

**Proceedings of the 34<sup>th</sup> Meeting of the Senate**

The 34<sup>th</sup> meeting of the Senate of the Academy of Scientific and Innovative Research (AcSIR) was held on May 21, 2025 from 2:00 p.m. onwards at CSIR-Science Centre, Lodhi Estate, New Delhi in Hybrid Mode. The meeting was attended by the following members:

Sl.	Name	
1.	<b>Prof. Manoj Kumar Dhar</b> , <i>Director, AcSIR</i>	<b>Chairperson</b>
2.	<b>Prof. Ajay Dhar</b> , <i>Associate Director, AcSIR</i>	<b>Member</b>
3.	<b>Prof. R.N.K. Bamezai</b> , <i>Former Professor &amp; Dean, JNU &amp; VC, SMVDU, Katra (Science)</i>	<b>Member</b>
4.	<b>Prof. Sanjay Mittal</b> , <i>Professor, IIT Kanpur (Engineering) (Online)</i>	<b>Member</b>
5.	<b>Prof. Anil K. Gupta</b> , <i>Visiting Faculty, IIM, Ahmedabad (Social Sciences)</i>	<b>Member</b>
6.	<b>Prof. Sanjay Puri</b> , <i>Jawaharlal Nehru University (Physical Sciences) (Online)</i>	<b>Member</b>
7.	<b>Prof. H.K. Sardana</b> , <i>Indian Institute of Information Technology, Raichur (Engineering Sciences)</i>	<b>Member</b>
8.	<b>Prof. Chetan J. Gadgil</b> , <i>Dean, Faculty of Engineering Sciences</i>	<b>Member</b>
9.	<b>Prof. Aniruddha P. Sane</b> , <i>Dean, Faculty of Biological Sciences &amp; Agricultural Sciences</i>	<b>Member</b>
10.	<b>Prof. Chada Raji Reddy</b> , <i>Dean, Faculty of Chemical Sciences</i>	<b>Member</b>
11.	<b>Prof. Sanjay R. Dhakate</b> , <i>Dean, Faculty of Physical Sciences</i>	<b>Member</b>
12.	<b>Dr. Neerja Garg</b> , <i>Dean, Faculty of Mathematical &amp; Information Sciences (Online)</i>	<b>Member</b>
13.	<b>Dr. Anup Anvikar</b> , <i>Dean, Faculty of Medical Research (Online)</i>	
14.	<b>Prof. Ram Kumar Sharma</b> , <i>Associate Dean, Faculty of Biological Sciences &amp; Agricultural Sciences</i>	<b>Member</b>
15.	<b>Prof. Raju Khan</b> , <i>Associate Dean, Dean, Faculty of Chemical Sciences (Online)</i>	<b>Member</b>
16.	<b>Prof. Dipankar Chatterjee</b> , <i>Associate Dean, Faculty of Engineering Sciences</i>	<b>Member</b>
17.	<b>Dr. Rudraswami N. G.</b> , <i>Associate Dean, Faculty of Physical Sciences</i>	<b>Member</b>
18.	<b>Prof. Neeru Saini</b> , <i>Associate Dean, Faculty of Medical Research</i>	<b>Member</b>
19.	<b>Dr. Ashwani Kumar</b> , <i>CSIR-IMTECH, Chandigarh</i>	
20.	<b>Dr. Harsha Bajaj</b> , <i>CSIR-NIIST, Thiruvananthapuram (Online)</i>	<b>Member</b>
-	<b>Ms. Arpita Sengupta</b> , <i>Sr. Manager, AcSIR</i>	<i>Non-Member Secretary</i>

Prof. K.R. Prasad, Indian Institute of Science; Prof. Geeta Sumbali, Former Professor & Dean, Life Sciences, University of Jammu; Prof. Sunil Kumar Singh, Director, CSIR-NIO, Goa; Prof. Manoranjan Parida, Director, CSIR-CRRI, New Delhi; Prof. Ajit K. Shasany, Director, CSIR-NBRI, Lucknow; and Dr. Indu Elizabeth, CSIR-NAL, Bengaluru, could not attend the meeting due to their prior engagements.

The quorum of the meeting was complete.

### **INITIATION OF THE MEETING**

#### **Item No. 1: Welcome address and brief update on the activities of AcSIR by the Chairman, Senate**

The Chairman, Senate extended a warm welcome to all members and appreciated their presence in the meeting. He acknowledged the hybrid format of the meeting as the new norm and expressed gratitude for the continued engagement of members in shaping the academic direction of AcSIR. He emphasized the pivotal role of the Senate as a key academic decision-making body of the Academy and underlined the collective responsibility of ensuring high standards in research, innovation, and education.

The Chairman briefly updated the Senate on the various developments and activities undertaken since the 33rd Senate Meeting held on August 28, 2024, as follows:

- **Academic Excellence and National Recognition:** AcSIR's consistent performance and upward trajectory in the National Institutional Ranking Framework (NIRF) under the 'Research Institutions' category from 22<sup>nd</sup> in 2021 to 11<sup>th</sup> in 2024 was credited to the efforts of students, faculty, and research staff.

A historic intake of 1,634 students (including 1437 in PhD and 197 in IDDP and other Master's and PGD programs) was recorded in 2024—AcSIR's highest till date—indicating its increasing appeal as a premier research institution. Additionally, 750 students joined in January 2025. A total of 831 Ph.D. degrees were awarded in 2024, with continued emphasis on maintaining academic quality alongside numerical growth.

- **Quality Assurance in Research at AcSIR:** The Chairman informed that the Hon'ble Chancellor, AcSIR has emphasized the importance of maintaining quality in research amid rising student numbers. The Chancellor has urged the Senate to ensure that mechanisms are in place to prevent any compromise on research rigor and the Senate should contribute towards enhancing stringency in research supervision and evaluation.
- **Convocation and Honorary Doctorates:** During the 8<sup>th</sup> Convocation, held on 23.11.2024, at Bharat Mandapam, New Delhi, Doctor of Science (Honoris Causa) degrees were conferred on four eminent scientists—Dr. R.A. Mashelkar, Prof. Samir K. Brahmachari, Dr. T. Ramasami, and Prof. Suresh K. Bhargava for their lifetime achievement in various areas of Science and Technology. Further, 342 PhD Degrees and 66 Masters' Degrees were also awarded. Best Thesis Awards were also presented to 12 PhD scholars and the Prof. Baldev Raj Memorial Award, instituted in collaboration with RMIT University, was awarded to three students.
- **International Collaborations and Global Exposure:** In alignment with the objectives of the National Education Policy (NEP) 2020 regarding the internationalization of higher education, AcSIR has significantly expanded its global engagement beyond its existing collaborations in Australia. Several new initiatives have been undertaken, and active discussions are currently underway with a few Australian and European universities in UK, Finland, Norway, and Germany for the establishment of Joint Degree Programs. The Chairman also informed that AcSIR has joined the Shastri Indo-Canadian Institute (SICI) as a new institutional member and participated in the Indian Members

Council meeting in 2025, where initiatives were discussed to foster academic partnerships with Canadian universities.

- **Growth of Science Clubs and Cultural Engagements:** The Science Club initiative has flourished and is now active in 32 CSIR labs, providing a platform for student-led innovation enhancing their skills.
- **Dr. APJ Abdul Kalam Transdisciplinary Lecture Series:** On the eve of the 93<sup>rd</sup> birth anniversary of Dr. A.P.J. Abdul Kalam, AcSIR instituted the Dr. APJ Abdul Kalam Transdisciplinary Lecture Series which aims to promote a holistic and transdisciplinary perspective in scientific research and higher education, in line with AcSIR's academic philosophy.

The inaugural lecture of the series was held on 14.10.2024, and was delivered by Dr. R.A. Mashelkar, FRS, on the title: "Balancing Excellence & Relevance in Scientific Research: Lessons from My Own Book of Life".

The second lecture under the series was delivered on 04.04.2025, by Dr. S. Sivaram, Honorary Professor at IISER Pune. He spoke on "what you must learn which they do not teach you in the University".

The Chairperson acknowledged the importance of such initiatives in shaping well-rounded researchers and highlighted that the lecture series will continue to feature eminent speakers, fostering dialogue that transcends disciplinary boundaries.

- **Digital Transformation:** AcSIR has signed an MoU with Samarth E-Gov Suite, University of Delhi, to implement an ERP platform for academic and administrative processes. This aligns with the Ministry of Education's goals for digital transformation in higher education and is expected to streamline student and faculty services across AcSIR's distributed ecosystem.

Before proceeding to the agenda items, the Chairman concluded his remarks by urging the Senate members to share their suggestions and critical feedback for further strengthening of AcSIR's academic brand and quality benchmarks.

The Members initiated a discussion on the National Institutional Ranking Framework (NIRF) and enquired about the gaps that AcSIR needs to address to improve its standing.

In response, the Chairman highlighted several key structural challenges affecting AcSIR's ranking metrics including (i) AcSIR not having a significant number of students in Master's Programs, which is a prominent parameter in NIRF's assessment criteria; (ii) A major concern lies in the perception metric, which carries significant weight in the NIRF framework. Despite strong performance indicators, AcSIR's score in perception metric is low.

The Chairman informed the Members that AcSIR has taken steps in this direction by (i) sending the AcSIR PhD Theses for evaluation to a diverse examiner pool drawn from leading national institutions, including IITs, IISc and various IISERs helping in improvement in AcSIR's visibility and credibility among peer researchers; (ii) revamping the AcSIR website with more dynamic features and aligned with modern communication needs; and (iii) taking initiative towards development of a new video journal showcasing PhD work of students in a concise, accessible format along with its societal relevance.

The members suggested additional measures to enhance the quality of research, visibility, and perception including encouraging all Senate members to actively promote AcSIR's achievements through social media platforms and their personal academic networks.

The Chairperson welcomed these thoughtful contributions and affirmed that steps would be taken to incorporate them in future academic reforms and outreach strategies.

After these remarks, the agenda items were placed before the Senate for deliberation by the Secretary.

**Item No. 2: Confirmation of the Proceedings of the 33<sup>rd</sup> meeting of the Senate:**

The Senate confirmed the proceedings of the 33<sup>rd</sup> meeting of the Senate, held on 28.08.2024.

**Item No. 3: Action Taken Report (ATR) on the recommendations of the 33<sup>rd</sup> Meeting of the Senate:**

The Senate was updated about the actions taken with respect to the various decisions of the 33<sup>rd</sup> meeting of the Senate.

### **ITEMS FOR INFORMATION**

**Item No. 4: Revised Estimate (RE) for FY 2024-2025, and the Budget Estimate (BE) for FY 2025-2026:**

The Senate took note of the Revised Estimate (RE) for FY 2024–2025 and the Budget Estimate (BE) for FY 2025–2026, as detailed below:

- (i) **Revised Estimate (RE) for FY 2024-2025 as Rs. 1201.50 Lakh** against the approved Budget Estimate (BE) of Rs. 1260.50 Lakh;
- (ii) **Budget Estimate (BE) for FY 2025-2026 for Rs. 1357.00 Lakh** against an anticipated income of Rs. 3103.48 lakhs.

The Senate noted that the Budget was approved by the Chairman, BoG on recommendation of the Chairman, Finance Committee. The Senate duly noted the finalized Revised Estimate (RE) for FY 2024-2025, and the Budget Estimate (BE) for FY 2025-2026 as placed.

**Item No. 5: Updates in eligibility criteria for (i) Project Assistants to apply in PhD programs & (ii)**

**PhD Medical Research:** The Senate took note of the revised eligibility criteria that the Project Assistants who have qualified any Ph.D. qualifying national-level examination [such as NET (Category 2 and 3), GATE, BET, JEST, etc.], even without fellowship, shall be exempted from the requirements of having one publication to be eligible for admission to AcSIR Ph.D. programs.

The Senate also took note of the revised eligibility criteria for candidates applying under the Faculty of Medical Research, tenable at ICMR institutes, MAX Institute, and TIGS. The new eligibility norms accommodate candidates with Qualifying degrees, in alignment with the needs of medical research, as detailed below:

Doctor of Medicine (D.M.) or Master of Chirurgiae (M.Ch.) or Doctor of Medicine (M.D.) or Master of Surgery (M.S.) from the National Medical Commission (NMC) (erstwhile Medical Council of India) recognized Medical College. **OR**

Master's degree in Science/Public Health with minimum 55% marks (without rounding off) or equivalent grade for General (UR)/General-EWS and minimum 50% marks (without rounding off) or equivalent grade for OBC (NCL)/SC/ST, Third gender and Persons with Disability (PwD). **OR**

Master's in population studies, social medicine, community health, anthropology, sociology and social work (medical), mathematical sciences, economics (health), biostatistics with minimum 55% marks (without rounding off) or equivalent grade for General (UR)/General/EWS and minimum 50% marks (without rounding off) or equivalent grade for OBC (NCL)/SC/ST, Third gender and Persons with Disability (PwD). **OR**

Bachelor of Medicine and Bachelor of Surgery (MBBS), or Bachelor of Dental Surgery (BDS)/Master of Dental Surgery (MDS) with minimum 55% marks (without rounding off) or equivalent grade for General (UR)/General-EWS and minimum 50% marks (without rounding off) or equivalent grade for OBC (NCL)/SC/ST, third gender and Persons with Disability (PwD) from the National Medical Commission (NMC) (erstwhile Medical Council of India) recognized Medical College.

**Item No. 6: International academic Agreements with (i) University of Melbourne, Australia and (ii) National Institute of Advanced Industrial Science and Technology ("AIST"), Japan:** The Senate took note of the formalization of international academic collaborations with the following organizations:

- University of Melbourne (Australia): Agreement signed on March 03, 2025, for a Joint Ph.D. (Cotutelle) Degree Program.
- AIST, Japan: Agreement signed on October 21, 2024, for Short-Term Training Programs.

**Item No. 7: International Academic Collaboration with University of Agder (UiA), Norway for Cotutelle Doctoral Program:** The Senate took note of the formalization of the following Agreement between AcSIR and the University of Agder (UiA), Norway on April 01, 2025, as detailed below:

- A Memorandum of Understanding (MoU) for establishment of bilateral collaboration, providing a mechanism for the development of activities which will lead to the strengthening and growth of mutually beneficial educational and scientific activities conducted jointly by AcSIR and UiA.
- An Agreement for a Cotutelle Doctoral Program, for establishment of a Cotutelle Degree Program.

