# Year End Review 2024: Department of Chemicals and Petrochemicals

Department of Chemicals and Petrochemicals implements the New Scheme of Petrochemicals with sub-schemes: Scheme for Setting up of Plastic Parks; Scheme for Setting up of Centres of Excellence; The Petrochemicals Research & Innovation Commendation Scheme

13th edition of "India Chem 2024" organised in Mumbai; showcased immense opportunities within India's rapidly growing chemical sector and highlighted various government initiatives aimed at fostering sustainable growth

Insecticide Thiomethoxam & fungicide Hexaconazole combination gel formulation for seed treatment developed to protect the seeds and seedlings from insects and fungal pathogens

The key initiatives/achievements/events of the Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers during the year are as under:

# 1. <u>DEPARTMENT OF CHEMICALS AND PETROCHEMICALS</u>

 i. Training session for introduction of upcoming and existing new features in eFile ver7.x-CPC

Training for introduction of upcoming and existing new features in eFile ver7.x was held for Department of Chemicals and Petrochemicals on 14.10.2024, to ensure effective communication of new features and to address user concerns in respect of eOffice. All employees, at the level of ASO and above, of the Department attended the training session programme.

ii. Protection and Maintenance of Cyber Assets:

For centralized management of endpoints as well as to monitor and secure in the future, UEM (Unified Endpoint Management) tool was installed on all endpoints. EDR (Endpoint Detection Response) tools was also installed on all the endpoints of the Department to remove the existing vulnerability. For virtual air gap, network segmentation has been allocated from the NIC Network Division and 4 old switches in Shastri Bhavan and one in Udyog Bhavan have been replaced

With the rapid adoption of technology and the significant importance of data held by government entities, in view of the heightened risks of cyber-attacks Indian Computer Emergency Response Team (CERT-In) under Ministry of Electronics and IT has set up Cyber Swachhata Kendra and deployed mechanisms, to detect IP addresses infected with botnet/malware or vulnerable services running within the IT infrastructure of Department / Organizations and for sharing automated daily reports / feed with details of such events with respective Department/Organizations, to enable clean up actions. Department of Chemicals & Petrochemicals has been configured for on boarding on Cyber Swachata Kendra.

#### iii. Observation of Swachhata Pakhwada:

The 9th Swachhata Pakhwada-2024 was observed from 1.9.2024 to 15.9.2024 in the Department of Chemicals & Petrochemicals and the PSUs/Autonomous Bodies under its administrative control undertook various swachhata activities like cleaning of office complexes / factories / labs / toilets / premises. Banners and posters on cleanliness were displayed. Various competitions like Essay Writing, Poetry Recitation, and Drawing Competitions etc. were organized by the organisations under the Dept during the Pakhwada. The officers and staff members of the Department also carried out Shramdaan activity. The Physical files were reviewed / weeded out as per the Record Retention Schedule. E-files and e –receipts were also reviewed during the period.

#### iv. **Observation of Swachhata Hi Seva Campaign:**

Swachhata Hi Seva campaign was observed from 14th September to 1st October with the theme of 'Swabhav Swachhata – Sanskaar Swachhata with swachh Bharat Diwas celebration on 2nd October. This campaign was jointly organized by SBM –Grameen & SBM-Urban under the Ministry of Housing and Urban Affairs (MoHUA). The following were the three main pillars of activities-

- Swachhata Ki Bhagidari Public participation, Awareness & Advocacy
- Sampoorna Swachhata including Swachhata Lakshit Ekayi
- SafaiMitra Suraksha Shivirs- Preventive Health checkups & Social security coverages
- d. Secretariat as well ABs/PSUs under the administrative control of the Department undertook various swachhata activities such as organising cleanliness drives, zero waste events, SafaiMitra Suraksha Shivir, installation of Selfi Points etc. during the campaign. There was special focus on transformation of identified Cleanliness Targets Units (CTUs) areas which are generally neglected garbage points, difficult to clean, as part of regular cleaning operations and post environmental, health and hygiene risk. The problem of water logging in the basement of D Wing, Shastri Bhawan due to faulty drainage system was identified as CTU, which was transformed during this campaign. Swachhta Diwas was celebrated in a befitting manner on the auspicious

day of the birth anniversary of our father of the Nation. All activities during SHS -2024 were updated on the specially curated IT portal.

