

IRIMEE Annual Report 2020-21

On behalf of IRIMEE, I extend a very warm welcome to all the distinguished guests from Railway Board and Zonal Railways, all the trainees, awardees and members of the IRIMEE family.

I extend special felicitations to Sri AK Singh, General Manager/South Western Railway, Sri Chet Ram, Additional Member/PU Railway Board, Sri Arun Arora, Additional Member EnHM Railway Board who have graced the occasion.

It's my privilege now to present to all of you the ninety-fourth Annual Report of the Institute for the Financial year 2020-21.

Initially attached to the East India Railway (EIR) Locomotive Workshop at Jamalpur, this institute was set up in 1888 as a Technical School to impart training to Artisans and Trade Apprentices.

In 1927, start of the SCA scheme at Jamalpur marked the beginning of Mechanical Engineering education in the country. Till then India had opportunity for education in only one branch of engineering, viz. civil engineering. IRIMEE's Annual Day thus celebrates

The administrative control of the Technical School was transferred to Railways Board on 1st of April, 1974, when it was renamed as the Indian Railways Institute of Mechanical and Electrical Engineering (IRIMEE). It has the distinction of being the first Centralized Training Institute (CTI) that was set up on Indian Railways for in-house training of its officers and staff. The training of probationers was put under control of IRIMEE in 1988, with the satellite center at Kharagpur, which too was shifted to Jamalpur in 1997.

Training activities at IRIMEE can be broadly grouped into the following categories:

- A. Centralized Probationary Training for IRSME Probationers of 78 weeks
- B. Common Introductory Training to probationary officers of other services of Indian Railways viz. IRSE, IRSEE, IRSS, IRSSE, IRTS, IRAS, IRPS and RPF for one week.
- C. Group B induction course of 6 weeks duration
- D. Professional courses for serving officers and supervisors and customized short-term courses for Non Railway Customers
- E. Mandatory courses for directly-recruited supervisors of Mechanical Department, Direct Recruit Chemist and Metallurgist Supervisors and Senior Chemist and Metallurgist Supervisors.

The institute also organizes Seminars and workshops on Subjects of current importance for Zonal Railways and PUs.

The total number of officials trained in various categories in at IRIMEE is as under:

Category	2020-21 (up to Jan 2021)
In-service Officers	618
IRSME Probationers	87
Other Service Probationers	290
Supervisors	1569
Grand Total	2564

The institute, in its earlier form, was around when the Spanish Flu affected a third of the world's population. That was a century ago. It has since then been a witness epoch's marked by from successive technological revolution and indeed to the birth of modern India itself. All along it has adapted change and thrived upon the opportunities that it brought.

Last year was no different. The sudden onset of Covid-19 pandemic, the effects of which are still lingering, forced the institute to switch from largely physical to online mode of instruction. This resulted in overall increase of more than 100% in training output.

While contact classes are important, online content and the virtual mode of delivery are here to stay as a complementary method in the training strategy for future. This has been a worldwide trend for some time, as seen from the Khan Academy or Udemy programme. I am happy to inform all of you that IRIMEE has adopted the new strategies very effectively and officers would increasingly be able to reach out to the institute when they need help, whether it is for refreshing their knowledge in a 15-minute module or a visit to the institute for weeks of study.

Last year following Mandatory Courses were conducted in Online Mode:

- ◆ Gr 'B' Induction Course (BIND)
- ◆ Junior Engineer Training (JET) for Direct recruit Supervisors
- ◆ Chemist and Metallurgist course for Direct recruit Supervisors

Following Professional Courses of Short duration were conducted in Online Mode:

- ◆ LHB Coach Maintenance:
- ◆ Freight Operation and Maintenance
- ◆ High Horsepower Loco
- ◆ Welding Technology
- ◆ Train Lighting & Air Conditioning
- ◆ Tenders & Contracts
- ◆ Environment & Housekeeping Management
- ◆ Distributed Power Rolling Stock
- ◆ Workshop Technology covering ERP and International Railway Standards

- ◆ E-Office
- ◆ RDSO Quality Assurance
- ◆ Amelioration Course for JAG/SG/SAG Officers

The training of freshly recruited Probationary Officers of the Indian Railways Service of Mechanical Engineers (IRSME) is centralized at IRIMEE.

Special Courses were conducted in 06 batches for Probationers of other services to give them an appreciation of the activities of Rolling Stock Department.

Furthermore, a Course on Maintenance of Diesel Locomotives was also conducted for IRSEE Probationers.