**Item No. 8: Policy for recognition of non-PhD Faculty with MD and equivalent degrees as primary PhD supervisors:** The Senate took note of the policy, as approved by the Chairman, Senate, based on the recommendations of a committee constituted by ICMR, for recognizing non-Ph.D. faculty with MD/MS/MDS degrees as AcSIR faculty and PhD Supervisor subject to the fulfilment of following conditions:

- a) He/she should be of the level of Scientist C and above;

- b) He/she should have at least 5 years' teaching/research experience after completing MD/MS/MDS;
- c) He/she should fulfil the additional criteria laid down by the ICMR from time to time (current criteria: h index of at least 16 for primary supervisor and 8 for co-supervisor).

### **ITEMS FOR RATIFICATION**

**Item No. 9: PhD Students availing Academic Break:** The Senate ratified the approvals accorded by the Chairperson, Senate to the following students availing one-time Academic Break, as per the details given against each name:

AcSIR Research Inst.	Student Name	Faculty	Registration No.	Academic Break From	Academic Break Upto
CSIR-IICT	Rashmi Reddy Mallu	Engineering Sciences	20EE23J18001	22.02.2025	21.02.2026
CSIR-CEERI	Shipra Bhatia	Engineering Sciences	20EE19A06004	15.05.2024	14.11.2024
CSIR-NGRI	Monalisa Kundu	Physical Sciences	10PP21J28011	01.10.2024	30.09.2026
CSIR-4PI	Swetha S	Math. & Info. Sciences	10MM20A45002	14.10.2024	15.01.2025
CSIR-NCL	Pavan N. Kalbande	Chemical Sciences	10CC21J26024	22.07.2024	21.01.2025
CSIR-IIIM	Shabu	Biological Sciences	10BB19J37012	11.11.2023	02.01.2025 extended upto 10.11.2025
CSIR-NPL	Rekha	Physical Sciences	10PP20A32027	05.07.2024	20.05.2026
CSIR-IIIM	Savita Luxmi	Biological Sciences	1BB20J37017	11.03.2024	10.12.2024 extended upto 10.08.2025
CSIR-NCL	Hrushikesh Malshikare	Chemical Sciences	10CC20A26031	28.06.2024	27.09.2024 extended upto 28.09.2025
CSIR-CSIO	Vikas Kumat	Engineering Sciences	20EE18J15015	10.10.2023	09.10.2024 extended upto 09.04.2025
CSIR-NIScPR	Vijay Luxmi	Math. & Info. Sciences	10MM19J42004	10.10.2023	09.08.2024
CSIR-NIIST	Hari Priya V M	Chemical Sciences	10CC21A39020	21.03.2025	20.09.2025
CSIR-NPL	Sumit Nehra	Physical Sciences	10PP22A32010	15.04.2025	14.04.2027
CSIR-CSIO	Pranshu	Physical Sciences	10PP20J15003	01.06.2024	31.05.2025 extend upto 31.12.2025
CSIR-CSIO	Akriti Bajpai	Physical Sciences	10PP22A15001	15.05.2025	14.05.2026

**Item No. 10: Inter-Institutional Transfer of AcSIR PhD students:** The Senate ratified the approval accorded by the Chairperson, Senate on inter-institutional transfers of the following students:

Name of the Student	Faculty	Enrolment No.	AcSIR Research Inst.		Revised Enrollment No.
			From	To	
Kavita Singh Rao	Biological Sciences	10BB24J77017	ICMR-NIV	ICMR-NIMR	10PP21J38006
Tanbir Ahmed	Chemical Sciences	10CC21A12004	CSIR-CMERI	CSIR-NCL	10CC21A26065
Nibedita Sinha	Chemical Sciences	10CC22J12008	CSIR-CMERI	CSIR-NCL	10CC22J26030
Santanu Pal	Chemical Sciences	10CC22J12009	CSIR-CMERI	CSIR-NCL	10CC22J26031

Name of the Student	Faculty	Enrolment No.	AcSIR Research Inst.		Revised Enrollment No.
			From	To	
Chandni Das	Chemical Sciences	10CC22J12010	CSIR-CMERI	CSIR-NCL	10CC22J26032
Anjumol P.	Biological Sciences	10BB24J10016	CSIR-CIMAP	CSIR-NIIST	10BB24J39022
Liston Fdo R	Biological Sciences	10BB24J02026	CSIR-IGIB	ICMR-NIV	10BB24J77025
Ruchi Kumari	Biological Sciences	10BB23J04019	CSIR-CDRI	CSIR-CIMAP	10BB23J10028
Pooja	Physical Sciences	10PP24J19002	CSIR-IIP	CSIR-NPL	10PP24J32021
Suneesh N S	Medical Research	40MR24A98004	ICMR-NITVAR	ICMR-NIV	40MR24A77024

**Item No. 11: Change of students' enrolment in PhD program from Regular to "Exemptions from Physical Presence" after successful completion of PTOC:** The Senate ratified the grant of exemption by the Chairman, Senate from Physical Presence at the Associate Research Institute of AcSIR of work after completion of all academic requirements, including Open Colloquium (PTOC) for the following students:

Student Name	Registration No.	AcSIR Research Inst.	Faculty	Date of PTOC	Effective Date	Approval of Chairman, Senate
Vinod	10CC21J32001	CSIR-NPL	Chemical Sciences	30.12.2024	20.01.2025	20.01.2025
Animireddy Ramesh	10PP18A28007	CSIR-NGRI	Physical Sciences	20.12.2024	20.01.2025	20.01.2025
Shipra Bhatia	20EE19A06004	CSIR-CEERI	Engineering Sciences	18.12.2024	10.01.2025	20.01.2025
Dave Vidhiben Sanjaykumar	10CC21A16018	CSIR-CSMCRI	Chemical Sciences	24.10.2024	26.11.2024	12.12.2024
Akshay Unnikrishnan	10BB19A29017	CSIR-NIO	Biological Sciences	24.10.2024	14.11.2024	20.11.2024
Pasagadg Sion	10PP19A28024	CSIR-NGRI	Physical Sciences	12.11.2024	05.12.2024	05.12.2024
Sooraj Sreenath	10CC20J16010	CSIR-CSMCRI	Chemical Sciences	07.10.2024	08.10.2024	17.10.2024
Shashwat Gupta	10CC20J04053	CSIR-CDRI	Chemical Sciences	04.10.2024	11.10.2024	10.10.2024
Shivam Kumar	20EE18A31003	CSIR-NML	Engineering Sciences	09.08.2024	18.08.2024	12.09.2024
Shyam Sundar Prasad	30EE15A06003	CSIR-CEERI	Engineering Sciences	29.07.2024	06.09.2024	12.09.2024
Gayatri Salunkhe Ravindra	10BB18J26021	CSIR-NCL	Biological Sciences	30.01.2025	21.02.2025	05.03.2025
Pradeep Kumar	10CC20A04007	CSIR-CDRI	Chemical Sciences	03.03.2025	04.03.2025	13.03.2025
Naval Kishore Mehta	32EE18A06009	CSIR-CEERI	Engineering Sciences	12.03.2025	23.03.2025	23.03.2025
Shubham Jaiswal	10CC20J04054	CSIR-CDRI	Chemical Sciences	06.05.2025	08.05.2025	07.05.2025
Rajender Kumar	10CC20A33006	CSIR-IHBT	Chemical Sciences	13.12.2024	07.05.2025	07.05.2025
Vinay Rajput	10BB22A26014	CSIR-NCL	Biological Sciences	11.12.2024	19.05.2025	19.05.2025

**Item No. 12: PhD Students permitted to go abroad for research work in foreign Labs:** The Senate ratified the approval granted by the Chairperson, Senate to PhD students, for availing fellowships in foreign Labs, as detailed under:

Student Name	Enrollment No.	Institute	Fellowship	Location and Period of visit
Leeza Dutta	10PP23A32003	CSIR-NPL, New Delhi	Mehta Rice Engineering Scholars Program (MRESP) -2024	Rice University, Houston, USA (01.09.2024 to 31.12.2024)
Abeer Banerjee	32EE20A06005	CSIR-CEERI, Pilani	DAAD doctoral degree program	Technical University of Munich, Germany (01.10.2024 to 30.09.2025)
Suraj Kumar Sahu	10PP22J64008	DST-BSIP, Lucknow	SERB Overseas Visiting Doctoral Fellowship	University of Alberta, Canada (03.09.2024 to 31.08.2025)

Student Name	Enrollment No.	Institute	Fellowship	Location and Period of visit
Kalyani Sivan	10PP19A29010	CSIR-NIO, Goa	DAAD fellowship	Germany (01.10.2024 to 01.05.2025)

**Item No. 13: Re-registration for PhD for students of January 2019 Batch:** The Senate ratified the approval granted by the Chairperson, Senate for re-registration of 83 Ph.D. students enrolled in January 2019 batch, upon completion of the 6-year maximum duration.

**Item No. 14: Inclusion of Co-Supervisors for AcSIR PhD students from non-AcSIR institutes:** The Senate ratified the approval accorded by the Chairperson, Senate for inclusion of Co-Supervisors for 61 Ph.D. students, from non-associated Institutes of AcSIR as detailed at **Annexure M-1**.

**Item No. 15: Conversion of studentship from regular to sponsored category:** The Senate ratified conversion of PhD registration from Regular to Sponsored category, as approved by the Chairperson, Senate, for the following students:

Student's Name	Enrollment No.	AcSIR Research Inst.
Qadeer Ahmed	10PP19A32058	CSIR-NPL
Kapil Kumar	10PP20A32009	CSIR-NPL
Kartikay Shukla	10MM21J42003	CSIR-NIScPR
Sukanya Bhattacharjee	10CC24J12005	CSIR-CMERI
Divyansh Joshi	10PP23J32010	CSIR-NPL
Rahul Kichi	10PP20A29028	CSIR-NIO
Sreedevi T E	10CC22A39012	CSIR-NIIST
Shabir Ahmad Mir	10CC8A37029	CSIR-IIIM
Chunilal Bahadrya Pawara	10CC21J16002	CSIR-CSMCRI
Vikas	10PP24A15006	CSIR-CSIO
S K Ariful Hossain	10PP21A29006	CSIR-NIO
Abhishek Mandal	20EE23A12008	CSIR-CMERI
Md. Saddam Ansari	20EE23A12012	CSIR-CMERI
Abhishek Mitra	20EE23A12010	CSIR-CMERI
Tanmoy Mondal	20EE23J12010	CSIR-CMERI
Tanmoy Bhattacharjee	20EE25J12002	CSIR-CMERI
Sagar	10CC21A32008	CSIR-NPL
Faisal Rahman P	20EE24A29001	CSIR-NIO
Rohit	10PP24A32010	CSIR-NPL
Naveen Kumar	10PP22A32011	CSIR-NPL
Rishabh Goel	10CC24J32004	CSIR-NPL

**Item No. 16: Change of faculty/discipline of study of AcSIR PhD students:** The Senate ratified the approval accorded by the Chairperson, Senate for change of faculty/discipline of Ph.D. enrolment of students based on the recommendations of the Coordinators and the concerned Deans, for the following students:

Name of the Student	Research Inst.	Faculty	Enrollment No.	Changed Faculty	Revised Enrollment No.
Nimmy Reghu	CSIR-NIIST	Agricultural Sciences	10AA24A39003	Biological Sciences	10AB24A39043
Rayhana J S	CSIR-NIIST	Agricultural Sciences	10AA24A39001	Biological Sciences	10AB24A39041

<b>Anjana P V</b>	CSIR-NIIST	Agricultural Sciences	10AA24A39002	Biological Sciences	10AB24A39042
<b>Nidhi Tiwari</b>	CBMR	Biological Sciences	10BB24A71007	Physical Sciences	10BP24A71001
<b>Sanjib Das</b>	TCG Crest	Physical Sciences	10PP23A78002	Chemical Sciences	10PC23A78002
<b>Rajdeep Boral</b>	TCG Crest	Chemical Sciences	10CC23A78001	Physical Sciences	10CP23A78001
<b>Ayan K Ghosh</b>	TCG Crest	Physical Sciences	10PP23A78006	Engineering Sciences	20PE23A78006
<b>Hemant</b>	DST-INST	Biological Sciences	10BB21J67006	Chemical Sciences	10CC21J67001
<b>Sanjay Singh Gahlaud</b>	DST-BSIP	Biological Sciences	10BB25J64005	Physical Sciences	10BP25J64005
<b>Sona Kurian</b>	CSIR-NIIST	Agricultural Sciences	10AA25J39001	Biological Sciences	10AB25J39033

**Item No. 17: Admission to PhD programs of AcSIR for January 2025 session:** The Senate ratified the admission proceedings for the PhD program (including IDDP) for the January 2025 academic session. In total, 751 students joined the AcSIR PhD programs including PhD Science, PhD-Engineering and the Integrated Dual Degree (MTech-PhD) Program (IDDP), at 82 Research Institutes (38 CSIR Institutes, 28 ICMR Institutes and 16 other associated Institutes of AcSIR), as detailed below:

Sl. No.	Faculty	Students Joined
1.	Biological Sciences	315
2.	Chemical Sciences	168
3.	Physical Sciences	93
4.	Mathematical & Information Sciences	12
5.	Agricultural Sciences	8
6.	Medical Research	45
7.	Engineering Sciences	78
8.	IDDP (Engineering)	32
<b>TOTAL</b>		<b>751</b>

**Item No. 18: Admission to PhD program in Engineering Sciences for one remaining seat for January 2024 session under the Visvesvaraya Scheme:** The Senate ratified the admission proceedings for selection of one student at CSIR-CEERI, Pilani for the remaining seat of the January 2024 session under the Visvesvaraya Ph.D. Scheme session.

**Item No. 19: Admission to the iPhD program for January 2025 session:** The Senate ratified the approval granted by the Chairperson, Senate for Phase 1 admissions to the new iPhD program, launched in collaboration with the National Innovation Foundation (NIF). Four students were provisionally selected under Scheme B (for existing AcSIR students) for January 2025 session.

**Item No. 20: Admission to MSc program in 'Applied Nutrition' and 'Sports Nutrition' at ICMR-NIN for August 2024 session:** The Senate ratified the admissions to M.Sc. programs in 'Applied Nutrition' and 'Sports Nutrition' at ICMR-NIN, Hyderabad for August 2024 session, with full intake of 24 and 18 students, respectively.

**Item No. 21: Admission to Masters in Public Health program at Max Society of Medical Academics Innovation and Research, New Delhi for August 2024 session:** The Senate ratified the admission of 21

students to the Master of Public Health program at Max Society of Medical Academics Innovation and Research (MSMAIR), New Delhi, for the August 2024 session.

