



CCE-02/STC-24/Cem/B/2026

Training Programme on Application of XRD, XRF and Optical Microscopy in Cement Industry

Objective

The course aims at imparting knowledge on application of XRD, XRF and Optical Microscopy in cement industry.

Course Contents:

- Basics of X-Ray Fluorescence (XRF), its principle, working, sample preparation types of XRF used in Cement Analysis.
- Basics of X-Ray Diffraction (XRD), its principle and working and determination of qualitative and quantitative phase analysis.
- Introduction on Polarizing Microscope, its principle, working and sample preparation techniques.
- Introduction on limestone mineralogy and different clinker phases, their textural and optical properties and application in cement industry.
- Demonstration of XRF, XRD and Polarizing Microscope with samples.

Mode of Training:

Offline/Physical at NCB-Ballabgarh

Duration and Timings:

2 days (12-13 August 2026); 10:00 hrs to 17:00 hrs (Indian Standard Timing)

Course Fee

Non-Residential

₹ 12,000 plus G.S.T. @ 18% (i.e ₹ 14,160/-), per participant

Residential

₹ 17,100 plus G.S.T. @ 18% (i.e ₹ 20,178/-), per participant

[Limited residential accommodation is available in the hostel located within the campus of NCB Ballabgarh. The accommodation is booked on first-come-first-serve basis only].

Discount on Course Fee

A discount of 10% and 15% on course fee will be extended if an organization nominates 3 and 4 or more participants respectively for the course.

Mode of Payment: Online

State Bank of India, CRI Faridabad Branch (Code 03794), Faridabad-121004, Haryana, India

SB Account No.: 37301477161

MICR Code: 110002194

IFSC Code: SBIN0003794

Participation Certificate

NCB will issue a certificate of participation on conclusion of the training course.

Venue & Communication Address

Centre for Continuing Education Services
National Council for Cement and Building Materials
34 KM Stone, Delhi-Mathura Road (NH-2)
Ballabgarh-121 004, Haryana, INDIA
Tel : +91-129-2666645/868/867;
E-mail : cceb@ncbindia.com;
Website : www.ncbindia.com

NOMINATION FORM



CCE-02/STC-24/Cem/B/2026

**Training Programme
on
Application of XRD, XRF and Optical Microscopy in Cement Industry
(12-13 August 2026)**

Please return the completed form to :

Centre for Continuing Education Services

National Council for Cement and Building Materials

(Under the Administrative Control of Ministry of Commerce & Industry, Govt. of India)

34 KM Stone, Delhi–Mathura Road (NH–2) Ballabgarh–121 004, Haryana, INDIA

Tel: +91-129-2666645/ 868/ 867; **E-mail:** cceb@ncbindia.com;

Website: www.ncbindia.com

To be Filled in by the Nominee

Name of Participant (in Block Letters) Dr /Mr /Mrs /Ms

Qualifications

Position / Designation

Organisation

Address for Communication

..... PIN

--	--	--	--	--	--

E-mail Tel/Mb Fax

☐ Non-Residential ☐ Residential

Signature of the Participant

To be Filled in by the Sponsor

Name of Sponsoring Organisation

GSTIN

Address for Communication

..... PIN

--	--	--	--	--	--

E-mail Tel Mobile

UTR No. Dated ₹

Date : Signature of the Sponsor with stamp of Organisation