# v. Observation of Special Campaign 4.0:

The Department of Chemicals and Petrochemicals along with its organizations participated in the Special Campaign 4.0 during 2.10.2024 to 31.10.2024 enthusiastically by focusing on mainstreaming of swachhta and minimizing pendency in offices. Towards mainstreaming of swachhta the Department set a target of reviewing all the 2443 physical files, lying in its record room. On completion of the review, a total of 1250 files have been weeded out during the campaign. The Department also reviewed all the 4656 e-electronic files that had been opened in the Department since the adoption of the e-filing system and closed 880 e files during the campaign.

The swachhta campaign also yielded tangible results in the form of freeing 28,128 sq ft of space and earning Rs.15, 82,889/- as revenue from disposal of scrap by the Department and its organisations. During the campaign, the organizations of the Department such as CIPET, IPFT, HOCL and HIL have undertaken the task of spreading swachhta message at places outside office environment. Towards this, cleanliness campaigns were held at 153 locations in public places such as parks, railway and bus stations, historical sites, educational institutions, markets etc.

### vi. **Migration to e-Bill:**

The Department has taken a decision to fully migrate to e-bill module of PFMS by the end of December 2024. The e-bill system ensures end to end digital processing of claims and their online tracking. It allows employees, vendors, suppliers, and contractors to submit and track bills online, enabling faster, paperless processing with audit trails at each stage. Three (3) rounds of training have been imparted to all concerned across the Divisions of the Department.

#### vii. Procurement through Government E-Market (GEM)

The Department made full utilization of the Government's E-procurement platform by procuring items it consumes through GeM. As a result, the value of goods procured through GeM for the period from 01.04.2024 till 20.11.2024 is Rs.306.09 Lakh against the procurement value of Rs.471.71 Lakh during the previous Financial Year.

#### viii. Observance of Nasha Mukt Bharat Abhiyan:

Nasha Mukt Bharat Abhiyan was launched on 15th August 2020. On its 5th year, a mass pledge was organised on 12th August 2024. The theme of this year's Nasha Mukt Bharat Abhiyan is "Viksit Bharat Ka Mantra, Bharat ho Nashe se Swatantra". All officers of DCPC and its Autonomous Bodies/PSUs were administered the pledge on 12.08.2024.

#### ix. International Day of Yoga:

The International Day of Yoga (IDY) was observed in the Department on 21st June, 2024 on the theme "Yoga for Self and Society" in collaboration with Indian Institute of Yoga and

Management (IIYM)) / (Bhartiya Yoga Avam Prabhandhan Sansthan) Murthal (Haryana). Acharya Kuldeep, Acharya Neelam and Acharya Sunjila from IIYM attended the sessions and imparted training on Yoga, Mudra and Meditation to the officers and officials of the Department.

#### x. Celebration of National Sports Day -2024

The National Sports Day is celebrated every year on 29th August on the occasion of the birth anniversary of Hockey legend Major Dhyan Chand as a befitting tribute to our sports icons for their contribution to bringing laurels to the country on the international stage. This year National Sports Day 2024 was celebrated with a series of pan-India sports events and other engagement activities between 26th and 31st August 2024 in all ABs and PSUs under the administrative control of the Department. Fit India Pledge was also administered to all officers / officials of the Department as well as ABs/PSUs under its control.

#### xi. National Learning Week

National Learning Week was observed in the Department from 19.10.2024 to 25.10.2024. All the employees were directed to complete a minimum 4-Hour Learning during the week. During this period the Dept, in consultation with iGOT organized two Webinars titled "the Hiring Essentials – competency-based hiring, Diversity & Inclusion and Interviewing Skills" and "Motivating Bureaucracy for citizen centric services". Selective courses have been identified on IGOT and published as training plan and were being consumed regularly the Officers/Officials of the Department.