**Item No. 22: Award of PhD Degrees in Science and Engineering:** The Senate ratified the results of 730 students who have completed all the academic requirements for the award of PhD degree (Since the 33<sup>rd</sup> meeting held on 28.08.2024). The Senate also noted that since inception, 5,301 Ph.D. degrees have been awarded by AcSIR (upto May 19, 2025).

**Item No. 23: Award of Masters' Degree:** The Senate ratified the award of M.Sc. degree to one student from the 2022–2024 batch of the Integrated MSc–Ph.D. Program in Health Informatics at IIPH/PHFI, Hyderabad, upon completion of all academic requirements.

**Item No. 24: Information items from the Joint meeting (9th) of the Board of Studies:** The Senate ratified the following proposals from the Joint 9<sup>th</sup> Meeting of the Boards of Studies (BoS) for 'Engineering & Physical Sciences Cluster' and 'Biological & Chemical Sciences Cluster' held on May 14, 2025 (**Annexure M-2**):

- 24.1. **Introduction of new Courses and modification of existing Courses;**
- 24.2. **Modification of Courses under M.Sc. (Food Technology) offered at CSIR-CFTRI, Mysuru;**
- 24.3. **Introduction of a new faculty of Biological Sciences at CSIR-AMPRI, Bhopal and courses therein;**
- 24.4. **Introduction of Integrated Dual Degree Program (IDDP: M. Tech + Ph.D.) at CSIR-CSMCRI, Bhavnagar** in the following areas of specialization: (i) Civil & Environmental Engineering, (ii) Chemical & Bio-Chemical Engineering, (iii) Mechanical Engineering, and (iv) Biotechnology Program Structure;
- 24.5. **Introduction of M. Tech Program at CSIR-CECRI, Karaikudi** in "Corrosion Science and Engineering";
- 24.6. **Introduction of Masters' program at Max-MIME, New Delhi** in "Healthcare Quality Management";
- 24.7. **Introduction of PG Diploma program by Max-MIME, New Delhi** in (i) Healthcare Quality Management and (ii) Public Health;
- 24.8. **Introduction of PG Diploma at CSIR-CSIO** in "Semiconductor Technologies (Assembly, Testing, Marking, and Packaging)".

**Item No. 25: Nomination of AcSIR Coordinators at all AcSIR Research Institutes:** The Senate ratified the appointments of AcSIR Coordinators at all 80 associated Research Institutes, as approved by the Chairman, Senate, in accordance with Clause 25 of AcSIR Statutes, 2017.

**Item No. 26: Updated information on strength and status of Faculty Members of AcSIR:** The Senate ratified the updated list of AcSIR faculty members, granted recognition by the Chairman, Senate, as on 30.04.2025, as detailed below:

Category	CSIR Institutes	ICMR Institutes	Other Associated Institutes	Total
Assistant Professors	1441	119	159	1719
Associate Professors	611	98	84	793
Professors	505	74	42	621
Outstanding Professors	34	20	5	59
Emeritus Professors	–	–	4	4
<b>TOTAL</b>				<b>3196</b>

## **ITEMS FOR DISCUSSION AND APPROVAL**

**Item No. 27: Induction of Adjunct Faculty of AcSIR:** The Senate considered and resolved to approve the induction of the following professionals as Adjunct Faculty of AcSIR, in accordance with Clause 46 of the AcSIR Statutes (2017):

- **Dr. Sunil Kaul**, Invited Senior Researcher, AIST, Japan
- **Dr. Renu Wadhwa**, Prime Senior Researcher & Head, AIST-INDIA DAILAB, AIST, Japan, and
- **Dr. Harpreet Singh**, at CSIR-IGIB, Delhi

The members suggested evolving a Standard Operating Procedure (SOP) for the appointment of Adjunct Faculty. It was informed that such guidelines already exist and it will be appropriately updated to ensure consistency and transparency in future nominations.

**Item No. 28: Introduction of “Professor of Practice” position in accordance to the NEP 2020:** The Senate considered and resolved to approve the introduction of the position of “Professor of Practice”. The Professor of Practice shall be appointed from amongst distinguished experts having remarkable contributions in diversified research areas. This model is in-line with the National Education Policy (NEP) 2020 and fulfils a critical gap in industry-academia engagement. Only such person shall be considered for “Professor of Practice” who fulfil the following eligibility criteria:

1. Distinguished expert of any field, especially industry, who has proven expertise in his/her specific profession or a role at a senior level;
2. A formal academic qualification shall not be considered essential for this position if they have exemplary professional practice in lieu. These experts will also be exempted from the requirement of publications and other eligibility criteria stipulated for the recognition/appointment of faculty members at the Professor level;
3. The engagement of Professor of Practice shall be for as long as his/her academic engagement continues with AcSIR;
4. Professor of Practice shall not generally be open for those in teaching profession- serving or retired;
5. Professor of Practice shall be on honorary basis.

The Chairman emphasised that such positions would be considered based on the seniority and subject domain expertise on a case-to-case basis.

**Item No. 29: International academic collaboration:** The Senate considered and resolved to approve the following proposals for international academic collaboration:

- a) **Murdoch University, Perth, Australia** – for establishing a Joint PhD Degree Program in Cotutelle Mode;
- b) **University of Wolverhampton, UK** – to explore the possibility of establishing a mutually beneficial relationship to promote education and collaboration, in areas of common interest;
- c) **Norwegian University of Science and Technology (NTNU), Norway** – for research collaboration and Joint PhD program.

The Senate accorded in-principle approval for initiating international academic collaborations with the above institutions and to proceed with further formalities, including academic discussions and signing of agreements. For future, the Senate suggested instituting a mechanism for quality screening of such partner universities.

**Item No. 30: Guidelines for consideration of Academic Collaboration with non-CSIR Institutes:** The Senate considered the recommendations of the Directorate of Academic Affairs regarding the initial screening criteria for non-CSIR institutions seeking academic association with AcSIR, as detailed below:

- (i) It should preferably be a National-level/autonomous research institute with good research infrastructure;
- (ii) The academic/research programs of the institution should be in subject areas compatible with the academic and research programs of AcSIR Associated Research Institutes, with particular stress on innovative and interdisciplinary areas of study;
- (iii) The institute should have adequate manpower, eligible to supervise PhD students and to teach the academic courses, to ensure a sizable enrolment at the institute in the academic program each semester
- (iv) The institution should have sufficient funds to support its academic activities. It would be preferred if the institute is already running a few academic programs since at least last 5 years.
- (v) The institute should agree, as far as possible, to only enroll all the students under the AcSIR program.

The initial screening shall be carried out by the Directorate of Academic Affairs, in accordance to the above criteria and with special emphasis on quality, sustainability, and mutual benefits and only those institutes, meeting these criteria shall be evaluated by an Expert Committee, as per the SoP approved by the Board earlier.

After deliberation, the Senate resolved to approve the proposed guidelines.

**Item No. 31: Policy on Renewal of Association for non-CSIR Institutes associated through Agreements:** The Senate deliberated on the need for a uniform policy for renewal of existing agreements with non-CSIR Associated Research Institutes and as per the recommendations of the Directorate of Academic Affairs. The Senate resolved to approve the following criteria for evaluation of existing academic associations for renewal:

- (a) Academic programs offered under AcSIR (PhD/MTech/MSc/MPH etc.);
- (b) Student enrollment under AcSIR Academic programs (PhD/MTech/MSc/MPH etc.) during the term of the agreement;
- (c) Number of students awarded degrees (PhD/MTech/MSc/MPH etc.);
- (d) Number of AcSIR approved courses being offered to the students;
- (e) Best practices followed at the Institute;
- (f) Impact of the programs;
- (g) Student placements, if any;
- (h) Quality and number of research publications;
- (i) Awards, honors earned by the students;
- (j) Number of Scientists recognized by AcSIR as Faculty (Guiding & Teaching);
- (k) Patents filed/granted having AcSIR students named as co-inventors;
- (l) Research Projects handled.

The Chairman, Senate was authorized to approve the renewal of such collaborations with the Institutes, who fulfil the above criteria.

**Item No. 32: Academic association and recognition of all Institutes under Ministry of Earth Sciences as AcSIR Research Institutes through Agreement:** The Senate considered the recommendations of the Directorate of Academic Affairs for an Umbrella Agreement with the Ministry of Earth Sciences (MoES) to recognize the following 10 MoES institutions as AcSIR Research Institutes:

1. India Meteorological Department (IMD), New Delhi
2. National Center for Medium Range Weather Forecasting (NCMRWF), Noida
3. Center for Marine Living Resources and Ecology (CMLRE), Kochi
4. National Center for Seismology (NCS), New Delhi
5. National Center for Coastal Research (NCCR), Chennai
6. National Center for Polar & Ocean Research (NCPOR), Goa
7. Indian National Center for Ocean Information Services (INCOIS), Hyderabad
8. Indian Institute of Tropical Meteorology (IITM), Pune
9. National Institute of Ocean Technology (NIOT), Chennai
10. National Center for Earth Science Studies (NCESS), Thiruvananthapuram

The Senate resolved to approve the proposal in-principle for collective recognition of the 10 Institutes under MoES, subject to payment of Annual Association Fee as per AcSIR norms.

**Item No. 33: Revision of mandatory requirement of external co-supervisor for sponsored PhD students:** The Senate discussed the requirements for the PhD Sponsored candidates of having a co-supervisor from another reputed institution other than his/her parent Institute viz. (i) Internal

candidates who are the permanent employees of AcSIR Associated Research Institutes and (ii) Regular employees of Industry.

The members discussed the issues of compliance and practical relevance of having an external co-supervisor for Sponsored Candidates. It was acknowledged that, while the original intent was to ensure academic integrity and prevent conflicts of interest, in many cases the external supervisors had minimal academic contribution or engagement, in the research work of the Sponsored PhD students. Accordingly, the Senate resolved to discontinue the requirement of having an external co-supervisor for all the categories of Sponsored PhD students.

However, in order to ensure strict quality standards and for maintenance of academic integrity in the PhD process, the Senate resolved to adopt common criteria for both the categories of Sponsored Candidates, viz. (i) Internal candidates who are the permanent employees of AcSIR Associated Research Institutes; and (ii) Regular employees of Industry, as detailed below:

- mandatory inclusion of an external member in the Doctoral Advisory Committee, with approval of the concerned Dean of the faculty;
- attendance of the external member of the Doctoral Advisory Committee shall be mandatory in all meetings for fulfilment of the quorum.

Accordingly, the Senate recommended that the Clause 4(5)(l)(i)(c)(i) of the AcSIR Ordinances, 2017 may be replaced by the following Clause **4(5)(l)(i)(c)(i-ii)** in the updated AcSIR Ordinances, subject to the approval of the Board:

Existing Clause 4(5)(l)(i)(c)(i) of the AcSIR Ordinances, 2017	Proposed revision in the AcSIR Ordinances 4(5)(l)(i)(c)(i-ii)
<i>(c) such candidates shall be considered as institute Sponsored Candidates and shall fulfill the following criteria, namely:-</i>	
<i>(i) he must have a guide or co-guide in another reputed institution, other than his primary appointing laboratory;</i>	<i>(i) mandatory inclusion of an external member in Doctoral Advisory Committee, with approval of the concerned Dean of the faculty;</i>
<i>(ii) the proposed research programme should be interdisciplinary; and</i>	<i>(ii) attendance of the external member of the Doctoral Advisory Committee shall be mandatory in all meetings for fulfilment of the quorum.</i>
<i>(iii) he must spend one semester in the institute of the guide or co-guide including course work, if necessary, to justify the interdisciplinary nature of the study;</i>	<i>Clause already deleted vide BoG approval at its 10<sup>th</sup> meeting held on 13.09.2024 [vide Item No. 10.20(iv)]</i>

**Item No. 34: Revision in minimum publication requirement as mandatory prerequisite for PhD Thesis Submission:** The Senate deliberated on the requirement of minimum one publication as prerequisite for Ph.D. thesis submission. The Senate stressed that appropriate publication ethics should

be practiced by the supervisors ensuring that the students receive due recognition for their contribution in research publications. The matter has been considered by the Directorate of Academic Affairs, at its meeting dated May 02, 2025. After thorough discussion, the Senate resolved to approve the following publication prerequisites for PhD thesis submission:

- a) Minimum of one publication, where the student is first-author or corresponding author or joint first author having equal contribution, and supervisor(s) as co-author, emanating from the original PhD thesis research work of the PhD student(s), as the case may be, published in a journal indexed in the Science Citation Index (SCI) or SCI-Expanded (SCIE); **OR**  
At least one patent (filed or published or granted), provided the research contribution emanated from the student's original Ph.D. thesis research work;
- b) Reviews/review articles/ Book Chapters, published even in a journal indexed in the Science Citation Index (SCI) or SCI-Expanded (SCIE), shall not be considered as publication prerequisite for thesis submission.

**Item No. 35: Revision in the number of External Examiners for PhD Thesis Board:** The Senate reviewed the recommendations of the Directorate of Academic Affairs, at its meeting dated May 02, 2025, for reduction in the number of external examiners in the PhD Thesis Board from eight (08) to six (06). After deliberation, the Senate resolved to approve the following:

- the number of examiners shall be a minimum of six (06), ensuring that no more than one examiner is proposed from a single state;
- henceforth the consent of the external examiners for thesis evaluation shall be obtained only by the AcSIR HQs.;
- the list of external examiners of the PhD Thesis Board has to be submitted along with the proceedings of successful conduct of PTOC, but not later than a month before the submission of thesis;
- in case the CVs of the external examiners are not available, publicly available website links to CVs will be accepted.

**Item No. 36: Revision in PhD Thesis submission timeline after successful conduct of PTOC (DAC-IV):** The Senate reviewed the recommendations of the Directorate of Academic Affairs, at its meeting dated May 02, 2025 and resolved to revise the thesis submission timeline as detailed below:

- i) PhD thesis can be submitted any time within three (03) months of successful conduct of Pre Thesis Open Colloquium (PTOC);
- ii) Submission beyond three (03) months will require Dean's approval for the requested extension period (maximum upto additional 03 months), on the basis of satisfactory reasons for the delay/extension. The permission, if granted, will be recorded at Dean/Associate Dean's level under intimation to the Associate Director (Academic), AcSIR;

- iii) If the thesis is not submitted within six (06) months (i.e., 03 months of usual time plus 03 months of extension, as above) of successful clearance of the PTOC, student will have to seek approval from the Chairman, Senate, through the concerned Dean, for reappearance at the PTOC. If granted, the student shall have to clear the PTOC within one (01) month and shall have to submit the PhD thesis within the next five (05) months, beyond which the PhD enrollment is liable to be cancelled. During this entire period, tuition fee shall be payable. Under no circumstances, the maximum tenure of PhD enrollment and submission of thesis, shall exceed six (06) years or eight (08) years with re-registration, as the case may be.

