





सीएसआईआर–केंद्रीय विद्युतरसायन अनुसंघान संस्थान CSIR-Central Electrochemical Research Institute

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद) (Council of Scientific and Industrial Research) कारैकुडी, तमिलनाडु, भारत / Karaikudi-630 003, Tamil Nadu, India



वैज्ञानिक और नवीकृत अनुसंधान अकादमी (एसीएसआईआर) Academy of Scientific and Innovative Research (AcSIR)

Two Year M.Tech. (Corrosion Science & Engineering) Programme

CSIR-Central Electrochemical Research Institute (CSIR-CECRI), Karaikudi, a premier research organization under the aegis of the Council of Scientific and Industrial Research (CSIR), New Delhi, was founded in 1948 to carry out R&D in all aspects of electrochemical science and technologies. CSIR-CECRI's thrust areas of research cover Corrosion & Materials Protection, Electrochemical Power Sources, Electroplating & Metal Finishing, Electrochemical Process Engineering, Electro-organic & Materials Electrochemistry, and Electrodics & Electrocatalysis. To support R&D, CSIR-CECRI has a well-equipped central instrumentation facility, computer networking unit, knowledge resources centre, and sophisticated engineering and technical services to cater to the needs of scientists and research scholars. CSIR-CECRI plays a catalytic role in stimulating the growth of the electrochemical industry in the country by nurturing academic excellence & creativity.

Under the Academy of Scientific and Innovative Research (AcSIR), Ghaziabad, an "Institution of National Importance" established by CSIR, CSIR-CECRI offers PhD degree from 2012 onwards. Since then, about 150 students were graduated and more than 150 students are currently enrolled for PhD programme. CSIR-CECRI has been offering a fully funded, five-year Integrated Dual Degree Programme (IDDP; M.Tech. + Ph.D.) for B.E./B.Tech. students with a valid GATE score under CSIR-GATE fellowship. With its excellent academic contributions, CSIR-CECRI is introducing a two-year M.Tech. programme in Corrosion Science & Engineering for young bright students from August 2025 session onwards. This course will have the scientists and experts in Corrosion & Materials Protection Division of CSIR-CECRI as faculty members.

About Corrosion & Materials Protection (CMP) Division

The CMP division works towards the understanding of various aspects of corrosion and has developed a variety of methods to mitigate the corrosion. The division concentrates on a wide array of interesting phenomena like structure and failure analysis, biological corrosion and related processes, studies on understanding the root cause of corrosion in concrete & steel structures, development of paints and coatings that are used for protecting a surface against corrosion, and cathodic protection that deals with introducing new materials to circumvent corrosion.

The R&D of CMP Division of CSIR-CECRI has been identified as a thrust area by CSIR due to its paramount importance and humongous impact in the industrial sector. Also CSIR-CECRI has been playing a lead role in research in this area which has led to the development of a number of anti-corrosion processes and products. The R&D of CMP division is diffused into the fields of paints and coatings, marine & biological corrosion, cathodic protection, concrete corrosion, and failure analysis. Each of these fields investigates specialized pathways and control measures of corrosion.

Eligibility for M. Tech. (CSE): (any one from the following)

(I) B.E. / B.Tech. in Material Science & Engineering or Metallurgy / Chemical or Electrochemical Engineering / Petrochemical Engineering / Mechanical Engineering / Civil / Biotech. or equivalent degree with valid GATE score or CGPA >= 8.0 from a CFTI

(or)

- (ii) Master's Degree in Chemical Science/Physical Science/Materials Science or equivalent degree with valid GATE Score (or)
- (iii) With similar education qualification as in (i) & (ii) and instead of valid GATE score, candidates should have at least one year experience in R&D project with one publication in SCI indexed journal

Interested candidates may visit AcSIR website http://acsir.res.in for admission processes. This site will be available open until 31 May 2025.

Candidates whose final results are awaited can also apply. If selected, they will be provisionally admitted to the programme. Their continuation in the programme will be subject to securing required percentage / equivalent grade (depending on the cut-off marks for screening for the specific programme) and submission of mark-sheet of their final result at the time of joining the programme.

Age Limit: The upper age limit for the applicants shall be 28 years. Relaxable upto 5 years in the case of candidates belonging to SC / ST / Women and Physically Handicapped applicants, and 3 years in the case of OBC (Non-Creamy Layer) candidates as per rules.

Tuition Fee: Rs. 30,000/- per semester

Hostel Facility: Limited hostel facility shall be provided separately in Boys and Girls Hostels available at the campus.

One or two seats will be reserved for well-deserved corrosion related industry sponsored candidates, who have at least one year of work experience with the present employer with educational qualification mentioned above in (i) or (ii).