#### xii. Observance of Vigilance Awareness Week:

The Vigilance Awareness Week was observed in the Department from 28th October to 3rd November 2024 with the following theme: "Culture of Integrity for Nations Prosperity"

All the officers and the Employees of the Department were administered Integrity Pledge during the Week.

#### xiii. Har Ghar Tiranga Campaign:

Har Ghar Tiranga campaign was organized from 9th - 15th August 2024 to celebrate India's Independence Day wherein people were encouraged to hoist flags in their premises. The officers uploaded selfies with Tiranga on the website www.harghartiranga.com and social media platform for making the Campaign a resounding success.

#### xiv. Rashtriya Ekta Diwas (National Unity Day)

Department of Chemical & Petrochemicals observed **Rashtriya Ekta Diwas (National Unity Day)** on 30.10.2024 (being Gazetted holiday on 31.10.2024) to commemorate the birth anniversary of Sardar Vallbhbhai Patel. All the officers/officials were administered Rashtriya Ekta Diwas pledge on 30.10.2024.

#### xv. Celebration of Constitution Day

As a part of the celebration of Constitution Day which falls on 26.11.2024 officers and staff were mobilised to read the preamble of the Constitution and thereby reaffirming our commitment to uphold its ideology.

#### 2. <u>NEW SCHEME OF PETROCHEMICALS</u>

The Department of Chemicals and Petrochemicals implements the New Scheme of Petrochemicals with sub-schemes on (i) Scheme for Setting up of Plastic Parks; (ii) Scheme for Setting up of Centres of Excellence; and (iii) The Petrochemicals Research & Innovation Commendation Scheme.

Under the Scheme for Setting up Plastic Parks, the Department promotes setting up of need-based Plastic Parks with requisite infrastructure and enabling common facilities. The objective is to consolidate and synergize the capacities of downstream plastic processing industry to help increase investment, production and export in the sector as well as generate employment. 10 Plastic Parks have been approved so far in different States and the same are at different levels of implementation. With regard to Centres of Excellence (CoEs), the objective is to provide grant-in-aid to educational and research institutions to improve existing technology and promote development of new applications. The emphasis of the Scheme is on modernization and upgradation of existing manufacturing processes as well as improving the quality of products. 18 CoEs have been approved so far.

Under the Petrochemicals Research & Innovation Commendation (PRIC) Scheme, the Government felicitates meritorious innovations and inventions in the field of petrochemicals, products, processes and other related areas. The Scheme seeks to improve research and development in the petrochemical sector, leading to more efficient energy consumption, plastic waste management, and development of new products.

# 3. <u>CENTRAL INSTITUTE OF PETROCHEMICALS ENGINEERING & TECHNOLOGY (CIPET)</u>

The Central Institute of Petrochemicals Engineering & Technology (CIPET) is a Centrally funded technical higher education institution under the Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Government of India, engaged in Skill development, Technology Support, Academic and Research (STAR) activities for the development of the petrochemical and allied industries in the country. CIPET has 48 Centres across the country, which includes 9 Institute of Petrochemicals Technology (IPTs), 32 Centers for Skilling and Technical Support (CSTS), 3 School for Advanced Research in Polymers (SARP), 4 sub-centers and 4 Plastics Waste Management Centres (PWMC).

The key activities/ achievements of CIPET are summarized below:

#### i. Academics And Skill Development Programmes

CIPET conducts various long term training programs (i.e., Diploma, Post Diploma, Post Graduate Diploma, Undergraduate and Post Graduate) and Ph.D. program in Material Science & Engineering, Polymer Science & Technology, Plastics Engineering, Physics & Chemistry; Polymer Nanotechnology; Bio Polymer Science; Applied Polymer Science etc. Diploma level programs are offered at CIPET: CSTSs and students for these programs are admitted through all India based CIPET Admission Test (CAT).