Provided that, female PhD scholars and Persons with Disabilities (having more than 40% disability) may be allowed an additional relaxation of two (02) years; however, the total period of completion of a PhD program in such cases should not exceed ten (10) years from the date of enrollment in the PhD program;

- iv) The tuition fees during the initial six (06) months period after successful conduct of PTOC (i.e., 03 months of usual time plus 03 months of extension, if granted), shall be payable at the rate of usual semester fees. The tuition fee shall be double of the usual semester fee beyond the six (06) months till submission of thesis. Further, tuition fee charged will be for full semester(s) or, even if period covered is only part of the semester.

These revised rules shall not be applicable for such students, who have already successfully cleared the PTOC prior to the date of implementation of these rules.

**Item No. 37: Review of enrollment in Master's and PG Diploma Courses:** The Senate deliberated on the Recommendations of the Joint meeting (9th) of the Board of Studies on the current status of enrolment in various Master's and PG Diploma programs from 2018 to 2024. It was noted that while some programs have attracted adequate student interest, others have witnessed consistently low or nil enrolments.

The Senate resolved that programs with nil or low enrolment (less than 5 students in two consecutive sessions) shall be reviewed for their relevance, demand, and structure. Institutes running such programs shall be asked to submit justifications for continuation of their programs before the next Senate meeting for further review.

**Item No. 38: Modification in the eligibility criteria for PhD: inclusion of candidates with UG degree with additional credit requirements for the program:** The Senate considered the recommendation of the Joint Meeting (9th) of the Board of Studies, modifying the eligibility criteria for Ph.D. programs to include candidates with a four-year undergraduate degree in alignment with UGC regulations 2022

and the NEP 2020. Members noted that direct Ph.D. admission after four-year undergraduate degrees had been practiced in AcSIR before and is followed by many HEIs in India.

While recognizing this as a progressive step, in order to ensure parity between UG degree holders and Master's degree entrants, it was recommended that such candidates undertake an additional academic year comprising of (i) Masters' Level coursework; and (ii) a mini-research project, the credit requirements for which are to be decided by the Board of Studies.

Such students can appear for Comprehensive Examination only after completion of (i) and (ii) above.

After discussion, the Senate approved the eligibility of applicants with a 4-year undergraduate degree for direct Ph.D. admission.

**Item No. 39: iPhD: Proposed Insertions/ Modifications in its Structure:** The Senate considered the proposed modifications in the structure of the iPhD program, as recommended by the Joint meeting (9th) of the Board of Studies and resolved to approve the proposed modifications for implementation, as detailed below:

Item	iPhD program structure
Program focus	Research to develop new product / technology for national progress & societal good.
Eligibility Requirements	<ul style="list-style-type: none"> <li>Master degree holder with demonstrated entrepreneurial activities</li> </ul>
Supervisor/ Co-supervisor	<ul style="list-style-type: none"> <li>Student shall be jointly supervised by the faculty of AcSIR and Industrial expert.</li> <li>Potential AcSIR Supervisors should possess documented experience in Industrial Projects; OR, Filed patent(s); OR Industrial Technology development</li> </ul>
Credit & course requirements	<p>18</p> <p><i>Research Methodology: 4</i></p> <p><i>Research &amp; Publication Ethics: 2</i></p> <p><b><i>Credits from Advanced Courses of the domain: 6 credits</i></b></p> <p><b><i>Credits from the Innovation, Start-up, Management domain: 6 credits</i></b></p> <p><b>Core Coursework (to be completed, within 3 years of enrolment, from SWAYAM / NPTEL or alternate arrangement):</b></p> <p><b>1 Innovation and Start-up Policy:</b></p> <ul style="list-style-type: none"> <li>The policy framework for promoting innovation and startups in India; the innovation ecosystem, including institutions and key concepts. Innovation and Innovation Ecosystem; Policy Framework; Startup Landscape and Innovation Hubs; Digital India and Make in India; Linking Innovation with IPR; Raising Finance for Startups in India; Innovation in Indian Context; Writing a Business Plan</li> </ul> <p><b>2 Managing Innovation</b></p> <ul style="list-style-type: none"> <li>To develop an innovative mindset, design thinking, and managing Research &amp; Development.</li> </ul> <p>The process of innovation; Developing an innovative mindset; Design thinking for innovation; Managing Research &amp; Development; Open innovation; Creating</p>

Item	iPhD program structure
	<p>an innovative organization; Measuring and sustaining innovation; Systematic approach to innovation; Building an innovation pipeline; Improving idea velocity; Enhancing business impact through an 8-step methodology.</p> <p><b>3 Valuation and Creating Sustainable Value</b></p> <ul style="list-style-type: none"> <li>Valuing companies and projects, with an emphasis on sustainable value creation. Fundamental concepts in finance, accounting, and valuation; Introduction to Valuation; Discounted Cash Flow Method; Relative Valuation; Real Options; Value Enhancement: Strategic choices; Start-up Valuation; Drivers for Creating Sustainable Value; Framework for Sustainable Growth.</li> </ul> <p><b>4 IP Management &amp; Technology Transfer</b></p> <ul style="list-style-type: none"> <li>To understand the principles of Intellectual Property (IP) and its management. Covers patents, trademarks, copyrights, and trade secrets. Technology transfer processes and commercialization of inventions. Introduction to IP &amp; IP Management; IP Lifecycle Management; Use of IP Analytics for IPM; Technology Transfer Concepts and Methods; IP and Technology Transfer Contracts; Commercialization of Inventions.</li> </ul>

**Item No. 40: Introduction of Master's program in Fragrance, Flavour & Cosmetics in collaboration with CSIR-CIMAP, Lucknow, and MSME-Fragrance and Flavour Development Centre (FFDC), Kannauj:** The Senate considered the proposal to initiate a Master's program in Fragrance, Flavour & Cosmetics, developed in collaboration with CSIR-CIMAP, Lucknow and the Fragrance and Flavour Development Centre (FFDC), Kannauj, an autonomous institution under the Ministry of MSME, as recommended in-principle, by the Board of Studies at its Joint (9th) meeting.

The Senate resolved to accord in principle approval and directed the Board of Studies to finalize the curriculum and credit structure and ensure minimum enrolment and sustenance plan for the program and authorized the Chairman, Senate to approve the final proposal, without waiting for the next Senate meeting, to prevent undue delay in launching the program.

**Item No. 41: Modification in the constitution of the Boards of Studies due to their restructuring and proposal for amendment of relevant Clauses of AcSIR Statutes 2017:** In view of the approval accorded by the Board of Governors [10<sup>th</sup> meeting held on 13.09.2024, vide Item No. 10.20(ii)] on restructuring of the Boards of Studies, the Senate recommended the amendment to Clause 30 (3) of the AcSIR Statutes, 2017 on the Composition of each of the Board of Studies, as detailed below:

- Associate Director (Academic) who shall be the Chairperson of each of the Board of Studies;
- the concerned Dean(s) of the Faculty of Study;
- two members from the Senate, representing the concerned Faculty of Study(s);
- two scientists from Research Institutes of AcSIR other than those nominated in the Board or the Senate;
- two external experts, from other academic or research institutions or Industries, other than those nominated in the Board or the Senate;
- the concerned Associate Dean(s) of the Faculty of Study; and

g) Senior Manager in charge of Academics shall be the non-Member Secretary.

The Senate recommended the proposed revision for placement before the Board of Governors, for ratification and incorporation into the Statutes.

**Item No. 42: Extension of all applicable rules of AcSIR to the non-CSIR Institutes associated as “AcSIR Associated Research Institutes” through Agreements:** The Senate considered the proposal for formal extension of all academic and administrative rules of AcSIR to the non-CSIR institutes recognized as “AcSIR Associated Research Institutes” through agreements. It was clarified that while such provisions already exist in individual agreements, however, incorporating it explicitly within the Statutes would lend uniformity and legal clarity.

The Senate recommended the proposal for placement before the Board of Governors, for approval.

**Item No. 43: Minutes of the 26th meeting of the Finance Committee:** The Senate considered the recommendations of the 26<sup>th</sup> Finance Committee (FC) Meeting held on February 01, 2025, as detailed below:

26 <sup>th</sup> FC Item No.	Details of Items
Item No. 5	<b>Reimbursement of return Airfare for AcSIR students selected under AcSIR-University of Western Australia (UWA) Joint Degree Program (JDP)</b> upto a maximum of Rs. 90,000/- per student once during their period of co-enrollment
Item No. 6	<b>Partial Reimbursement of Australian VISA Fee for International Joint Cotutelle PhD Program Students not covered by partner University</b> upto a maximum of Rs. 50,000/- or 50% of the actual Australian VISA fee, whichever is lower
Item No. 8	<b>Reimbursement of Overseas Student Health Cover (OSHC) for AcSIR students selected under AcSIR-University of Western Australia (UWA) Joint Degree Program (JDP)</b> upto a maximum amount of Rs. 60,000/
Item No. 9	<b>AcSIR’s Annual membership to Shastri Indo-Canadian Institute (SICI)’s Indian Member Council</b>
Item No. 12	<b>Expenses for 8th Convocation 2024:</b> total budget for the Convocation as Rs. 60.30 lakhs which is reflected in the Revised Budget for the FY 2024-2025
Item No. 15	<b>Renovation of the Office Space at AcSIR HQs.</b> i) <b>Update on the ongoing renovation work at AcSIR HQs.:</b> Total expenditure contained within the approved budget ii) <b>Proposed renovation of the existing office areas at AcSIR HQs.:</b> Total estimated expenditure of approximately Rs. 40.0 Lakhs for Civil and Electrical work and an additional estimated amount of Rs. 15.0 Lakhs for office furniture.

The Senate endorsed the recommendations, for placement before the Board of Governors for approval.

**Item No. 44: Any other Item with permission of the Chair**

**Additional Item No. 44(i): Maintenance of academic integrity:**

The Senate addressed a sensitive issue concerning the retraction of multiple research papers authored by a faculty member of AcSIR. The Chancellor's concerns on the matter were highlighted, emphasizing the potential impact on AcSIR's reputation and the career of the affected Ph.D. students.

The following key points were discussed:

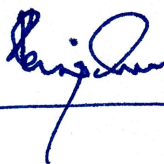
- **Nature of Retractions:** The Members stressed that in case of retractions, it needs to be ascertained whether the retractions are due to academic malpractice or minor errors of judgement. For such cases, AcSIR should either conduct its own investigation or should consult the findings of any investigation committee constituted at the concerned Institute.
- **Student Impact:** The Senate deliberated that conduct of viva voce or declaration of results for any such student, whose publication(s) have been retracted, should be put on immediate hold till the outcomes of investigation are available and further decision is taken by the Competent Authority of AcSIR.
- **Institutional Responsibility:** It was suggested that institutes should be sensitized about such issues and should conduct periodic internal reviews to prevent such occurrences.
- **Zero Tolerance Policy:** Members emphasized that AcSIR should strictly address academic malpractice, ensuring faculty accountability.
- **Future Preventive Measures:** The need for awareness, ethical training, and possibly an institutional oversight committee was discussed.

**Additional Item No. 44(i): Proposal for MTech Program in Food Technology at CSIR-CFTRI:**

The proposal for MTech Program in Food Technology at CSIR-CFTRI was received after the meeting of the Board of Studies. However, it was endorsed by the Dean, Engineering Sciences with the remarks that the program is valuable for students and industry alike. It was noted by the members that CSIR-CFTRI already runs a successful M.Sc. program in 'Food Technology', and the proposal aims to extend admission to BTech students, granting them MTech degrees with industry-relevant training. The coursework remains largely aligned with the existing program, ensuring consistency and academic rigor.

The Senate authorized the Chairperson to approve the MTech program in "Food Technology" at CSIR-CFTRI.

The meeting ended with a vote of thanks to the Chair.



