



One week advanced training programme on Pollution Monitoring Techniques and Instrumentation (November 14 – 18, 2011)

Day 1: 14/11/2011, Monday

Time	Topics	Speakers
9.00 am – 9.15 am	Registration	Sadia, CSE
9.15 am – 9.45 am	Participants introduction and need for regulator's training programme	Dr D D Basu, additional director, Central Pollution Control Board (CPCB)
9:45 am – 10:00 am	About Centre for Science and Environment (CSE) and Pollution Monitoring Lab (PML)	Prof H C Agarwal, professor of zoology (rtd), University of Delhi and advisor, CSE
10.00 am – 10:15 am	About CSE's regulator's training programme	Nivit Kumar Yadav, CSE
10.15 am – 11.15 am	Sample collection, storage and preservation (including legal requirements)	Dr D Saha, scientist 'D', air lab, CPCB
11:15 am – 11:30 am Tea		
11:30 am – 12:30 pm	Analytical techniques (GC, HPLC, AAS and GC-MS)	Prof H C Agarwal, professor of zoology (rtd) University of Delhi and advisor, CSE
12: 30 pm – 2.30 pm Lunch and visit to CSE lab at India habitat centre (IHC)		
2.30 pm – 3:30 pm	Industrial emission standards and monitoring	Dr B Sengupta, former member secretary, CPCB
3.30 pm – 6.00 pm	Lab demonstration and exercises at PML	Dr Sapna Johnson and Poornima, CSE

Day 2: 15/11/2011, Tuesday

9:00 am – 10:00 am	QA/QC techniques in laboratory analysis	Dr D D Basu, additional director, CPCB
10:00 am – 11:00 am	Sample preparation techniques for trace organics in water	Abhijit Pathak, senior scientist, CPCB
11:00 am – 11:30 am Tea		
11.30 am – 12:30 pm	Chromatographic 'finger printing' technique for fuel quality monitoring and analysis	Dr H B Mathur, professor, IIT Delhi (rtd) and distinguished fellow, CSE
12: 30 pm – 2.30 pm Lunch and visit to IHC		
2.30 pm – 6:00 pm	Lab demonstration and exercises at PML	Dr Sapna Johnson and Poornima, CSE

Day 3: 16/11/2011, Wednesday

9:00 am – 10:00 am	Heavy metal analysis in water	Dr C S Sharma, senior scientist, bio and instrumentation lab, CPCB
10:00 am – 11:00 am	Water quality, objective, criteria, standards – rationale and procedure for fixing standards	Dr R C Trivedi, former additional director, CPCB
11:00 am – 11:30 am Tea		
11.30 am – 12:30 pm	Toxic air pollutants	Dr H B Mathur, professor, IIT Delhi (rtd) and distinguished fellow, CSE
12: 30 am – 2.30 pm Lunch and visit to CPCB		
2:30 pm – 6:00 pm	Lab demonstration and exercises on microbiological tests at CPCB labs	Dr D D Basu, additional director, CPCB

Day 4: 17/11/2011, Thursday

9:00 am – 10:00 am	Current scenario of pesticide usage	Prof H C Agarwal, professor of zoology (rtd) University of Delhi and advisor, CSE
10:00 am – 11:00 am	Water quality monitoring – techniques and use of modern technologies (GIS/GPS) for pollution monitoring	Dr R M Bharadwaj, scientist 'D', Pollution, Assessment, Monitoring and Survey, CPCB
11:00 am – 11:30 am Tea		
11.30 am – 12:30 pm	Automatic instrumentation for air pollution monitoring – calibration, reliability and data interpretation issues	R Agarwal, managing director, Envirotech Instruments Pvt Ltd
12.30 pm – 2.30 pm Lunch and visit to CPCB lab at Income tax office (ITO)		
2.30 pm – 6:00 pm	Lab demonstration and exercises at air monitoring station at ITO	Dr D D Basu, additional director, CPCB

Day 5: 18/11/2011, Friday

9:00 am – 10:00 am	Ambient air monitoring techniques, sampling location criteria, air quality index and QA/QC in ambient air monitoring	Dr Rajendra Prasad, chief executive, Ecotech Instruments Pvt Ltd
10:00 am – 11:00 am	Recovery, sampling and analysis techniques of VOCs/BTEX/PAH in air	Dr S K Tyagi, scientist 'D', air lab, CPCB
11:00 am – 11:30 am Tea		
11.30 am – 12:30 pm	Trace organic analysis	Dr Sapna Johnson , CSE
12: 30 pm – 2.30 pm Lunch and visit to IHC		
2.30 pm – 5:00 pm	Lab demonstration and exercises at PML	Dr Sapna Johnson and Poornima, CSE
5.00 pm – 5:30 pm	Valedictory function and distribution of certificates	