In the current academic year 2024-25, long term programs commenced at the following new CIPET Centres:

- CIPET: CSTS, Bhagalpur Diploma level programs in Plastics Mould Technology and Plastics Technology
- CIPET: IPT, Bihta Degree level programs in Chemical Engineering, Petrochemicals Engineering, Mechanical Engineering and Waste Management.

CIPET conducts NSQF-aligned and National Skills Qualifications Committee (NSQC) approved Skill Development Training Programs (SDTP) in the field of Petrochemicals Engineering & Technology. The range of programs offered at CIPET includes Employment-linked Skill Development Training Programs; Up-skilling and Re-skilling Programs; Short-term Industry Specific Programs; Tailor made training programs for industries; and In-plant Training/ Internship Training Programs for students from various colleges and universities. These short duration Skill Development Training Programs (SDTP)/ Skill Upgradation programs (SUP) are aimed at enhancing the skill and competency level of participants in the relevant domains of Petrochemicals and Plastics/ Polymers. During the year 2024-25 (upto October, 2024), CIPET has trained 25,488 candidates through various short term skill training programmes.

## ii. Technology Support Services

D&D Activities

CIPET offers Technology Support Services (TSS) in the entire spectrum of petrochemical engineering and technology. TSS forms an integral part of CIPET's portfolio and highlights its technical competency by offering high-quality services to customers in the areas of design and manufacturing of moulds and dyes, tooling, plastics processing and testing, inspection and quality control. CIPET Centers have state-of-the- art infrastructural facilities in the areas of design, CAD/ CAM/ CAE, tooling and mould manufacturing, processing, testing and quality control, to cater to the needs of the polymer and allied industries. During the year 2024-25 (up to October, 2024) CIPET has undertaken 59,756 Technology Support Service Assignments (TSS) in the area of plastics processing, design and tooling, testing, consultancy and inspection activities for the petrochemicals and allied industries.

140.	R&D Activities
1.	Research Publication in Reputed International Journals (Q1 & Q2)
2.	Workshops for Industry areas for Research& Development
3.	No. of sponsored Research Projects

- 4. Book/ Chapter through International Publishers
  - 5. No. Research Scholars (Ph.D. Registration)

#### **Total**

#### iii. Research and Development

CIPET has well-established R&D wing in the form of Schools for Advanced Research in Petrochemicals (SARP), namely, (i) Advanced Research School for Technology & Product Simulation (ARSTPS), Chennai; (ii) Laboratory for Advanced Research in Polymeric Materials (LARPM), Bhubaneswar; and (iii) Advanced Polymer Design & Development Research Laboratory (APDDRL), Bengaluru.

The research activities undertaken by CIPET during 2024-25 (upto October, 2024) are summarized below:

#### **Key Milestones/ Achievements:**

- The PWMC and the Hostel building at CIPET, Varanasi were inaugurated virtually by Shri Narendra Modi, Hon'ble Prime Minister of India, on 20th October, 2024.
- CIPET: CSTS at Gwalior, Baddi and Ranchi were inaugurated virtually by Dr. Mansukh Mandaviya, Hon'ble Minister of Health and Family Welfare and Chemicals & Fertilizers, Government of India, on 4th March, 2024.
- A Patent titled "Sharps Disposal Container with the provision for Decontamination at Source" (Patent No.: 550118, Date of Grant: 12.09.2024) has been granted jointly to CIPET and Shri Ramachandra Hospital, Chennai, for an invention based on the DST Sponsored Project titled "Design & Development of Hospital Waste Management Technique for Safe Disposal of Biomedical Waste". This would help in the mutilation of needles, removal of needle from syringes and decontamination of mutilated needles at source.