(Prof. Manoj Kumar Dhar)  
Chairman, Senate

**Inclusion of Co-Supervisors for AcSIR PhD students from non-AcSIR institutes**

Sl. No.	Student Name	Enrollment No.	CSIR Lab	AcSIR Supervisor	Inclusion of Co-supervisor
1	K. Chandra Shekhar	10CC24A18039	CSIR-IICT	Dr. Debasish Swain	Dr. P. Someshwar, Asst. Prof., Osmania University, Hyderabad
2	Appala Naidu Chokkapu	10CC25J18032	CSIR-IICT	Dr. Ujjwal Pal	Dr. Madhuri Dumpala, Asst. Prof., Osmania University, Hyderabad
3	Utpal Manna	20EE24A12002	CSIR-CMERI	Dr. Suman Saha	Dr. Ankur Bhattacharya, Asst. Prof., BITS, Pilani
4	Athul K	10CC24A39014	CSIR-NIIST	Dr. C. Kesavachandran	Dr. K. Anoop Krishnan, Scientist, National Centre for Earth Sciences Studies, Ministry of Earth Sciences, Thiruvananthapuram
5	Sourav Mondal	20EE24J12025	CSIR-CMERI	Dr. Pradeep Rajan	Dr. Mukesh Kumar Saini, Asst. Prof, IIT Ropar
6	Phull Gurlovleen Singh	20EE24J12029	CSIR-CMERI	Dr. Pradeep Rajan	Dr. Peeyush Soni, Asso. Prof, IIT Kharagpur
7	Viji K	32EE24A12006	CSIR-CMERI	Dr. Manidipto Mukherjee	Dr. Amitava Mondal, Asso. Prof., IIT Dhanbad
8	Anup Rajak	32EE24A12007	CSIR-CMERI	Dr. Ved Prakash	Dr. Himanshu Khandelwal, Asst. Prof., NIAMT, Jharkhand
9	Raj Kishore	32EE23A27006	CSIR-NEERI	Dr. Sunil Kumar	Dr. Vikas Kumar, Asst. Prof, Central University of Haryana, Mahendragarh
10	Gaikwd Siddharth Pandurang	20EE24A14024	CSIR-CRRI	Dr. G Bharath	Dr. Kranthi Kumar Kuna, Associate Professor, IIT Kharagpur
11	Debasree Sarkar	20EE24J12018	CSIR-CMERI	Dr. Arup Kr. Nandi	Prof. Surajit Kundu, Assistant Professor, NIT Jamshedpur
12	Kalyan Maji	20EE24J12019	CSIR-CMERI	Dr. Umesh S. Patkar	Prof. Subir Gupta, Associate Professor, Haldia Institute of Technology, West Bengal
13	Manish Yadav	20EE24A36003	CSIR-IMMT	Dr. Sumit Saha	Prof. Nitin K Singh, Associate Professor, Marwadi University, Gujarat
14	Ganvir Ganesh Vasantao	20EE23A14017	CSIR-CRRI	Dr. Abhishek Mittal	Prof. G D Ransinchung, IIT Roorkee
15	Sreedevi T E	10CC22A39012	CSIR-NIIST	Dr. K Jayasankar	Prof. Upendra Singh, HoD, JNARDDC, Nagpur
16	L. Yugender Raju	10CC25J18027	CSIR-IICT	Dr. Arindam Chakraborty	Dr. Someshwar Pola, Assistant Professor Osmania University
17	Sudesh Yadav	20EE23J32002	CSIR-NPL	Dr. Rajesh	Prof. Amit Chaudhary, Assistant Professor, University of Delhi
18	Kimmi Gupta	20EE23A14012	CSIR-CRRI	Dr. Ravi Sekhar	Dr. Dileep Kumar Yadav (Associate Professor, Bennett University)
19	Sagar Nimsadkar	10CC23A27006	CSIR-NEERI	Dr. S. K. Singh	Prof. Ratnadeep C Sawant, Asst. Prof., Dr. Ambedkar College, Deekshabhoomi, Nagpur
20	Paridhi Gupta	10BB24A02039	CSIR-IGIB	Dr. Swarnendu Bag	Dr. Jyotirmoi Aich, Deputy General Manager, R&D, MicroCRISP, Gujarat
21	Alok Kumar Nanda	20EE23J36001	CSIR-IMMT	Dr. Sourav Ganguly	Prof. Anindya Basu, Professor, NIT, Rourkela
22	Srikanth Renukunta	20EE23A14013	CSIR-CRRI	Dr. Ch. Ravi Sekhar	Prof. Ankit Khaturia, Associate Professor, IIT Jammu
23	B C Venkateshwarlu	10CC24J31002	CSIR-NML	Dr. Alok Kumar Meher	Dr. Devendra Yadav, Executive Director, CiMEC Infralabs Pvt. Ltd.

Sl. No.	Student Name	Enrollment No.	CSIR Lab	AcSIR Supervisor	Inclusion of Co-supervisor
					Ghaziabad, Ex-Joint Director-CRT, NCCBM
24	<b>Bhudhrani Ronak Suresh</b>	20EE24A14007	CSIR-CRRI	Dr. Errampalli Madhu	Prof. Shriniwas S Arkatkar, SVNIT, Surat
25	<b>Bawa Puri</b>	20EE24J14006	CSIR-CRRI	Dr. Nasim Akhtar	Dr. Perveez Alam, Sr. Asst. Professor, Baba Ghulam Shah Badshah University, Rajouri, J&K
26	<b>Gagandeep Singh</b>	20EE24A14013	CSIR-CRRI	Dr. Ambika Behl	Dr. Mahesh W Kasture, Chief Manager, R&D Centre BPCL, Greater Noida
27	<b>Shashank Sonal</b>	20EE21A14004	CSIR-CRRI	Dr. Deepa S	Prof. Nivitha M R, Asst. Professor, PSC College of Technology, Chennai
28	<b>Divita Sharma</b>	20EE24A15004	CSIR-CSIO	Dr. Abhay Sachdev	Dr. Ishita Matai (Amity University, Punjab)
29	<b>Manish Mishra</b>	20EE24A14008	CSIR-CRRI	Dr. Abhishek Mittal	Dr. Sebnem Karahancer, Isparta University of Applied Science, Turkey)
30	<b>Ashish Pippal</b>	20EE24J01005	CSIR-CBRI	Dr. Ajay Chaurasia	Prof. Ruchita Gupta, Asso. Prof., Head, Dept. of Housing, School of Planning and Architecture, New Delhi
31	<b>Anand Bohra</b>	20EE24A14011	CSIR-CRRI	Dr. Siksha Swaroopa	Prof. L P Singh, Director General, NCBM, Haryana
32	<b>Mrityunjay Sharma</b>	20EE24J15002	CSIR-CSIO	Dr. Ritesh Kumar	Dr. Valentina Parma, Assistant Director and Assistant Member, Monell Chemical Senses Center, Philadelphia, USA
33	<b>Sivakumar S</b>	20EE24J31001	CSIR-NML	Dr. Madan M.	Prof. Gour Gopal Roy, Professor, IIT Kharagpur
34	<b>Ashish Kapoor</b>	20EE23A01008	CSIR-CBRI	Dr. Ajay Chourasia	Prof. Pradeep Bhargava, Professor, IIT Roorkee
35	<b>Brijendra Kumar Verma</b>	20EE24A06002	CSIR-CEERI	Dr. Udit Narayan Pal	Prof. Dheerendra Singh, Professor, BITS-Pilani
36	<b>Debashree Ghosh</b>	10CC23A12004	CSIR-CMERI	Dr. Nripen Chanda	Prof. Mrinal K. Bera, Assistant Professor, IEST, Shibpur
37	<b>Manoj Kumar Singh</b>	20EE23A14016	CSIR-CRRI	Dr. Abhishek Mittal	Prof. Pawan Kalla, Associate Professor, MNIT, Jaipur
38	<b>Saravana Kumar K</b>	20EE24A41002	CSIR-SERC	Dr. S. Parivallal	Prof. U. Saravanan, Professor, IIT Madras, Chennai
39	<b>Kumar Pratim Das</b>	10CC24J31001	CSIR-NML	Dr. Trilochan Mishra	Prof. Sudhanshu Shekhar Pati, Asst. Prof. NIT Jamshedpur
40	<b>Totan Chand</b>	20EE24J15001	CSIR-CSIO	Dr. Shravan Kumar R R	Prof. Sourabh Roy, Professor, NIT Warangal
41	<b>Subrata Kumar Majumdar</b>	20EE23A12028	CSIR-CMERI	Dr. R Manivannan	Prof. Saikat Chatterjee, Director, Sanaka Educational Trust's Group of Institutions, Durgapur
42	<b>Tanmoy Mondal</b>	20EE23J12010	CSIR-CMERI	Dr. Kulbhushan Samal	Prof. Sabyasachi Biswas, Assistant Professor, NIT Durgapur
43	<b>Abhisek Mitra</b>	20EE23A12010	CSIR-CMERI	Dr. Phani Kumar Mallisetty	Prof. Ganesh Chandra Nayak, Associate Prof, IIT (ISM), Dhanbad
44	<b>Arijit Mukherjee</b>	20EE23J12012	CSIR-CMERI	Dr. R Manivannan	Prof. Saikat Chatterjee, Director and Professor, Sanaka Educational Trust's Group of Institutions, Durgapur

Sl. No.	Student Name	Enrollment No.	CSIR Lab	AcSIR Supervisor	Inclusion of Co-supervisor
45	Suryashree Pandey	20EE23A12023	CSIR-CMERI	Dr. Arpita Mukherjee	Prof. Samit Biswas, Asst. Prof. IEST Shibpur
46	Gadela Dharma Sai Goud	10PP24J28011	CSIR-NGRI	Dr. Nimisha Vedanti	Prof. Jyotirmoy Mallik, Associate Professor IISER Bhopal
47	Rashmi Thakare	10BB23J27004	CSIR-NEERI	Dr. S. Saravanadevi	Prof. S Santha Kumar, Professor & Director, VIT, Vellore
48	Soumyajit Kundu	20EE22A12020	CSIR-CMERI	Dr. Manidipto Mukherjee	Prof. Shibendu Shekhar Roy, Professor, NIT, Durgapur
49	Kiran Jash	20EE24J12020	CSIR-CMERI	Dr. Swarup Kumar Laha	Prof. Nanda Dulal Jana, Assistant Professor, NIT, Durgapur
50	Satyendra Kumar	10CC23A31003	CSIR-NML	Dr. Alok Kumar Meher	Prof. Prateek Sharma, NCCBM, Ministry of Commerce and Industry
51	Ayushi Srivastava	10CC23A31002	CSIR-NML	Dr. Susanta Kumar Nath	Prof. Varsha Liju, NCCBM, Ministry of Commerce and Industry
52	Biplab Palye	20EE23J12013	CSIR-CMERI	Dr. Swarup K Laha	Prof. Sachin K Singh, IIT, Dhanbad
53	Rohit	10CC24J67004	DST-INST	Dr. Akashdeep	Dr. Praveen Kumar, Head, R&D, Exigo Ltd., Gurugram
54	Suchitra	10CC25J01001	CSIR-CBRI	Dr. Soumitra Maiti	Prof. Krunal M. Gangawane, Asst. Prof., IIT Jodhpur
55	Jagdish M	20EE24J12027	CSIR-CMERI	Dr. Pradeep Rajan	Prof. Sudipto Mukherjee, Professor, IIT New Delhi
56	Prerona Das	10BB24A04028	CSIR-CDRI	Dr. Monika Sachdev	Prof. Rekha Sachan, Professor & Unit Head, King George's Medical University, Lucknow
57	Rahul Kumar	32EE24J09001	CSIR-CGCRI	Dr. Soupitak Pal	Dr. Ramasubbu Sunder, Research Director, Instron India, ITW-India Pvt. Ltd., Bangalore
58	Md. Hamjala Alam	20EE24J12016	CSIR-CMERI	Dr. Swarup Ranjan Debbarma	Prof. Anita Pal, Asso. Prof. NIT Durgapur
59	Anurag Pandey	20EE23A01005	CSIR-CBRI	Dr. Anindya Pain	Dr. B Giridhar Rajesh, Asst. Prof., IIT Dharwad
60	Binod Kumar	20EE24A14001	CSIR-CRRI	Dr. Abhishek Mittal	Prof. A.K. Singh, Professor, M. N. National Institute of Technology, Allahabad
61	Anshul Saxena	20EE23A14015	CSIR-CRRI	Dr. Pradeep Saxena	Dr. Hardeo K Thakur, Bennett University, Greater Noida
62	Rashmi G Shinde	40MR24A98006	ICMR-NITVAR	Dr. Godbole	Dr. Nikhil Anil Gupte, Deputy Director, Johns Hopkins Center of Infectious Diseases in India (CIDI)
63	Pallavi D. Kanade	40MR25J98002	ICMR-NITVAR	Dr. Manisha Ghate	Dr. Shrikala Acharya, Professor, Seth G.S. Medical College & KEM Hospital, Parel, Mumbai
64	Sukanya Bhattacharjee	10CC24J12005	CSIR-CMERI	Dr. Tapas Kulia	Dr. Madhab C. Das, Asso. Prof., IIT Kharagpur
65	Kannan Sabarinath	40MR24A77016	ICMR-NIV	Dr. Pragya Yadav	Dr. Anish T S, Professor, Govt. Medical College, Kozhikode, Kerala
66	Harshvardhan Joshi	10BB18J26022	CSIR-NCL	Dr. Anu Raghunathan	Dr. Jasmine Isar, Group Lead, Reliance Industries Ltd.
67	Bharti	10PP25J32012	CSIR-NPL	Dr. Sunil Singh Kushvaha	Dr. Rupesh Kumar Chaubey, Scientist F, DRDO, Delhi
68	Rahane Akshay Bharat	20EE25J01003	CSIR-CBRI	Dr. Debdutta Ghosh	Dr. Surendra Beniwal, Asst. Prof., IIT Jammu

Sl. No.	Student Name	Enrollment No.	CSIR Lab	AcSIR Supervisor	Inclusion of Co-supervisor
69	Mohit Nayal	20EE24A01005	CSIR-CBRI	Dr. C S Meena	Dr. Varun Pratap Singh, Asst. Prof., UPES Dehradun
70	Anusmita Bhowmik	32EE24A12004	CSIR-CMERI	Dr. Subrata Kumar Mandal	Dr. Subrata Karmakar, Professor, B.C.K.V. Mohanpur, West Bengal
71	Rashmi	10CC24A19014	CSIR-IIP	Dr. Pankaj K. Kanuajia	Prof. Prashant Singh, Professor, DAV PG College, Dehradun
72	Abhishek Kumar	20EE24A12005	CSIR-CMERI	Dr. Amit Kumar	Dr. Subramanian Narayanan, Asso. Prof., IIT, ISM Dhanbad
73	Rupa Das	10CC25J31005	CSIR-NML	Dr. Rajen Kundu	Dr. Rina Sahu, Asso. Prof., NIT Jamshedpur
74	Souradip Ganguly	10CC24J12009	CSIR-CMERI	Dr. Chanchal Loha	Dr. Sirshendu Ghosh, Asst. Prof., Chanakya University (Previously Dr. Ghosh was faculty in CSIR-CMERI and moved to Chanakya University)
75	Biswadev Goswami	20EE21A12017	CSIR-CMERI	Dr. Rajesh P. Barnwal	Dr. Sanjib Saha, Asst. Prof., Dr. B C Roy Engineering College, Durgapur
76	Sumit Roy	10BB25J37012	CSIR-IIIM	Dr. Premnarayan Gupta	Dr. Madhulika Bhagat, Professor, University of Jammu
77	Kunal Sharma	10CC25J32008	CSIR-NPL	Dr. Ved Varun Agrawal	Dr. Nitin Kumar, Scientist B, Central Pulp & Paper Research Institute, Saharanpur
78	Deepak Sharma	20EE24A14002	CSIR-CRRI	Dr. Mukti Advani	Dr. Deepty Jain, Asst. Prof., Indian Institute of Technology, Delhi
79	Rajiv Jalota	10CC21J27001	CSIR-NEERI	Dr. P V Nidheesh	Prof. Anju Singh, Indian Institute of Management, Mumbai
80	Animesh Samanta	20EE23A12006	CSIR-CMERI	Dr. Srinivasan Aruchamy	Dr. Sabyasachi Samanta, Professor, Haldia Institute of Technology, West Bengal
81	Abhishek Mandal	20EE23A12008	CSIR-CMERI	Dr. Raghu Selvaj	Dr. Soumya Das, Asst. Prof., University Institute of Technology, Burdwan
82	Md. Saddam Ansari	20EE23A12012	CSIR-CMERI	Dr. Ved Prakash	Dr. Saikat Chatterjee, Director & Professor, Sanaka Education Trust's Group of Institutions, Durgapur
83	Ishita Banerjee	20EE23A12022	CSIR-CMERI	Dr. Rashmi Ranjan Sahoo	Dr. Ganesh Chandra Nayak, IIT (ISM) Dhanbad
84	Narukula Durga Bhavani	10PP24A45002	CSIR-4PI	Dr. Sridevi Jade	Dr. Vinee Srinivasan, IISER Bhopal
85	Adwaita Maiti	20EE23A12029	CSIR-CMERI	Dr. Himadri Roy	Dr. Siddhartha Roy, Asst. Prof., IIT Kharagpur
86	Abhijit Das	20EE23A12030	CSIR-CMERI	Dr. Abhijit Mahapatra	Prof. (Dr.) Dilip Kumar Pratihara, Professor, IIT Kharagpur
87	Balaji Chandrakanth	20EE23A12031	CSIR-CMERI	Dr. Chanchal Loha	Prof. Gautam Biswas, Professor, IIT Kanpur
88	Moloy Narayan Das	20EE23A12032	CSIR-CMERI	Dr. Dip Narayan Das	Dr. Nairit Barkataki, Asst. Prof., Gauhati University, Guwahati
89	Garima Singh	20EE25J01006	CSIR-CBRI	Dr. Kishor S Kukarni	Prof. Yuan Chao, Asso. Prof., National University of Singapore (NUS), Singapore
90	Bidisha Paul	20EE23A12024	CSIR-CMERI	Dr. Rajesh P Barwal	Dr. Nirnay Ghosh, Asst. Prof., Indian Institute of Engineering Science and Technology, Shibpur

