is internationally known for its excellence in scientific research in chemistry and chemical engineering as well as for its outstanding track record of industrial research involving industry from concept to commercialization. CSIR-NCL has made significant contributions to advance Indian chemical and related industry and has partnered with them for desired technology development. The Interdisciplinary research activities of CSIR-NCL are in the fields of polymer science and engineering, fuel cells, organic chemistry, chemical engineering, catalysis, physical and materials chemistry, biological sciences etc. It is the nation's knowledge storehouse in next generation chemical engineering, organic and polymer chemistry, fuel cells specialty chemicals and has put India in a leadership position in green chemistry, solar energy research at the interface of chemistry and biology.

For more details about the Laboratory, visit www.ncl-india.org

CSIR-Central Salt & Marine Chemicals Research Institute (CSIR-CSMCRI), Bhavnagar is a premier institute with a mission to work in partnership with visionary sponsors and collaborators to generate the knowledge and innovations required for efficient utilization of India's coastal wasteland, sea water, marine algae, solar power and silicates. In achieving it, the institute harnesses its capabilities in biosciences, chemical transformation, process engineering, environmental monitoring, separation science and analysis to address focused needs of industries and organizations in the region and beyond. The R&D activities of CSIR-CSMCRI cover the domains of salt & marine chemicals, inorganic materials & catalysis, electro membrane processes, marine biotechnology & ecology, reverse osmosis, engineering (focused at membrane technologies for desalination and water purification), waste land research etc. Achieving technological excellence, the institute has been granted several patents, commercialized landmark technologies and it has been playing a key role in human resource development in the domains of its operation. CSIR-CSMCRI has in place state of the art R&D facilities.

For more details about the institute, visit <a href="http://www.csmcri.org">http://www.csmcri.org</a>

## **Information Sciences**

CSIR-National Institute of Science, Technology and Development Studies (CSIR-NISTADS), New Delhi is known for its studies in the area of S&T policy, entrepreneurship, history, philosophy and sociology of S&T planning, utilization of S&T for regional development and scientometrics. CSIR-NISTADS is working on different aspects of interaction among science, society and the state and it provides policy and analysis support to the national S&T system.

For more details about the institute, visit <a href="http://www.nistads.res.in">http://www.nistads.res.in</a>

CSIR-Fourth Paradigm Institute (CSIR-4PI), Bengaluru formerly known as CSIR-Center for Mathematical Modelling and Computer Simulation (CSIR-CMMACS) is located in the Belur Campus of the CSIR-National Aerospace Laboratories (CSIR-NAL), Bengaluru. CSIR-CMMACS has been well known for modeling and simulation studies in the areas of computational geology and computational biology, notably the modelling of hazard environments, pollution, climate change and modelling for new drugs. The CSIR-4PI is positioned to address the data intensive scientific research and discovery. It is pursuing R&D in trans-disciplinary domains such as bio (genome) informatics, chem-informatics, earth and environmental system informatics, engineering sciences, and life sciences to name a few while nurturing a expert group on parallel programming and optimization, computational mathematics, HPC, cyber security, data analytics and visualization and large scale scientific computing. CSIR-4PI is positioned to cater to the training of next generation technical and scientific manpower in fourth paradigm research.

For more details about the institute, visit <a href="http://www.csir4pi.in">http://www.csir4pi.in</a>

#### **Engineering Sciences**

CSIR-Central Road Research Institute (CSIR-CRRI), New Delhi is engaged in R&D pertaining to design, construction and maintenance of roads and runways,

traffic and transportation planning of mega and medium cities and management of roads in diverse environments and terrains. This has led to significant interventions at a number of sites in the country. Also, improvement of marginal materials and utilization of industrial waste in road construction has been achieved. The institute has developed processes for landslide control, ground improvements and mitigating environmental pollution. CSIR-CRRI carries out life assessment and rehabilitation of highway & railway bridges. It also provides technical and consultancy services to various user organizations in India and abroad. For capacity building of human resources in the area of highway engineering to undertake and execute roads and runway projects, CSIR-CRRI organizes national & international training programmes and continuing education courses.

For more details about the institute, visit <a href="http://www.crridom.gov.in">http://www.crridom.gov.in</a>

CSIR-Central Institute of Mining and Fuel Research (CSIR-CIMFR), Dhanbad pursues R&D focused at the entire coal-energy chain, ranging from mining to consumption. It provides advisory services and helps in technology up-gradation & adaptation to coal and mineral based industries to reach the targeted production with high standards of safety, economy and cleaner environment. CSIR-CIMFR provides R&D support to mineral-based industry for safe, efficient and environment-friendly mining, especially in the areas of mine ventilation, mine fire control, mine subsidence, mine support systems, mining techniques, safety instrumentation, mine site conservation and rehabilitation.

For more details about the institute, visit <a href="http://www.cimfr.nic.in">http://www.cimfr.nic.in</a>

CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur is carrying out R&D in robotics & mechatronics, embedded systems & electronics, micro-systems technologies, advanced materials processing, energy & process plant, industrial and farm machinery and manufacturing technologies. CMERI has to its credit design and development of Swaraj, Sonalika and Krishi Shakti tractors and India Mark II pump.