#### 4. HINDUSTAN ORGANIC CHEMCIALS LIMITED (HOCL)

HOCL has achieved a capacity utilization of 82 % during the period from April to November 2024, as against 115 % during the same period in 2023-24. There was also decrease of 25 % in sales turnover compared to the same period during 2023-24. The low-capacity utilization and decrease in sales turnover was due to annual shutdown for change of catalyst and maintenance related activities from 10.4.2024 to 10.06.2024. The company has also achieved reduction in specific consumption of raw materials due to commissioning of tar cracking unit.

The company has successfully implemented various programmes as per the directions received from Administrative Ministry.

#### **India Chem 2024**

Department of Chemicals and Petrochemicals organised the 13th edition of the mega event "India Chem 2024", under the CPDS Scheme, from 17th-19th October, 2024, in Mumbai. The event is one of the largest exhibition cum conference for chemical and petrochemical industries in the Asia-Pacific region, the event showcased the immense opportunities within India's rapidly growing chemical sector and highlighted various government initiatives aimed at

fostering sustainable growth. India Chem 2024 provided a platform for brainstorming discussions amongst industry leaders and Government representatives on specific topics of relevance to the sector, facilitating dialogue on investment prospects, regulatory frameworks, and strategic challenges. The event saw participation from 172 exhibitors, including 49 international exhibitors, and attracted 78 global CEOs, 135 speakers, and 689 foreign participants. With 1,115 Indian delegates and 8,720 business visitors, India Chem 2024 reaffirmed its significance as a major gathering for the chemicals and petrochemicals industry. There were several sessions on issues ranging from dyes, and agrochemicals, to petrochemicals, which saw discussions on the latest developments in the field, as well as on the importance of innovation and adoption of sustainable practices. Besides, there were dedicated sessions focusing on geography specific issues including the India-EU, India-East Asia, India-US and India-Russia Chemicals & Petrochemicals Forums, bringing together key stakeholders from each of these regions. The keynote session was graced by Shri Jagat Prakash Nadda, Union Minister for Health & Family Welfare, and Chemicals & Fertilizers, Shri Bhupendra Rajnikant Patel, Chief Minister of Gujarat, Shri Mohan Charan Majhi, Chief Minister of Odisha, Shri Mohan Yadav, Chief Minister of Madhya Pradesh along with Smt. Anupriya Patel, Minister of State, Chemicals and Fertilizers and Shri Sampad Chandra Swain, Minister of State, Industries Department, Odisha. This was followed by a Global CEOs' Conclave, presided over by the Union Minister for Chemicals & Fertilizers, wherein industry leaders from across the globe discussed the opportunities and challenges of the Indian chemical industry. Netherlands was the Partner Country for this edition, and several Indian states, including Gujarat, Odisha, Andhra Pradesh, Madhya Pradesh, and Rajasthan, featured as Partner States. On its third and final day, the event hosted an engaging job fair featuring 14 leading chemical companies from different sectors and students from CIPET - Central Institute of Plastic Engineering and Technology. During the job fair, the students got an opportunity to interact with the industry to explore possible career prospects.

#### 5. HIL (India) Limited for the year 2024

- I. Under the UNIDO Project, HIL commissioned the second stream of LLIN Plant as part of capacity enhancement project to achieve the annual capacity of 10 million nets.
- II. CIB&RC has extended the validity of registration of HIL's LLIN under section 9(3b) till March-2025
- III. HIL entered into contract with UNIDO to execute the FARM project. Under this project, HIL is setting up of manufacturing facility to manufacture various biopesticides and to create awareness among farming community to use safer alternatives replacing highly hazardous pesticides. HIL, under this project is targeted to convert an agriculture area of 1.45 million hectare from the use of HHPs to safer alternatives including bio and botanical pesticides and also IPM practices and will impart training to 1.45 million farmers in the project period of 5 years. The regional program was launched in July 2024 at New Delhi.
- IV. Company achieved a turnover of Rs. 266 Cr till 15th Dec -2024 with an increase of around 83% against the previous year turnover of Rs. 145.41 Cr.
- V. As part of the Alternative Mechanism, company has closed down the two loss making Units and issued VRS to the employees, and cleared the liability of both the units.
- VI. In the year 2024, HIL organized 31 Farmers Training Program on "Safe and Judicious Use of Pesticides and IPM Practices" benefitted 10385 farmers against 38 training programs benefitted 9545 farmers in the year 2023.