## Academy of Scientific and Innovative Research

Dated: 15.05.2025

Following the receipt of proposals from various AcSIR-associated Research Institutes, and based on the recommendations of the respective Deans, the Associate Director has reviewed and recommended the following proposals for consideration and approval. These proposals were duly endorsed by the Boards of Studies during its 9th (Joint) Meeting held on May 14, 2025:

### 1. Course Proposals:

- Biological Sciences: CSIR-NIO (New course), CSIR-IMTech (Modifications)
- Chemical Sciences: TCG-CREST (New course)
- Physical Sciences: CSIR-CEERI (New course), CSIR-NIO (New course)
- Engineering Sciences: CSIR-NAL (New course), CSIR-CMERI ((New course & Modifications), TCG-CREST (New course), CSIR-CSIO (New course)
- Mathematical & Information Science: CSIR-NIO (New course)
- Medical Research: ICMR-JALMA, ICMR-NCDIR, ICMR-NICHDR, ICMR-NICPR, ICMR-NIE, ICMR-NIIH, ICMR-NIMR, ICMR-NIN, ICMR-NIREH, ICMR-NIRCH, ICMR-NIRT, ICMR-NIRTH, ICMR-NITM, ICMR-NITVAR, ICMR-NIV, ICMR-RMRC BBSR, ICMR-RMRC GKP, ICMR-RMRC PB, ICMR-NARFBR, ICMR-NIRBI, ICMR-VCRC, and MAX-MIME (All ICMR labs: New courses)

### 2. Modification of courses under M.Sc. (Food Technology) offered at CSIR-CFTRI, Mysuru (Modifications)

### 3. Proposal for starting of a new faculty of Biological Sciences at CSIR-AMPRI, Bhopal (New courses)

### 4. Introduction of Integrated Dual Degree Program (IDDP: M.Tech+PhD) at CSIR-CSMCRI, Bhavnagar

### 5. Introduction of MTech (Corrosion Science & Engineering) program at CSIR-CECRI, Karaikudi

### 6. Introduction of Master of Healthcare Quality Management from Max-MIME

### 7. Introduction of PG Diploma program by Max-MIME under following areas:

- Healthcare Quality Management
- Public Health

### 8. Introduction of PG Diploma in Semiconductor Technologies (Assembly, Testing, Marking, and Packaging) by CSIR-CSIO

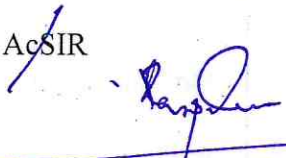
The recommended documents and their summary are attached herewith. The proposals are submitted for your kind consideration and approval.

  
(Ashwini Mishra)  
Senior Manager, AcSIR

Director may kindly accord permission  
to place this agenda item to the  
Senate meeting

  
Associate Director, AcSIR

Director, AcSIR

  
15.5.2025

**Summary of enrollment in the Masters and PG Diploma Program of AcSIR:**

Sl. No.	Course Title	Course code	Faculty of study	Research Institute	Course Type	L-T-P-C	Remarks
1.	Ocean biodiversity: Evolution, functions, and application	AcSIR-29-BS-AD-007	BS	CSIR-NIO	AD	1-0-2-2	New course
2.	Coastal Ecosystems: Introduction, Ecological Function, Conservation and Management.	AcSIR-29-BS-AD-008	BS	CSIR-NIO	AD	2-0-0-2	New course
3.	Microbes-from Diversity to Genes and (meta)-Genomes	AcSIR-20-BS-AD-009	BS	CSIR-IMTech	AD	2-0-0-2	Modifications
4.	Infectious Diseases	AcSIR-20-BS-AD-011	BS	CSIR-IMTech	AD	2-0-0-2	Modifications
5.	Protein Biochemistry & Biophysics	AcSIR-20-BS-AD-012	BS	CSIR-IMTech	AD	2-0-0-2	Modifications
6.	Concepts and Application	AcSIR-20-ID-017	BS	CSIR-IMTech	ID	2-0-0-2	Modifications
7.	Research Methodology 1 (a)	AcSIR-20-RM	BS	CSIR-IMTech		2-0-0-2	Modifications
8.	Physics and Chemistry of Materials	AcSIR-78-ID-006	CS	TCG-CREST	ID	2-0-0-2	New course
9.	Materials Synthesis and Characterization I	AcSIR-78-CS-AD-010	CS	TCG-CREST	AD	2-1-0-3	New course
10.	Materials Synthesis and Characterization II	AcSIR-78-CS-AD-011	CS	TCG-CREST	AD	2-1-0-3	New course
11.	Geochemical Tracers in Oceanography	AcSIR-29-PS-AD-011	PS	CSIR-NIO	AD	1.5-0-1-2	New course
12.	VLSI Architectural Synthesis & Design	AcSIR-06-PS-AD-017	PS	CSIR-CEERI	AD	2-0-2-3	New course
13.	Applied Mathematics	AcSIR-06-ID-013	PS	CSIR-CEERI	ID	2-0-0-2	New course
14.	Hardware Design for Machine/Deep Learning	AcSIR-24-ES-AD-018	ES	CSIR-NAL	AD	3-0-0-3	New course
15.	Advanced Computing Engineering	AcSIR-24-ES-AD-019	ES	CSIR-NAL	AD	3-0-0-3	New course
16.	Fluid Power and Application	AcSIR-12-ES-AD-017	ES	CSIR-CMERI	AD	3-0-0-3	New course
17.	Automotive Power Electronics: Devices, Circuits and Applications	AcSIR-12-ES-AD-018	ES	CSIR-CMERI	AD	2-0-2-3	New course
18.	Mobile Robotics (Modification course)	AcSIR-12-ES-AD-019	ES	CSIR-CMERI	AD	2-1-0-3	New course
19.	Advanced Mechanics of Fluids	AcSIR-12-ES-AD-020	ES	CSIR-CMERI	AD	3-0-0-3	New course
20.	Manufacturing Process Modelling (Modification course)	AcSIR-12-ES-AD-013	ES	CSIR-CMERI	AD	3-0-0-3	Modifications
21.	Elements of Probability and Statistics	AcSIR-78-ES-AD-003	ES	TCG-CEST	AD	3-0-0-3	New course
22.	Introduction to Machine Learning	AcSIR-78-ES-AD-004	ES	TCG-CEST	AD	3-0-0-3	New course

Sl. No.	Course Title	Course code	Faculty of study	Research Institute	Course Type	L-T-P-C	Remarks
23.	Introduction to Artificial Intelligence	AcSIR-78-ES-AD-005	ES	TCG-CEST	AD	3-0-0-3	New course
24.	Computational Number Theory	AcSIR-78-ID-005	ES	TCG-CEST	ID	3-0-0-3	New course
25.	Biomedical microelectromechanical system (BioMEMS) Fundamental, Materials & Devices [BioMEMS-FRAME]	AcSIR-15-ES-AD-010	ES	CSIR-CSIO	AD	2-0-2-3	New course
26.	Advanced Manufacturing Technologies (AMT)	AcSIR-15-ES-AD-011	ES	CSIR-CSIO	AD	1-0-2-2	New course
27.	Semiconductor Manufacturing Processes	AcSIR-15-ES-AD-012	ES	CSIR-CSIO	AD	2-0-2-3	New course
28.	Advanced Semiconductor Physics and Devices	AcSIR-15-ES-AD-013	ES	CSIR-CSIO	AD	2-0-2-3	New course
29.	Advanced Communication and RF-MEMS Technologies	AcSIR-15-ES-AD-014	ES	CSIR-CSIO	AD	2-0-2-3	New course
30.	Mathematical techniques for Water Waves	AcSIR-29-MIS-AD-005	MIS	CSIR-NIO	AD	2-0-0-2	New course
31.	Public Health & Practice	AcSIR-100-ID-001	MR	ICMR-RMRC BBSR	AD	2-0-0-2	New course
32.	Basic Laboratory Skills	AcSIR-98-ID-002	MR	ICMR-NITVAR	AD	2-0-0-2	New course
33.	Epidemiology, Screening, Prevfection and Diagnosis of Cancers prevalent in India	AcSIR-96-FMR-AD-001	MR	ICMR-NICPR	AD	1-0-2-2	New course
34.	Cancer Biology: Molecular, Cellular and Immunology of cancer	AcSIR-96-FMR-AD-002	MR	ICMR-NICPR	AD	1-0-1-2	New course
35.	Biostatistics and Bioinformatics in Cancer Research	AcSIR-96-FMR-AD-003	MR	ICMR-NICPR	AD	1-0-2-1	New course
36.	Basics in reproductive biology-Female Reproduction	AcSIR-104-FMR-AD-001	MR	ICMR-NIRRCH	AD	2-0-0-2	New course
37.	Basics in reproductive biology-Male Reproduction	AcSIR-104-FMR-AD-002	MR	ICMR-NIRRCH	AD	2-0-0-2	New course
38.	Molecular Endocrinology Module	AcSIR-104-FMR-AD-003	MR	ICMR-NIRRCH	AD	2-0-0-2	New course
39.	An Overview of Infectious Diseases	AcSIR-82-FMR-AD-001	MR	ICMR-JALMA	AD	2-0-0-2	New course
40.	Tuberculosis, Resistance & Therapy	AcSIR-82-FMR-AD-002	MR	ICMR-JALMA	AD	2-0-0-2	New course
41.	Diagnostics in Communicable diseases (TB and Leprosy)	AcSIR-82-FMR-AD-003	MR	ICMR-JALMA	AD	2-0-0-2	New course
42.	Molecular and Cellular Mechanism of Defence	AcSIR-82-FMR-AD-004	MR	ICMR-JALMA	AD	2-0-0-2	New course

Sl. No.	Course Title	Course code	Faculty of study	Research Institute	Course Type	L-T-P-C	Remarks
43.	Communicable Disease Epidemiology (Tuberculosis and Leprosy)	AcSIR-82-FMR-AD-005	MR	ICMR-JALMA	AD	2-0-0-2	New course
44.	Epidemiology and Management of Non-Communicable Diseases: Concepts, Methods, and Interventions.	AcSIR-84-FMR-AD-001	MR	ICMR-NCDIR	AD	3-0-0-3	New course
45.	Advanced Statistical Methods in Non-Communicable Disease Research	AcSIR-84-FMR-AD-002	MR	ICMR-NCDIR	AD	2-0-2-3	New course
46.	Cryobiology in Biomedicine	AcSIR-91-FMR-AD-001	MR	ICMR-NARFBR	AD	2-0-0-2	New course
47.	Stems Cells for Biomedicine	AcSIR-91-FMR-AD-002	MR	ICMR-NARFBR	AD	2-0-0-2	New course
48.	Biotechnology in Human Health	AcSIR-91-FMR-AD-003	MR	ICMR-NARFBR	AD	2-0-0-2	New course
49.	Genetic Engineering for Biomedicine	AcSIR-91-FMR-AD-004	MR	ICMR-NARFBR	AD	2-0-0-2	New course
50.	Non-Human Primates in Biomedical Research	AcSIR-91-FMR-AD-005	MR	ICMR-NARFBR	AD	2-0-0-2	New course
51.	Medical Genetics	AcSIR-91-FMR-AD-006	MR	ICMR-NARFBR	AD	2-0-0-2	New course
52.	Biosafety and Biosecurity for Bacterial Pathogens	AcSIR-92-FMR-AD-001	MR	ICMR-NIRBI	AD	3-0-0-3	New course
53.	Epidemiology of Communicable Diseases	AcSIR-92-FMR-AD-002	MR	ICMR-NIRBI	AD	3-0-0-3	New course
54.	Immunology	AcSIR-88-FMR-AD-001	MR	ICMR-NIRT	AD	3-0-0-3	New course
55.	Bacterials Genetics & Zoonosis	AcSIR-88-FMR-AD-002	MR	CMR-NIRT	AD	2-0-2-3	New course
56.	Essentials of Microbial informatics	AcSIR-88-FMR-AD-003	MR	CMR-NIRT	AD	3-0-0-3	New course
57.	Health and Nutrition Communication Research and Practice	AcSIR-93-FMR-AD-001	MR	ICMR-NIN	AD	3-0-0-3	New course
58.	Food Components & Nutrients	AcSIR-93-FMR-AD-002	MR	ICMR-NIN	AD	2-0-2-3	New course
59.	Principles of human genetics	AcSIR-93-FMR-AD-001	MR	ICMR-NIIH	AD	2-0-0-2	New course
60.	Genetics of multifactorial diseases	AcSIR-93-FMR-AD-002	MR	ICMR-NIIH	AD	2-0-0-2	New course
61.	Molecular biology	AcSIR-93-FMR-AD-003	MR	ICMR-NIIH	AD	2-0-0-2	New course
62.	Basics of Environmental Health	AcSIR-86-FMR-AD-001	MR	ICMR-NIREH	AD	3-0-0-3	New course
63.	Environment and Health Monitoring	AcSIR-86-FMR-AD-002	MR	ICMR-NIREH	AD	3-0-0-3	New course
64.	Indian Traditional of Medicine	AcSIR-99-FMR-AD-001	MR	ICMR-NITM	AD	2-0-0-2	New course

