Completed registration form should be sent to the following address:

Prof. Ashutosh Kumar  
Course Coordinator  
Department of Biosciences and Bioengineering, IIT Bombay, Powai, Mumbai – 400 076.

Phone: +(91-22) 2576 7762  
Fax: +(91-22) 2572 7760  
Email: ashutoshk [at] iitb.ac.in

Important Dates
Last date for receipt of registration: **October 15, 2017**
Notification of acceptance: **October 20, 2017**
Course dates: **November 13-16, 2017**

Notes:
- Incomplete application forms will not be entertained.
- For multiple registration, copy the form or type in the given format.

Venue for Course:
IIT Bombay [VMCC]

Date & Time of Registration:
Nov 13, 2017, 9.00 AM

HANDS ON EXPERIENCE:
NMR spectrometer and computational modeling

Fees:
Total Course fee Rs. 23,600/- (inclusive GST 18%). The demand draft should be drawn in favour of “The Registrar, IIT Bombay- CEP Account” payable at Mumbai. For on-line payments, please [Click here].
Introduction
In the post genomic era, Nuclear Magnetic Resonance (NMR) Spectroscopy has emerged as one of the most powerful techniques with its application in many fields of scientific research, ranging from material science, synthetic and natural products chemistry, molecular and structural biology, clinical medicine, and even to understand the functioning of the human brain. NMR offers a unique avenue to understand various life processes in terms of macromolecular structure and their interactions in their native state.

This certificate course will cover various theoretical and application aspects of NMR spectroscopy. Some exposure to hardware and computational modeling will also be provided. Essentially, this course intends to offer a practical knowledge of advanced NMR methods for research and problem solving for pharmaceuticals and Biologics industries.

Course Contents
- Introduction to NMR spectroscopy
- Overview of NMR hardware
- Chemical shifts and J-coupling
- One-dimensional : proton NMR and X-nuclei NMR (13C, 15N, 31P and 19F)
- Homonuclear 2D NMR and Heteronucler 2D NMR
- Structure determination of molecules
- Solvent suppression, Drug Discovery, DOSY
- Basics of Protein and Biologics NMR.

NMR Spectroscopy for Pharma and Biotech Research
November 13 - 16, 2017
Registration Form
Name* (in block letters): (Mr/Mrs/Ms/Dr)
Designation:
Organization*:
Mailing Address*:
Telephone: Mobile*: Fax:
Email*:
Educational Qualifications*:
Discipline/Specialization*:
Accommodation Required*: YES / NO
Exposure to 10+2 level Physics/Maths*: YES/NO
Any experience with operating NMR spectrometer : YES/NO if yes how long
Signature of Applicant*:
Sponsorship & signature of Head of the Organization (with date & seal)*.
* Required fields otherwise application will be rejected.