



## Skill Development Program

On

### “Molecular Cloning and Protein Expression”

14th to 29th July 2025

CSIR-Center for Cellular and Molecular Biology shall conduct a hands-on training workshop for sixteen days on “Molecular Cloning and Protein Expression” (RECOMB-IV) targeted to faculty/researchers, Post graduates from Universities/Institutes as well as people working in the industry in the field of Life Sciences, Medical Sciences, Pharmaceutical Science & allied areas. This introductory workshop is intended for beginners to teach and train them about the basics of Molecular Cloning and Protein Expression in basic research for various experiments. It will be supplemented with informative lectures, hands-on training, instrument set-up, data collection and analysis.

<b>Duration</b>	:	16 days
<b>No. of seats</b>	:	10-12
<b>Target Audience</b>	:	Faculty/ Researcher from Academia/Industries/ Institutes
<b>Minimum Qualification</b>	:	Masters in any branch of Life Science/Allied areas
<b>Dates</b>	:	14 <sup>th</sup> July – 29 <sup>th</sup> July 2025
<b>Mode of the Course</b>	:	In-house training at CCMB
<b>Mode of selection</b>	:	Application form & Statement of Purpose
<b>Course Fee</b>	:	30,000/- INR (Including Accommodation & GST)
<b>Apply using the link</b>	:	<a href="http://recruitment.ccmb.res.in/training_programs/sdp/">http://recruitment.ccmb.res.in/training_programs/sdp/</a>

#### **Training Curriculum for Course:**

- Media preparation, handling bacterial cell culture; reagents preparation and equipment use for cloning.
- Competent cell preparation for recombinant DNA cloning and protein expression.
- Polymerase Chain Reaction (PCR)- Its principle, working and designing of oligos for gene of interest.
- Plasmid vector preparation and restriction digestion of the plasmid by restriction enzymes.
- Ligation and transformation of the ligated recombinant gene.
- Screening for positive clones and confirmation using colony PCR or restriction enzyme digestion and DNA sequencing.
- Transformation of the confirmed clone into expression host bacterial strain.
- Protein expression standardization, optimization of purification strategies for the expressed protein and its analysis by SDS –PAGE.

#### **Salient Features of the Training:**

- Skilled resource persons will provide lectures and laboratory training
- Exposure to laboratory safety regulations
- One-to-one interaction with the trainers
- Evaluation assignments and Trouble-shooting sessions
- Certificate of participation will be issued to the participants

#### **Contact details:**

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Scan to Apply