Sl. No.	Course Title	Course code	Faculty of study	Research Institute	Course Type	L-T-P-C	Remarks
65.	Basic Science in Traditional Medicine	AcSIR-99-FMR-AD-002	MR	ICMR-NITM	AD	2-0-0-2	New course
66.	Clinical research in traditional medicine and integrative health	AcSIR-99-FMR-AD-003	MR	ICMR-NITM	AD	2-0-0-2	New course
67.	Parasite Biology	AcSIR-65-FMR-AD-001	MR	ICMR-NIMR	AD	2-0-0-2	New course
68.	Mosquito Biology	AcSIR-65-FMR-AD-002	MR	ICMR-NIMR	AD	2-0-0-2	New course
69.	Parasite Culture	AcSIR-65-FMR-AD-003	MR	ICMR-NIMR	AD	2-0-0-2	New course
70.	Bacteriology	AcSIR-103-FMR-AD-001	MR	ICMR-RMRC PB	AD	2-0-0-2	New course
71.	Virology	AcSIR-103-FMR-AD-002	MR	ICMR-RMRC PB	AD	2-0-0-2	New course
72.	Immunology	AcSIR-103-FMR-AD-003	MR	ICMR-RMRC PB	AD	2-0-0-2	New course
73.	Cancer Biology	AcSIR-94-FMR-AD-001	MR	ICMR-NICHDR	AD	2-0-2-3	New course
74.	Biosafety	AcSIR-94-FMR-AD-002	MR	ICMR-NICHDR	AD	3-0-0-3	New course
75.	Insect Biology & Biosafety	AcSIR-69-FMR-AD-001	MR	ICMR-VCRC	AD	1-0-2-2	New course
76.	Techniques in Vector Biology and Arthropod Research	AcSIR-69-FMR-AD-002	MR	ICMR-VCRC	AD	1-0-2-2	New course
77.	Immunology	AcSIR-69-FMR-AD-003	MR	ICMR-VCRC	AD	2-0-2-3	New course
78.	Epidemiology of Vector Borne Diseases	AcSIR-69-FMR-AD-004	MR	ICMR-VCRC	AD	2-0-2-3	New course
79.	Pesticides and Public Health	AcSIR-69-FMR-AD-005	MR	ICMR-VCRC	AD	3-0-0-3	New course
80.	Bioinformatics: Tools and Techniques	AcSIR-69-FMR-AD-006	MR	ICMR-VCRC	AD	3-0-0-3	New course
81.	Microbial Biotechnology	AcSIR-69-FMR-AD-007	MR	ICMR-VCRC	AD	3-0-0-3	New course
82.	Molecular Biology	AcSIR-69-FMR-AD-008	MR	ICMR-VCRC	AD	3-0-0-3	New course
83.	Integrated Vector Management: Strategies and Tools	AcSIR-69-FMR-AD-009	MR	ICMR-VCRC	AD	2-0-2-3	New course
84.	Vector Biology, Ecology, and Control	AcSIR-69-FMR-AD-010	MR	ICMR-VCRC	AD	2-0-2-3	New course
85.	Advanced Vector Science and Emerging Vector-Borne Diseases	AcSIR-69-FMR-AD-011	MR	ICMR-VCRC	AD	2-0-2-3	New course
86.	Design and analysis of epidemiological studies for causal inference	AcSIR-87-FMR-AD-001	MR	ICMR-NIE	AD	1-1-0-2	New course
87.	Implementation research: Principles and methods	AcSIR-87-FMR-AD-002	MR	ICMR-NIE	AD	1-1-0-2	New course

Sl. No.	Course Title	Course code	Faculty of study	Research Institute	Course Type	L-T-P-C	Remarks
88.	Systematic Reviews and Meta-Analysis	AcSIR-87-FMR-AD-003	MR	ICMR-NIE	AD	1-1-0-2	New course
89.	Statistics for Clinical Trials	AcSIR-87-FMR-AD-004	MR	ICMR-NIE	AD	1-1-0-2	New course
90.	Public health microbiology	AcSIR-87-FMR-AD-005	MR	ICMR-NIE	AD	1-0-2-2	New course
91.	Molecular tools for infectious disease epidemiology	AcSIR-87-FMR-AD-006	MR	ICMR-NIE	AD	1-0-2-2	New course
92.	Molecular Biology and Its application in Public Health	AcSIR-101-FMR-AD-001	MR	ICMR-RMRC GKP	AD	2-0-0-2	New course
93.	Infectious Diseases: An Overview	AcSIR-101-FMR-AD-002	MR	ICMR-RMRC GKP	AD	2-0-0-2	New course
94.	Diagnosis of Infectious diseases	AcSIR-101-FMR-AD-003	MR	ICMR-RMRC GKP	AD	2-0-0-2	New course
95.	Advanced Biomedical Instrumentation	AcSIR-101-FMR-AD-004	MR	ICMR-RMRC GKP	AD	2-0-0-2	New course
96.	Immune defence against infectious diseases	AcSIR-101-FMR-AD-005	MR	ICMR-RMRC GKP	AD	2-0-0-2	New course
97.	Diagnostic and Disease Pathology	AcSIR-75-FMR-AD-001	MR	MAX-MIME	AD	1-1-0-2	New course
98.	Advances in Nephro, Neuro and Pulmonary Sciences	AcSIR-75-FMR-AD-002	MR	MAX-MIME	AD	1-1-0-2	New course
99.	Obstetrics, Gynecology, and Neonatology	AcSIR-75-FMR-AD-003	MR	MAX-MIME	AD	1-1-0-2	New course
100.	Radio Diagnosis and Nuclear Medicine	AcSIR-75-FMR-AD-004	MR	MAX-MIME	AD	1-1-0-2	New course
101.	Cardiovascular Research	AcSIR-75-FMR-AD-005	MR	MAX-MIME	AD	2-1-0-3	New course
102.	Clinical Cancer Research	AcSIR-75-FMR-AD-006	MR	MAX-MIME	AD	2-1-0-3	New course
103.	Community Medicine & Epidemiology	AcSIR-75-FMR-AD-007	MR	MAX-MIME	AD	2-1-0-3	New course
104.	Endocrinology, Metabolism & Diabetes	AcSIR-75-FMR-AD-008	MR	MAX-MIME	AD	2-1-0-3	New course
105.	Gastroenterology and Human Nutrition	AcSIR-75-FMR-AD-009	MR	MAX-MIME	AD	2-1-0-3	New course
106.	Liver and Biliary Science	AcSIR-75-FMR-AD-010	MR	MAX-MIME	AD	2-1-0-3	New course
107.	Viral Disease of Public Health Importance	AcSIR-77-FMR-AD-001	MR	ICMR-NIV	AD	2-0-0-2	New course
108.	Antivirals and vaccines	AcSIR-77-FMR-AD-002	MR	ICMR-NIV	AD	2-0-0-2	New course
109.	Advances in Immunology	AcSIR-77-FMR-AD-003	MR	ICMR-NIV	AD	2-0-0-2	New course
110.	Epidemiology and dynamics of malaria in Tribal areas	AcSIR-89-FMR-AD-001	MR	ICMR-NIRTH	AD	2-0-0-2	New course

**Modification in courses M.Sc. (Food Technology) program at CSIR-CFTRI**

**1st Semester**

Sl.No.	Existing	Proposed	L-T-P-C
1	Food Chemistry (AcSIR-08-BS-001)	Food Chemistry & Biochemistry (AcSIR-08BS-001)	4-0-4-6
2	Food Microbiology (AcSIR-08-BS-002)	Food Microbiology (AcSIR-08-BS-002)	2-0-4-4
3	Principles of General Engineering (AcSIR08-BS-003)	Principles of General Engineering (AcSIR08-BS-003)	3-0-2-4
4	Applied mathematics & Statistics (AcSIR08-BS-004)	Applied mathematics & Statistics (AcSIR08-BS-004)	4-0-0-4
5	Soft Skill and Humanities (AcSIR-08-BS-005)	Nutrition & Nutraceuticals (AcSIR-08-BS005)	1-0-2-2

*Summary of Modifications:*

1. Food Chemistry changes to Food Chemistry & Biochemistry
2. Food Microbiology remains unchanged.
3. Principles of General Engineering remain unchanged.
4. Applied Mathematics & Statistics remains unchanged.
5. Soft Skills and Humanities changes to Nutrition & Nutraceuticals.

**2<sup>nd</sup> Semester**

Sl.No.	Existing	Proposed	L-T-P-C
1	Principles of Food Processing (AcSIR-08-BS006)	Principles of Food Processing (AcSIR-08BS-006)	3-0-4-5
2	Biochemistry, Nutrition & Nutraceuticals (AcSIR-08-BS-007)	Animal Products Technology (AcSIR-08BS-007)	5-0-2-6
3	Food Engineering (AcSIR-08-BS-008)	Food Engineering (AcSIR-08-BS-008)	3-0-2-4
4	Grains pulses and Oil Seeds Processing Baking Technology (AcSIR-08-BS-009)	Grains pulses and Oil Seeds Processing Baking Technology (AcSIR-08-BS-009)	3-0-2-4
5	Information Technology & Computing (AcSIR08-BS-010)	Information Technology & Computing (AcSIR-08-BS-010)	2-0-2-2

*Summary of Modifications:*

1. Principles of Food Processing remain unchanged in terms of course content and structure.
2. Biochemistry, Nutrition & Nutraceuticals is changed to Animal Products Technology.
3. Food Engineering remains unchanged.
4. Grains, Pulses, and Oil Seeds Processing Baking Technology remains unchanged.

5. *Information Technology & Computing remains unchanged.*

**3<sup>rd</sup> Semester**

Sl.No.	Existing	Proposed	L-T-P-C
1	Animal Products Technology (AcSIR-08-BS010)	Soft Skill and Humanities (AcSIR-08-BS011)	3-0-2-4
2	Packaging Technology & Supply chain (AcSIR08-BS-011)	Packaging Technology & Supply chain (AcSIR-08-BS-012)	3-0-2-4
3	Food Biotechnology & Bioengineering (AcSIR08-BS-012)	Food Biotechnology & Bioengineering (AcSIR-08-BS-013)	3-0-4-5
4	Plantation Products & Flavour Technology (AcSIR-08-BS-013)	Plantation Products & Flavour Technology (AcSIR-08-BS-014)	2-0-2-3
5	Food Quality, Sensory Science, food Security & Safety (AcSIR-087-BS-014)	Agri-Food Business Management & Intellectual Property (AcSIR-087-BS-015)	3-0-2-4

*Summary of Modifications:*

1. *Animal Products Technology (AcSIR-08-BS-010) is changed to Soft Skill and Humanities (AcSIR-08-BS-011).*
2. *Packaging Technology & Supply Chain (AcSIR-08-BS-011) is renumbered to Packaging Technology & Supply Chain (AcSIR-08-BS-012).*
3. *Food Biotechnology & Bioengineering (AcSIR-08-BS-012) is renumbered to Food Biotechnology & Bioengineering (AcSIR-08-BS-013).*
4. *Plantation Products & Flavour Technology (AcSIR-08-BS-013) is renumbered to Plantation Products & Flavour Technology (AcSIR-08-BS-014).*
5. *Food Quality, Sensory Science, Food Security & Safety (AcSIR-08-BS-014) is changed to AgriFood Business Management & Intellectual Property (AcSIR-08-BS-015).*

**4<sup>th</sup> Semester**

Sl.No.	Existing	Proposed	L-T-P-C
1	Agri-Food management & Intellectual property (AcSIR-08-BS-015)	Food Quality, Sensory, Science, Food security & Safety (AcSIR-08-BS-016)	3:0:2:4
2	Project Work (IN-HOUSE or INDUSTRY) (AcSIR-08-BS-016)	Project Work (IN-HOUSE or INDUSTRY) (AcSIR-08-BS-017)	0:0:28:28

*Summary of Modifications:*

1. *Agri-Food Management & Intellectual Property (AcSIR-08-BS-015) is changed to Food Quality, Sensory Science, Food Security & Safety (AcSIR-08-BS-016).*
2. *Project Work (IN-HOUSE or INDUSTRY) (AcSIR-08-BS-016) is changed to be Project Work (IN-HOUSE or INDUSTRY) (AcSIR-08-BS-017), with no change in content or credits.*

**List of courses in the newly introduced Faculty of Biological Sciences at CSIR-AMPRI:**

Sl.No.	Name of course	Course code	L-T-P-C
1	Biomaterial and Biomimetic materials	AcSIR-35-BS-AD-001	3-0-0-3
2	Nanostructured Materials for Biosensor Techniques	AcSIR-35-BS-AD-002	3-0-0-3
3	Materials for Biomedical Applications	AcSIR-35-BS-AD-003	3-0-0-3
4	Antimicrobial Materials and Coatings	AcSIR-35-BS-AD-004	3-0-0-3
5	3D Bioprinting and its Applications	AcSIR-35-BS-AD-005	2-0-0-2
6	Biotechnology and Bioinstrumentation	AcSIR-35-BS-AD-006	2-0-0-2
7	Medicinal Plants for Advanced Therapeutics	AcSIR-35-BS-AD-007	2-0-0-2
8	Basic Chemistry Course	AcSIR-35-BS-AD-008	2-0-0-2

**List of courses in the Integrated Dual Degree Program (IDDP: M.Tech+Ph.D.) in the specializations (i) Civil & Environmental Engineering, (ii) Chemical & Bio-Chemical Engineering, (iii) Mechanical Engineering, and (iv) Biotechnology Program Structure at CSIR-CSMCRI, Bhavnagar:**

*1<sup>st</sup> Semester: 16 Credits (Inter-disciplinary Learning of 4 credits + 12 Credits)*