- VII. HIL signed MoU with Kerala State Cooperative Marketing Federation Ltd (KERALA MARKETFED) to market HIL's range of products viz. Agrochemicals, Seeds, Biofertilizers, LLIN etc. within the State of Kerala.
- VIII. Ministry of Fisheries, Animal Husbandry & Dairying approved and directed HIL to take up the fodder seed production for the quantity 28,000 quintals with the production subsidy amounting to Rs. 25 Cr.
- IX. executed the supply order of fodder seed of quantity 20,000 quintals amounting to Rs. 20 Cr from the Department of Animal Husbandry, Government of Karnataka.
- X. HIL entered into an agreement with BRBN, Bihar for the production and supply of various seeds for 3 years in Bihar state
- XI. HIL has supplied the sunflower minikits to the Department of Agriculture, Andhra Pradesh, as per the allocation by Ministry of Agriculture & Farmers Welfare, Government of India, under the revival of sunflower in Andhra Pradesh.
- XII. Ministry of Fisheries and Animal Husbandry has approved the annual action plan of HIL for the supply of fodder seeds under National Livestock Mission (NLM) worth Rs. 25.3 Cr.
- XIII. Execution of supply order of Organic Ginger worth Rs. 61 Cr to Odisha State Seed Corporation in progress.
- XIV. HIL started the seed buisiness in Private sector for the first time and executed order worth Rs. 1 Cr.
- XV. HIL resumed the business with the Department of Agriculture, Assam by supplying Linseed
- XVI. Ministry of Agriculture & Farmers Welfare allocated and directed HIL to supply 1,97,500 nos of Pulse minikits to the Department of Agriculture of Madhya Pradesh, Tamil Nadu, Uttar Pradesh, West Bengal and Andhra Pradesh worth Rs. 13.22 Cr.
- XVII. HIL resumed the Seed business in Madhya Pradesh by supplying Corriander seed to the Department of Horticulture.
- XVIII. The Department of Agriculture, Uttar Pradesh has included HIL in general distribution system to the farmers through POS machine.
- XIX. HIL signed MoU with PUNSEED to market HIL's range of products viz. Agrochemicals, Seeds, Biofertilizers, LLIN etc.
- XX. HIL received a supply order of more than 1 Lakh qtl pf Potato from Odisha State Seed Corporation amounting to Rs. 40 Cr.
- XXI. HIL received the supply order for 1.48 Cr numbers of Tomato Seedlings worth Rs. 4.36 Cr to VEGFED in the state of Bihar.

#### 6. Institute of Pesticide Formulation Technology (IPFT)

Institute of Pesticide Formulation Technology, Gurugram is an autonomous institute under Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Government of India. The objectives of IPFT include developing user & environment friendly pesticide formulation technologies, promoting efficient application technologies, bio efficacy studies on pesticide formulations for CIB&RC licensing and imparting specialized trainings to Scientists, Engineers, and students from agrochemical industries and academia.

#### Major Achievements during 2024

i. Development of safer & effective Soluble Concentrate formulation of Insecticide Monocrotophos

The conventional Soluble Concentrate poses the risk of accidental or intentional poisoning and leads to toxic residues in crop produce. The safer & effective formulation has been developed with emectics to minimize the risk of poisoning. The developed formulation contains blend of adjuvants to provide higher efficacy with dose reduction up to 40%, thus controlling the target pests at lower doses, thereby minimizes the risk of toxic residues in crop products. The technology has been transferred to industry for commercialization.