For more details about the institute, visit <a href="http://www.cmeri.res.in">http://www.cmeri.res.in</a>

## (A) For the positions of Director

#### **Essential Qualifications:**

**Physical Sciences:** Ph.D. in Natural Science or Master's Degree in Engineering (for Engineering, Ph.D. is desirable)

**Chemical Sciences:** Ph.D. in Natural Science or Master's Degree in Engineering (for Engineering, Ph.D. is desirable)

**Information Sciences:** Ph.D. in Natural/Social Sciences or Master's Degree in Engineering (for Engineering, Ph.D. is desirable)

**Engineering Sciences:** Ph.D. in Natural Science or Master's Degree in Engineering (for Engineering, Ph.D. is desirable)

**Age:** 45 years or above but not exceeding 58 years.

**Experience:** 16 years of experience in Research and Development in the areas of activities of the Laboratory/Institute and demonstrated excellence in leadership therein.

Years of experience shall be computed from the beginning of his research career.

**Relaxation:** The qualifications, age and experience can be relaxed in case of exceptionally meritorious candidates with the approval of DG, CSIR.

**Candidate:** Should be creative, innovative and a well-recognized scientist/technologist having a demonstrated ability to manage multidisciplinary R&D teams with excellent interpersonal relations. The candidate should be able to create a conducive environment for nurturing high class research and development.

**Responsibilities:** The Director shall supervise and exercise administrative control on the staffs of the Institute and shall be responsible for (i) realizing the mission of the Institute, and (ii) creating an environment in the Institute conducive to nurturing of innovation and high class R&D and other S&T activities of the Laboratory/Institute.

**Appointment:** The appointment to the post of Director will be made for a tenure of six years or till superannuation whichever is earlier in the pay scale of Rs 67,000 (annual increment @ 3%)-79,000 (HAG) with allowances as admissible. In deserving cases, the tenure period can be extended by another term upto six years or till the age of superannuation whichever is earlier as per rules.

**Benefits:** The provision to share the money realized from external contract R&D, consultancy and rendering of S&T services is also available as per extant rules. Residential accommodation and transport are provided as per rules. In addition medical, LTC and other facilities are provided as per CSIR rules.

# (B) For the position of Outstanding Scientist (Scientist 'H') in Information Sciences

**Essential Qualifications:** Ph.D. in any branch of Science or Master's Degree in Engineering

# Desirable Qualifications/Recognition:

- For Engineering, Ph.D. is desirable.
- (ii) National/International recognition like Awards, Fellowships of Academies, Visiting Fellow/Professor

## **Experience:**

- (i) Minimum 16 years of experience in Research and Development in the National/International R&D/Academic Laboratory/Institution including Corporate R&D.
- (ii) Should hold a position at Scientist F/G/Professor level in Govt./Statutory/Autonomous institutions (in Pay Band-4 with Grade Pay of Rs 8900/- or above) or equivalent in Non-Govt./ Private Institution/Organization with outstanding academic records.

Age: Minimum 45 years.

The applicant must be citizen of India.

**Relaxation:** The qualifications, age and experience can be relaxed by DG, CSIR as per rules.

**Candidate**: Should be creative, innovative and a well-recognized scientist/technologist having a demonstrated leadership and man-management qualities and to manage multidisciplinary R&D teams with excellent interpersonal relations.

**Appointment**: The appointment to the post of Scientist H/Outstanding Scientist shall be made for a period of five years or till superannuation, whichever is earlier in the pay scale of Rs 67,000 (annual increment @ 3%)-79,000 (HAG) with allowances as admissible. In deserving cases, the tenure can be extended as per rules. For those who are in CSIR service, the term shall be till superannuation.

# How to apply:

Interested candidates may kindly send separate brief bio-data for each post, in the proforma given below for preparation of synopsis. The application for the post with detailed bio-data along with list of publications/patents etc. may also be sent through email or by post to Director General, Council of Scientific and Industrial Research (CSIR), Anusandhan Bhawan, 2, Rafi Marg, New Delhi-110001 separately for each post. The last date of the receipt of applications is 15<sup>th</sup> June, 2015. Fax:011-23710618 email: dgcsir@csir.res.in or dg@csir.res.in

Note: Those candidates who had applied earlier for the position of Outstanding Scientist/ Scientist 'H' at CSIR-4PI against the advertisement No. 02/2014 may submit their updated bio-data afresh.

## Format for Bio-Data

- 1. Name:
- 2. Date of Birth:
- 3. Current Position and Address:
- 4. Educational Qualification:

SI. No.	Degree/Certificate	Year of Passing	University/Institute	Subjects

Academic/Research Experience/Employment

SI. No	From	To	Name of	Position held
Si. 140	1 10111	10	Organization	
			Organization	

- Area of Specialization:
- 7. Honors/Awards received:
- 8. Professional Affiliations:
- 9. \*(a) Number of Research Publications:
  - (b) List of best 5 publications in last 10 years:
- 10.\* Number of Books authored/edited:
- 11.\* Number of Patents granted/applied for:
- 12. Dissertations supervised:
  - (a) Ph.D.
  - (b) Post-Graduation

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Signature	of the	Ann	licant
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Date:	
Place	٠.

<sup>\*</sup> Details may be enclosed separately