S. No	Course Code	Course	Core/Elective	L-T-P-C	Remarks
1	AcSIR-16-ID-008	Environmental science and technology	Core	1-0-0-1	
2	AcSIR-16-ID-010	Membrane technologies	Elective	1-0-0-1	
3	AcSIR-16-ID-015	Crystallization Science & Engineering	Elective	1-0-0-1	New Proposed Course
4	AcSIR-16-ID-016	Sustainability	Core	1-0-0-1	New Proposed Course
5	AcSIR-16-ID-004	Bioprocess Technology for Biologists	Elective	1-0-0-1	
6	AcSIR-16-ID-013	Risk Assessment and Hazard Management	Elective	1-0-0-1	
7	AcSIR-16-ES-AD-007	Salt technology	Core	2-0-0-2	
8	AcSIR-16-ES-AD-009	Physics for Engineers	Core	2-0-0-2	New Proposed Course
9	AcSIR-16-ES-AD-011	Energy Management	Core	3-0-0-3	New Proposed Course
10	AcSIR-16-ES-AD-013	Design of Solar Salt Works	Core	3-0-0-3	New Proposed Course
11	AcSIR-16-ES-AD-016	Marine Microbial Diversity and Biotechnological Potentials	Core	2-0-0-2	New Proposed Course

*2<sup>nd</sup> Semester: 16 Credits (Advanced topics of 4 credits+12 Credits)*

S. No	Course Code	Course	Core/Elective	L-T-P-C	Remarks
1	AcSIR-16-ES-AD-010	Advanced Numerical Methods	Core	2-0-0-2	New Proposed Course
2	AcSIR-16-ES-AD-012	Engineering aspects in membrane-based separation	Elective	3-0-0-3	New Proposed Course
3	AcSIR-16-ES-AD-014	Waste valorization techniques	Core	2-0-0-2	New Proposed Course

4	AcSIR-16-ES-AD-017	Advanced Fluid Dynamics	Elective	3-0-0-3	New Proposed Course
5	AcSIR-16-ES-AD-018	Project Management	Core	2-0-0-2	New Proposed Course
6	AcSIR-16-BS-AD-006	Algal Technologies	Elective	2-0-0-2	
7	AcSIR-16-CS-AD-001	Advanced Catalysis	Elective	2-0-0-2	
8	AcSIR-16-CS-AD-004	Advanced Separation Science and Technology	Elective	2-0-0-2	
9	AcSIR-16-CS-AD-006	Polymers for Membrane Applications	Elective	2-0-0-2	
10	AcSIR-16-ES-AD-002	Aspects of Biochemical Engineering	Elective	2-0-0-2	
11	AcSIR-16-ES-AD-006	Process Engineering and Case Studies	Elective	2-0-0-2	

*3<sup>rd</sup> Semester: 10 Credits*

S. No	Course Code	Course	L-T-P-C
1	AcSIR-16-RM	Research Methodology	L-T-P-4
2	AcSIR-16-RPE	Research and Publication Ethics	L-T-P-2
3	AcSIR-16-Mini Project	Mini Project	L-T-P-4

*4<sup>th</sup> Semester: 24 Credits*

S. No	Course Code	Course	L-T-P-C
1	AcSIR-16-Project	Project title	L-T-P-24

**List of courses of M.Tech program in “Corrosion Science and Engineering” at CSIR-CECRI, Karaikudi:**

**1<sup>st</sup> Semester:**

Sl. No	Institute	Course Title	Course code	L-T-P-C
1	CSIR-CECRI	Corrosion Principles	AcSIR-05-CSE-001	3-1-0-4
2	CSIR-CECRI	Metallurgical aspects of Corrosion	AcSIR-05-CSE-002	3-0-0-3
3	CSIR-CECRI	Corrosion Monitoring Techniques	AcSIR-05-CSE-003	2-0-2-3
4	CSIR-CECRI	Corrosion Laboratory-01	AcSIR-05-CSE-004	0-0-4-2
5	CSIR-CECRI	Corrosion Laboratory-02	AcSIR-05-CSE-005	0-0-4-2
6	CSIR-CECRI	High -Temperature Corrosion (Elective)	AcSIR-05-CSE-008	2-0-0-2
7	CSIR-CECRI	Corrosion in Oil and Gas Industry (Elective)	AcSIR-05-CSE-009	2-0-0-2
8	CSIR-CECRI	Advanced Characterization of Materials	AcSIR-05-CSE-010	2-0-0-2

**2<sup>nd</sup> Semester:**

1	CSIR-CECRI	Protective Coatings	AcSIR-05-CSE-011	3-0-0-3
2	CSIR-CECRI	Cathodic Protection	AcSIR-05-CSE-012	2-1-0-3
3	CSIR-CECRI	Concrete Corrosion	AcSIR-05-CSE-013	3-0-0-3
4	CSIR-CECRI	Biocorrosion and Biofouling	AcSIR-05-CSE-014	3-0-0-3
5	CSIR-CECRI	Corrosion Laboratory-03	AcSIR-05-CSE-015	0-0-4-2
6	CSIR-CECRI	Advance Materials for Corrosion Prevention application (Elective)	AcSIR-05-CSE-016	2-0-0-2
7	CSIR-CECRI	Corrosion Management and Modelling (Elective)	AcSIR-05-CSE-017	2-0-0-2
8	CSIR-CECRI	Surface Engineering (Elective)	AcSIR-05-CSE-018	2-0-0-2
9	CSIR-CECRI	Erosion and Corrosion (Elective)	AcSIR-05-CSE-019	2-0-0-2
10	CSIR-CECRI	Fatigue and Fracture (Elective)	AcSIR-05-CSE-020	2-0-0-2

**3<sup>rd</sup> Semester:**

19	CSIR-CECRI	Mini Project	--	0-0-8-4
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**4<sup>th</sup> Semester:**

20	CSIR-CECRI	M. Tech. Dissertation	--	0-0-0-24
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**List of courses of Master of Healthcare Quality Management program at MAX-MIME, New Delhi:**

Sl. No.	Course Title	Code	Compulsory/ Elective	L-T-P-C
	<i>Semester-1</i>			
1	Overview on Healthcare Systems and Management Dynamics	AcSIR-75-HQM101	Compulsory	1-1-0-2
2	Hospital Planning and Design	AcSIR-75-HQM102	Compulsory	1-0-2-2
3	Strategic Management in Healthcare	AcSIR-75-HQM103	Compulsory	1-1-2-3
4	Patient Centred Care	AcSIR-75-HQM104	Compulsory	1-0-0-1
5	Hospital Operations and Material Management	AcSIR-75-HQM105	Compulsory	1-1-2-3
6	Quality Management & Quality Improvement Tools	AcSIR-75-HQM106	Compulsory	1-0-2-2
7	Measuring Quality	AcSIR-75-HQM107	Compulsory	1-0-0-1
8	NABH Standards	AcSIR-75-HQM108	Compulsory	1-0-2-2
9	Audit Tools	AcSIR-75-HQM109	Compulsory	1-0-0-1
10	Documentation	AcSIR-75-HQM110	Compulsory	1-1-2-3
	<i>Semester 2</i>			
11	Hospital Utility and Facility Management	AcSIR-75-HQM201	Compulsory	1-0-2-2
12	Legal & Statutory requirements	AcSIR-75-HQM202	Compulsory	1-0-0-1
13	Healthcare Communication and Leadership	AcSIR-75-HQM203	Compulsory	1-0-0-1
14	Hospital Support Services	AcSIR-75-HQM204	Compulsory	1-1-0-2
15	Health Economics and Financial Management	AcSIR-75-HQM205	Compulsory	1-0-2-2
16	Research Methods & Biostatistics	AcSIR-75-HQM206	Compulsory	1-0-2-2
17	Health Insurance and Medical Claims Management	AcSIR-75-HQM207	Compulsory	1-1-0-2
18	JCI Accreditation	AcSIR-75-HQM208	Compulsory	1-1-2-3
19	Patient & Hospital Staff Safety	AcSIR-75-HQM209	Compulsory	1-0-0-1
20	Internship/ Research Project	AcSIR-75-HQM210	Compulsory	0-0-8-4
	<i>Semester 3</i>			
21	Medico legal aspects of healthcare	AcSIR-75-HQM301	Compulsory	1-0-2-2
22	Disaster and Emergency Preparedness in Healthcare	AcSIR-75-HQM302	Compulsory	1-1-2-3
23	Patient Satisfaction and Service Excellence	AcSIR-75-HQM303	Compulsory	1-1-2-3
24	Future of Healthcare	AcSIR-75-HQM304	Compulsory	1-1-0-2
25	Hospital Information Systems and Health IT	AcSIR-75-HQM305	Compulsory	1-1-2-3
26	Hospital Infection Control	AcSIR-75-HQM306	Compulsory	1-0-2-2
27	Global Health	AcSIR-75-HQM307	Compulsory	1-0-2-2
28	Clinical Governance	AcSIR-75-HQM308	Compulsory	1-1-2-3
	<i>Semester 4</i>			
29	Dissertation Project	AcSIR-75-HQM401	Compulsory	0-0-48-24

**List of courses of PG Diploma (Healthcare Quality Management) at MAX-MIME, New Delhi:**

Sl. No.	Course Title	Code	Compulsory/ Elective	L-T-PC
	<i>Semester-1</i>			
1	Overview on Healthcare Systems and Management Dynamics	AcSIR-75-60HQM101	Compulsory	1-1-0-2
2	Hospital Planning and Design	AcSIR-75-60HQM102	Compulsory	1-0-2-2
3	Strategic Management in Healthcare	AcSIR-75-60HQM103	Compulsory	1-1-2-3
4	Patient Centred Care	AcSIR-75-60HQM104	Compulsory	1-0-0-1
5	Hospital Operations and Material Management	AcSIR-75-60HQM105	Compulsory	1-1-2-3
6	Quality Management & Quality Improvement Tools	AcSIR-75-60HQM106	Compulsory	1-0-2-2
7	Measuring Quality	AcSIR-75-60HQM107	Compulsory	1-0-0-1
8	NABH Standards	AcSIR-75-60HQM108	Compulsory	1-0-2-2
9	Audit Tools	AcSIR-75-60HQM109	Compulsory	1-0-0-1
10	Documentation	AcSIR-75-60HQM110	Compulsory	1-1-2-3
	<i>Semester 2</i>			
11	Hospital Utility and Facility Management	AcSIR-75-60HQM201	Compulsory	1-0-2-2
12	Legal & Statutory requirements	AcSIR-75-60HQM202	Compulsory	1-0-0-1
13	Healthcare Communication and Leadership	AcSIR-75-60HQM203	Compulsory	1-0-0-1
14	Hospital Support Services	AcSIR-75-60HQM204	Compulsory	1-1-0-2
15	Health Economics and Financial Management	AcSIR-75-60HQM205	Compulsory	1-0-2-2
16	Research Methods & Biostatistics	AcSIR-75-60HQM206	Compulsory	1-0-2-2
17	Health Insurance and Medical Claims Management	AcSIR-75-60HQM207	Compulsory	1-1-0-2
18	JCI Accreditation	AcSIR-75-60HQM208	Compulsory	1-1-2-3
19	Patient & Hospital Staff Safety	AcSIR-75-60HQM209	Compulsory	1-0-0-1
20	Internship/ Research Project	AcSIR-75-60HQM210	Compulsory	0-0-8-4

**List of courses of PG Diploma (Public Health) at MAX-MIME, New Delhi:**

Sl. No.	Course Title	Code	Credits	Compulsory
	<i>Semester-1</i>			
1	Module-1: Foundations of Public Health Practice	AcSIR-75-60PH-101	2	Compulsory
2	Module -2: Practical- Postings at ongoing Public Health Projects	AcSIR-75-60PH-102	1	Compulsory
3	Module-3: Principles of Social Research Methods	AcSIR-75-60PH-103	2	Compulsory
4	Module- 4: Practical Scientific/ Medical writing	AcSIR-75-60PH-104	1	Compulsory
5	Module-5: Principles and Methods of Epidemiology	AcSIR-75-60PH-105	2	Compulsory
6	Module -6: Practical- Postings at Various departments	AcSIR-75-60PH-106	1	Compulsory
7	Module-7: Health Systems Development and Management	AcSIR-75-60PH-107	3	Compulsory
8	Module-8: Law and Ethics in Public Health	AcSIR-75-60PH-108	2	Compulsory
	<i>Semester-2</i>			
9	Module 9: Advanced Epidemiology	AcSIR-75-60PH-201	3	Compulsory
10	Module 10: Practical- Postings at Various Departments	AcSIR-75-60PH-202	1	Compulsory
11	Module-11: Introduction to Statistical Thinking and Data Analysis	AcSIR-75-60PH-203	3	Compulsory
12	Module-12: Hands on Practice of Data entry and Data Analysis	AcSIR-75-60PH-204	2	Compulsory
13	Module-13: Introduction to Health Economics	AcSIR-75-60PH-205	3	Compulsory
14	Module 14: Health Services system	AcSIR-75-60PH-206	3	Compulsory
15	Module- 15: Practical visit to sub centers, PHCs, CHCs	AcSIR-75-60PH-207	1	Compulsory
16	Module 16: Global Health	AcSIR-75-60PH-208	2	Compulsory
17	Module 17: Digital Health	AcSIR-75-60PH-209	2	Compulsory
18	Module 18: Public Health Aspects of Mental Health	AcSIR-75-60PH-210	2	Compulsory
19	Internship and Research Project	AcSIR-75-60PH-211	4	Compulsory

**List of courses of PG Diploma in Semiconductor Technologies (Assembly, Testing, Marking, and Packaging) at CSIR-CSIO, Chandigarh:**

Sl. No.	Course Title	Code	Core/Elective	L-T-PC
	<i>Semester-I (18 Credits)</i>			
1	Semiconductor Physics and Devices	AcSIR-15-60ATMP101	Core	3-0-2-4
2	Semiconductor Manufacturing Processes	AcSIR-15-60ATMP102	Core	3-0-2-4
3	CMOS Integrated Sensors and Transducers	AcSIR-15-60ATMP103	Core	2-0-2-3
4	Semiconductor testing and Characterization	AcSIR-15-60ATMP104	Core	3-0-2-4
5	Semiconductor materials	AcSIR-15-60ATMP105	Core	2-0-2-3
	<i>Semester-II (22 Credits)</i>			
6	Statistical methods for semiconductor manufacturing	AcSIR-15-60ATMP201	Core	1-0-2-2
7	Assembly and Packaging Technologies	AcSIR-15-60ATMP202	Core	3-0-0-3
8	Digital IC Design	AcSIR-15-60ATMP203	Core	2-0-2-3
9	Emerging Semiconductor technologies and applications	AcSIR-15-60ATMP204	Core	2-0-0-2
10	Advanced Communication and RF-MEMS Technologies	AcSIR-15-60ATMP205	Core	2-0-2-3
11	Industrial Training	AcSIR-15-60ATMP206	Core	9