

CSIR FOURTH PARADIGM INSTITUTE

Section 4(1)(b)-i

The particulars of its organization, functions and duties:-

The office is located

CSIR Fourth Paradigm Institute (CSIR-4PI)

[Formerly, CSIR Centre for Mathematical Modelling and Computer Simulation (CMMACS)]

NAL Belur campus, Wind Tunnel Road

Bangalore - 560 037, Karnataka, INDIA

Tel: +91-80-2505 1921

Fax: +91-80-2522 0392

Office Timings:-

The office timings of the Commission are 8.30 AM to 5.00 PM Monday to Friday.

About CSIR-4PI

CSIR Centre for Mathematical Modelling and Computer Simulation (CSIR CMMACS) was set up in 1988 with the mandate to develop expertise, excellence and facilities for undertaking major mathematical modelling and simulation problems in identified areas primarily of relevance to CSIR. The Centre is located in the Belur Campus of the CSIR National Aerospace Laboratories (NAL), Bangalore. The policies and programmes of the centre are approved and monitored by a high level Advisory Committee under the Chairmanship of the Director General of CSIR, comprising members drawn from various Academic, R&D and Industrial Institutions. The centre has a core Scientific and Technical staff with several PhD's in varied areas notably, Physical, Mathematical and Engineering Sciences. The major research areas include carbon flux & ocean modelling, climate and environmental modelling, computational mechanics, high performance computing & cyber security and solid earth modelling.

One of the youngest and the smallest of CSIR laboratories, CSIR 4PI today is a vibrant and a premier institution of research. It has successfully blended basic and applied research. In spite of a core scientific strength of less than 30, CSIR C-MMACS has maintained a high scientific output. CSIR Fourth Paradigm Institute has taken up many important Five Year Plan Projects funded by CSIR apart from projects funded by DST, MOES, MOEFCC, KSNDMC, ISRO and other agencies since its inception. The institute also has active collaboration with several national and international research organizations/ institutes/universities.

CSIR C-MMACS was repositioned in 2013 as CSIR-Fourth Paradigm Institute (CSIR-4PI) to provide the country a unique positioning in the domain of computational and data intensive research powered by high performance computing and informatics research. CSIR-4PI was granted **National Institute status** on **19th June 2024**, along with the approval for the position of Director, marking a significant mile stone in the institute's growth and recognition at national level.

Vision: To provide modeling, simulation and data intensive capability powered by high performance computing and informatics research

Mission: Develop knowledge products in earth system and information sciences for societal good by exploiting modeling, simulation and data science capabilities.

Objectives: To develop capability for addressing critical issues of scientific significance and social benefit;

To enhance the scope and strength of mathematical modeling through development of new techniques/algorithms etc.;

To train and develop high-quality man-power in the area of Mathematical Modeling and Computer Simulation.

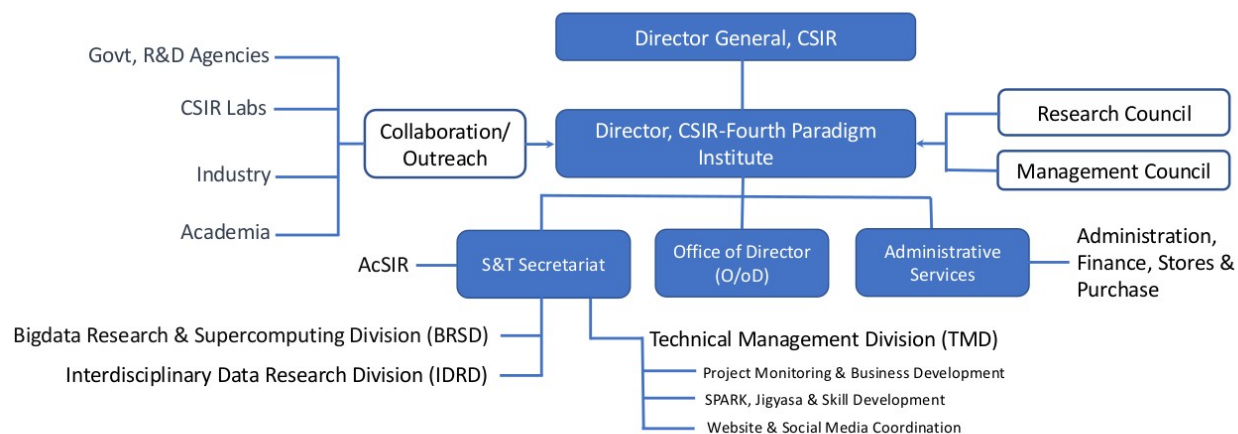
Core Strengths: Leadership in Multi-Disciplinary Modelling, GNSS, Computational Seismology, Carbon Cycle, Complex Materials; Innovative Algorithms & Forecast Platforms for Renewable Energy, Smart agricultural practices, Pro-active healthcare, Long-range forecasting of monsoon, Hydro-meteorological Disaster Forecast and Impact assessment; Next Generation Cyber Communication and Cryptographic Protocols; State-of-the-art Service: Supercomputing and Visualization; Data analytics: Assessment and Quantification

Unique Facilities: CSIR-HPC (360 TeraFLOPS), Global Navigation Satellite System (GNSS) and Broadband Seismic Stations, Greenhouse Gas Measurement Stations

Organizational Chart



CSIR-Fourth Paradigm Institute



The Director, CSIR-4PI

Dr. G K Patra

Designation: Director

CSIR Fourth Paradigm Institute (CSIR-4PI), NAL Belur Campus, Bangalore-560037, India

Phone: (+91)80-25224667, 25051920 and Fax: (+91)80-25220392

Email: director.4pi@csir.res.in

The powers and duties of Officers and employees

HEAD

- He is the Executive Head of the Laboratory. The responsibilities of head are:
- Realizing the mission of the National Laboratory.
- Creating an environment in the National Laboratory conducive to nurturing of innovation and high class R & D and the other S&T activities of the laboratory and having administrative and financial powers.