#### ii. Combination formulation of insecticide and fungicide for seed treatment

The insecticide Thiomethoxam & fungicide Hexaconazole combination gel formulation for seed treatment has been developed. The formulation effectively protects the seeds and seedlings from insects and fungal pathogens.

# iii. Imidacloprid Nanosuspension Formulation with Oleoresin for Enhanced Efficacy Against Whiteflies

The Imidacloprid nanosuspension formulation with oleoresin was developed to enhance bioavailability and effectiveness of active ingredient. This combination offers advantage of higher efficacy at minimum doses.

#### iv. Emamectin Benzoate and Acetamiprid Nanoemulsion for Sucking Pest Control

The Nano emulsion formulation of Emamectin benzoate and Acetamiprid was developed. The nano emulsion provides improved pesticide efficacy, reduced environmental impact and targeted delivery. This approach promotes sustainable pest management and minimizes the environmental impact of chemical pesticides while ensuring the safety of non-target organisms.

#### v. Bio-botanical pesticide formulations for controlling pests of seed spices

The formulation development for pest management in seed spices crops, in collaboration with ICAR-National Research Centre for Seed Spice, Ajmer is ongoing. The development and bioefficacy studies on bio-pesticide formulations of Trarmira seed extract, Gaur seed (Cluster Beans) extract and Hirsutellathompsonii are in progress

### vi. Workshops for farmers

IPFT is making efforts for popularizing the use of botanicals and biopesticides from locally available plants for controlling different agricultural insects on PAN India basis. Workshops for farmers were organized to impart training to farmers for enhancing crop productivity by application of bio-botanical based products, which are safe to user & environment and provide pesticide residue free food products. The bio-botanical formulations may be effectively applied for minimization of pesticide residue in crops. To promote organic farming and IPM program, following 20 workshops have been organized in 10 states of India during the year 2024 by IPFT

#### vii. Monitoring of Pesticide Residues at National Level in the state of Haryana:

This project is sponsored by Department of Agriculture & Farmers Welfare (DA&FW), Ministry of Agriculture, Government of India to monitor pesticide residues in samples of Cereals, Pulses, Vegetables, Fruits, and Milk collected every month from two locations

(Rohtak & Gurugram). The samples are analyzed for the pesticide residue contamination and the reports are submitted in monthly frequency to ICAR New Delhi.

#### viii. New Research Projects

ICAR-National Agriculture Science Fund sanctioned three new research projects on (i) bio-botanical formulations for insects, Nematodes and ticks' control (ii) Weedicide formulations for management of Orobanche parasitic weed in Mustard crop (iii) development of agri-wasre decomposer formulations and Soil remediation, The funding support will be Rs. 120 Lakhs for three years duration. The research work is being done in collaboration with ICAR institutions.

#### ix. Bio-efficacy & Phytotoxicity studies

Twenty-five projects on field scale Bio-efficacy &Phytotoxicity studies on different crops sponsored by various pesticide industries and five in-house projects were competed.

#### x. <u>Persistence studies</u>

Nine projects on pesticide residue studies of new formulations on different crops sponsored by various pesticide industries competed.

#### xi. Research Publications

20 research papers were published in reputed international and national journals.

#### xii. Internship Training

Internship Training on various aspects related to agrochemicals were provided to 23 students from different universities.

#### 7. Statistics and Monitoring (S&M) Division

The Statistics and Monitoring (S&M) Division of the Department of Chemicals and Petrochemicals (DCPC) has taken an intiative to expand the coverage of units and products related to the chemical sector for monitoring. In this regard, the division is collecting the data in online mode through the ChemIndia web portal. This portal facilitates the collection, compilation, and real-time analysis of data.

Previously, data collection was collected through the Production Management System (PMS) portal. In the PMS portal, data on selected products was manually collected from 245 large and medium-scale manufacturing industries/units. In contrast, the ChemIndia portal, being an online system, has significantly expanded its coverage. As of the current financial year (2024–25), a total of 835 units are registered, and 3,160 products are mapped to these units, compared to the 197 products under the PMS portal.