

Pakistan Council of Scientific and Industrial Research (PCSIR)

Pakistan Council of Scientific and Industrial Research (PCSIR) is one of the premier research and development organization of the country. PCSIR has a network of 17 research laboratories/ units including training institutes located all over the country in Federal as well as all provincial capitals. Several laboratories of PCSIR are ISO-17025 accredited and some are under the accreditation process. The council laboratories are providing testing & certification services to almost entire industrial sector and most of the exportable products are being tested/ certified by its ISO-17025 accredited labs. The thrust areas of PCSIR research touches almost all the sectors of the economy including energy, food, food safety, advance and composite material, leather, textile, herbal medicines and value addition in products.

Major Objectives

- Utilization of indigenous resources for the development and promotion of industrial sector leading to import substitution and export enhancement.
- To carry out self-sustaining and marketable research to contribute in the industrialization and economic growth of country and human resource development through organized training courses.

Major Activities

- **Process and Product Development**

The Scientists and Technologists of PCSIR have developed various industrial technologies/ processes and products mostly based on the locally available raw materials.

- **Investigative Analysis and Import Substitution**

The expertise and technical manpower available in the PCSIR have been able to decode and analyses many of these products and helped the local SME's in the development of import-substituted materials.

- **Calibration & Standardization Services**

PCSIR is providing calibration and standardization services to the Industries, Traders and Exporters. These services are Traceable to National & International Standards at NPSL Pakistan, PTB Germany, NPL England, NIST USA and NIM China. Calibration laboratories are ISO/IEC 17025:2005 by PNAC.

- **Technical Consultancy & Advisory Services**

PCSIR's scientist and engineers having expertise in giving technical consultancy and advisory services to clients from public and private sectors in the disciplines of Marine & Food Sciences, Environment, pharmaceuticals, Calibration, Industrial Pollution Control, Mineral up-gradation and Engineering Industries etc to the Pakistani manufactures, exporters and importers.

- **Quality Control (QC)/ Quality Assurance (QA) Services**

PCSIR laboratories are Internationally/ Nationally accredited having state-of-the-art equipment and diverse team of scientists/ engineers which are constantly learning and taking challenges to support the local industry by providing them with QC/QA services.

- **Industrial Linkages**

Strengthening of linkages with industrial sector and academia is one of the major strategies of PCSIR. For this purpose the Commercialization & Marketing Cells of PCSIR continuously conducting focus group meetings/ interaction with different chambers & sector specific trade associations to assess and resolve the problems faced by the local industries

- **Demand Driven/ In-house R&D Projects**

Focus is given to carry out demand driven in-house R&D projects, so that problems of local industry could be solved. PCSIR is funding many industrial need based R&D projects to support the industrial sector. MoST also provides funds to PCSIR to execute need based R&D Projects.

- **Rural Support Initiatives – Community Uplift Programme**

- To train local community with skills/techniques for preservation of fruits and vegetables.
- To enhance income and employment opportunities for local communities.
- To increase role of women and their participation in socio-economic development.

- **Pilot Plant Production Services**

PCSIR offer its Pilot Plant Services to the clients (Public, Private) to evaluate catalyst and processes/ technologies as well as generate real time process data to support the design basis for commercial applications, optimization of production facilities, post mortem troubleshooting of process operations and toll production. The pilot plants

support wide array of process technologies including delayed coking, desalting, distillation, fixed-bed reactor processing, solvent refining etc.

- **Incubation Facilities Services**

Incubation Facilities Services are also being provided by PCSIR to the business community through its Technology Business Incubation Centre (TBIC) at Lahore, Karachi & Peshawar. The main aim is to provide business space and support services within the environment of a third level institution that will accelerate the development of emerging, high potential start-up companies. Objectives are to: (i) foster entrepreneurship and campus company activity, (ii) help realize the commercial potential of Pakistan's research community, and (iii) support balanced regional development.

- **Training Workshops/ Seminars/ Symposia/ Exhibitions**

In order to promote science culture in the country, PCSIR regularly holds the Training Workshops/ Seminars/ Conferences/ Exhibitions in major cities as well as in less developed areas like Swat, Skardu in different scientific fields and provides expertise in their fields to serve the country in the best possible way.

Human Resource Development

Trained and Skilled Manpower is the bloodline of Industries and Institutions of any country. Keeping in view the needs of the nation, PCSIR has established its Skill Development Centres namely:

1. Institute of Industrial Electronics Engineering Karachi
2. Pak-Swiss/Precision Systems Training Centre (Karachi/ Quetta/ Lahore/ Peshawar).
3. Cast Metal & Foundry Technology Centre, Daska