FUNCTIONS OF CONTROLLER OF ADMINISTRATION

1. To advise Head on all matters of General Administration.
2. In charge of Establishment matters.
3. Keep liaison with CSIR on matters related to administration.
4. Provide healthy working conditions and atmosphere to the institute by correct interpretation of rules and laws.

STORES & PURCHASE OFFICER (SPO)

1. SPO co-ordinates all activities pertaining to materials management of the laboratory. The core activities of procedures and follow-up applicable for material procurement, inspection, issue, stock entry, inventory record, disposal of surplus unserviceable stores, payment of bills of vendors.
2. In order to facilitate smooth functioning regarding the material procurement, the SPO also co-ordinates activities between indentors planning, stores, purchase, accounts, administration, vendors (both Indian and Foreign), statutory agencies like Customs and their agencies like transporters, clearing and forwarding agencies.

FINANCE & ACCOUNT OFFICER (FAO)

All financial & account related activities.

SCIENTISTS

- Major duties and responsibilities of Scientist are to carryout R&D/S&T activities leading to a Project / Programme of the Laboratory as per the approved mandate.

TECHNICAL/ ADMINISTRATIVE STAFF

- Technical & Supporting Staff members provides technical support to the R&D activities.

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Procedure followed in Decision Making Process Including Channels of Supervision and Accountability

The procedure followed to take a decision on various matters is in accordance with the rules and regulations governing the subject matter under consideration. Notwithstanding the fact that the Head has the authority to exercise all administrative and financial and other powers, he has delegated certain administrative and financial powers to subordinate functionaries.

The final authority in the decision making process rests with the Head and in certain specified matters, the final authority rests with DGSIR, New Delhi. However, certain powers have been delegated to lower functionaries by the Head.

We are guided in our activities by our Controlling Authority, i.e. CSIR. Based on its directives, the decisions are taken at Laboratory level by the Head of the Laboratory.

Section 4 (1)(b)iv

The norms set by it for the discharge of its functions

1. The laboratories operate under the overall control of CSIR. The Labs will manage the routine administrative & financial matters. However, CSIR will be the nodal authority in matters such as Receipt & Disbursement of funds from the Government, Research Fellowship and Training, Budget & Finance, policies of recruitment and promotion, legal matters, etc.
2. Director of each laboratory shall be assisted by Administrative functionaries (Controller of Administration, Controller of Finance & Accounts, Controller of Stores & Purchase) to advise him in respect of all administrative and financial matters.
3. In regard to all matters concerning service conditions of employees of the Society, the Fundamental and Supplementary Rules framed by the Government of India and such other rules and orders issued by the Government of India from time to time shall apply to the extent applicable to the employees of the Society. Notwithstanding anything contained in the Bye-law, the Governing Body shall have the power to relax the requirement of any rule to such extent and subject to such conditions as it may consider necessary.

Section 4 (1)(b)v

The rules, regulations, instructions, manuals and records, held by it or under its control or used by its employees for discharging its functions;

CSIR-4PI is bound by rules & regulations of CSIR given in the following link:

<http://www.csir.res.in/rules-regulation>

Section 4 (1)(b)vi

A statement of the categories of documents that are held by it or under its control

Sl No.	Category of Documents	Held By
01	(a) Documents relating to service matters (b) All documents relating to General Administration	Administration
02	All documents relating to Vigilance / Disciplinary / legal case	Administration
03	All documents related to recruitment, Assessment and promotions of staff	Administration
04	Documents relating to all purchases, stores and issue	Stores & Purchase Section
05	Documents relating to payments / finance	Finance & Accounts Section
06	Documents relating to construction & maintenance works (Civil, Electrical, Mechanical)	EBU
07	Documents relating to Sponsored & Consultancy projects, Industrial Projects, patents, public information relating to the Lab	TMD & Project Leader
08	All documents relating to R & D projects	TMD & Project Leader
09	All documents relating to publication and science communication including Annual Reports	TMD & Project Leader

Section 4 (1)(b)vii

The particulars of any arrangement that exists for consultation with, or representation by, the members of the public in relation to the formulation of its policy or implementation thereof;

NIL

Section 4 (1)(b)viii

A statement of the boards, councils, committees and other bodies consisting of two or more persons constituted as its part or for the purpose of its advice, and as to whether meetings of those boards, councils, committees and other bodies are open to the public, or the minutes of such meetings are accessible for public;

Section 4 (1)(b)ix

(ix) directory of its officers and employees;

Available in the website

Section 4 (1)(b)x

(x) the monthly remuneration received by each of its officers and employees, including the system of compensation as provided in its regulations;

Available in the website

Section 4 (1)(b)xi

(xi) the budget allocated to each of its agency, indicating the particulars of all plans, proposed expenditures and reports on disbursements made;

Budget allocations: Rs 3166.00 lakhs for 2025-26

Section 4 (1)(b)xii

(xii) the manner of execution of subsidy programmes, including the amounts allocated and the details of beneficiaries of such programmes;

NIL

Section 4 (1)(b)xii

(xiii) particulars of recipients of concessions, permits or authorisations granted by it;
NIL

Section 4 (1)(b)xiv

(xiv) details in respect of the information, available to or held by it, reduced in an electronic form;

As available in our website

Section 4 (1)(b)xv

(xv) the particulars of facilities available to citizens for obtaining information, including the working hours of a library or reading room, if maintained for public use;

NIL

Section 4 (1)(b)xvi

(xvi) the names, designations and other particulars of the Public Information Officers.

Available