To make the trainees aware of what they may expect in the field and to gain from the experience of managers from other departments, IRIMEE invited 54 persons as visiting faculty from within and outside the railways, prominent among them being:

Railway

- ◆ Sri Shubhranshu, CAO/RWP/Bela
- ◆ Sri Suresh Khade, Ex-Director/IRIEEN
- ◆ Dr Manish Pandey CWM, Alambagh Workshop
- ◆ Sri Ashesh Agarwal PCME/Western Railway
- ◆ Sri Mukesh Rathore, ex-Director(Technical)/RITES
- ◆ Sri Ravindra Sharma, CMS Secunderabad
- ◆ Sri A K Bharti, ED/QA/I&L/RDSO/Kolkata
- ◆ Sri Shivendra Mohan EDME/EnHM/RB
- ◆ Sri V K Agarwal ED/MP/RDSO
- ◆ Sri K Raman CWE/RWF
- ◆ Sri Mahesh Kumar CMM/CLW
- ◆ Sri DC Sharma CAO/P/NR

Non-Railway Visiting Faculty included:

- ◆ Sri Navneet Goel Director Genral/NACIN Chennai
- ◆ Ms Priya Srivastav Pr. Project Engineer CRIS New Delhi

DIGITAL INITIATIVES

Training Videos:

- Developed training video films on topics relevant to Workshop Technology, Rolling Stock, Diesel, Disaster Management, Metallurgy & Chemistry.
- 56 videos have been developed with in-house effort
- A YouTube Channel for video content is now hosted on irimee.in

These initiatives make self-learning material available to officers and supervisors at their convenience.

QR Code

To make self-learning interactive and easier, QR codes are provided in the model rooms at IRIMEE that allow visitors to access informative videos about the cut-sections, components and working models.

Web-based Training Management System:

IRIMEE has developed a WEB BASED Training management System through M/s Skydot, Rajkot. The system includes Time Tabling, ONLINE attendance system, Leave management, ONLINE examinations, Hostel and Vehicle Management and hosting of Training material Online.

MAJOR INITIATIVES

Digital Learning Platform: IRIMEE adopted “Moodle Learning Management System” by introducing assignments and Video Books on the e-learning Platform. The Institute has improved its online training infrastructure and has introduced its own Virtual Private Server for Web Conferencing so that data in our web conferences is secure and controlled by IRIMEE alone. Now Institute is able to host 500 trainees at a time with 10 Virtual classrooms of 50 each.

Condemned ICF Coach converted into TLAC Model room: Model room for Air Conditioning and train lighting equipment has been set up by the Institute faculty using a condemned ICF coach. This is not only more effective in imparting the training using actual equipment, but also saved Rs. 75 lacs that may have been otherwise spent.

Rolling Stock Knowledge Resource: Rolling Stock Knowledge Resource (RSKR) platform is being hosted by IRIMEE for uploading all the teaching/training material in the form of Power Point or Video related to Rolling stock knowledge. For Capacity Development of other STCs for conducting online training courses by Hand Holding, a one-day workshop for Supervisors and officers "Supervisors Online Training Platform (SOLTP-)" was organized. Regular follow up/interaction is being done with STCs.

Online Posting Exam and Viva of IRSME Probationers: An online course 20-Online-Posting-2 for “Posting Examination and Director’s Interview” for 69 IRSME probationers of ESE-2018 and EOL-2017 batch was organized from 02.09.2020 to 18.09.2020. This was done using a Proctoring Software to ensure that the process remained fair. IRIMEE has released 67 probationers after successful completion of training to their allotted railways on 18.09.2020 for their further assignments.

Manpower Cost Reduction: In order to reduce the manpower cost, a total of 32 Group D posts were surrendered and further 02 Jr Scale (Group A) posts were also recommended to be transferred to other establishments.

Social Responsibility: Queens Road Hostel & Yantrik Niwas Hostel of IRIMEE were acquired by Munger District administration for Isolation Ward in its fight against COVID-19. Despite this loss of facilities, IRIMEE did not allow Training activities to be affected, which continue uninterrupted.

Achievements of Trainee officers and Faculty:

- ◆ Sri G Venkatesh, Ex-Professor/MIS/IRIMEE was conferred Railway Week Award at Railway Board Level on his valuable contribution in IRIMEE towards Online Training
- ◆ Sri Silabhadra Das, Professor/MIS/IRIMEE has bagged DG Medal during MDP Course conducted at NAIR/Vadodara.
- ◆ Sri Poonardeep Singh, IRSME Probationer of ESE-2019 Batch has bagged DG Medal during for best performance in Group A Foundation Course at NAIR conducted from 12-10-2020 on the 69th foundation day of NAIR Vadodara on 31.01.2020.

NEW INFRASTRUCTURE PLANNED

- ◆ The institute obtained sanctions to improve the IRIMEE building, improve the hostel facilities, including augmentation of sports facilities, construction of residential accommodation for officers, expansion of Yantrik Niwas by four additional suites, etc.
- ◆ In view of Board's instructions to control Capital Expenditure, 03 works were dropped, one of which was the much-needed model room for instruction in AC coach maintenance. As I mentioned earlier, this facility was created with a condemned coach provided by ER, saving the money while, perhaps, increasing the effectiveness of training. Other dropped items will also be taken up in the coming years.