INTRODUCTION
Computational Fluid Dynamics is an inherently interdisciplinary branch of science which has an extremely broad spectrum of applications such as aviation, automotive, chemical and process industries, atmospheric sciences, energy, medicine and environment, micro and nanotechnology. There has been considerable growth in the development and application of CFD to all aspects of fluid dynamics. Presently, Computational Fluid Dynamics (CFD) is widely used to analyse systems involving fluid flow, heat transfer and associated phenomena such as chemical reactions in most of the engineering disciplines. The technique is very powerful and spans over a wide range of academic research and industrial applications. The CFD embraces a variety of technologies including mathematics, computer science, engineering and physics and these disciplines have to be brought together to provide the means of modelling fluid flows. Such modelling is to be useful if the results that it yields must be a realistic simulation of a fluid in motion. Hence, there is a need to enhance our fundamental knowledge on the CFD from the academic and industrial experts. The proposed refresher course will give a platform toward interactive discussion on the fundamental issues of the CFD used in engineering to upgrade the user knowledge.

CONTENTS OF THE PROPOSED COURSE
1. Review of Thermodynamics, Fluid Mechanics and Heat Transfer
2. Introduction to CFD
3. Numerical Methods
4. Modeling of incompressible and compressible flows
5. Turbulent Modelling
6. CFD for Fluid flow problems
7. CFD for Heat Transfer Problems
8. CFD for Turbo-machines
9. CFD for Aerospace Applications
10. CFD for Micro and Nano Flows
11. CFD for Automotive applications
12. CFD for Multiphase Flows
13. CFD for Combustion studies
14. CFD for Environmental applications
15. CFD for Biomedical applications.

RESOURCE PERSONS
FACULTY will be from the experts of Jadavpur University, as well as other LEADING Universities/Institutes of India. Experts from Industries, different research organizations will cover some of the topics.

ELIGIBILITY
Full time faculty members of AICTE/UGC approved colleges and Universities of India are eligible.

APPLICATION PROCEDURE
Application in plain paper in the given format along with a passport sized photograph, duly forwarded by the Head of the Institution, should reach the Director, Academic Staff College or the Course Coordinators latest by 11th June 2012. Scanned copy of the duly signed application form and DD should reached latest by 9th June 2012.

COURSE FEE
A non-refundable registration fee of Rs. 500/- is to be sent through DD/Banker's Cheque in favour of 'JADAVPUR UNIVERSITY' drawn on SBI, payable at Kolkata, along with the application. However, the draft will be refunded if the applicant is not selected in the course. Acceptance of application is as per eligibility norms of UGC.

DAILY ALLOWANCES
As Per UGC norms, the selected outstation participants will be entitled to 2nd class railway fare (AC 3 tier over 500 kms. or more than 12 hours of journey) and daily Rs.250/- towards boarding and lodging, while the local participants will be entitled to Rs.100/- for daily hospitality. Out station participants should arrange for their own accommodation. However, the course coordinators may provide necessary help in this regard, if informed well in advance.
Application format
Refresher Course On
Recent Advances and Trends in
Applications of Computational Fluid
Dynamics (CFD) in Engineering

1. Name of the Applicant (in block letters):
2. Address: i) Residential
   ii) for Communication
   iii) Phone:  iv) E-mail:
3. Date of Birth  4. Sex
5. Educational Qualification
6. Date of joining in the College / University
7. Teaching Experience in Years
8. Present Designation and Department
9. Name and Address of the College/University
10. Whether the college admitted under 2(1) 12B of UGC
11.a) Detail of Previous Orientation/Refresher Course attended
    b) Dates of last Refresher Course attended
12. Any other information

Place:   Date:   Signature of the Applicant

CERTIFICATE
I hereby certify that _______________ is interested in undergoing the Refresher Course and that he / she will be relieved in time to participate in the above course at Jadavpur University.

Place: Office seal   Signature of the Principal / Head of the Institution

The application format may be downloaded from http://www.jaduniv.edu.in/asc.php

UNIVERSITY GRANTS COMMISSION

JADAVPUR UNIVERSITY

ACADEMIC STAFF COLLEGE

Refresher Course

on

Recent Advances and Trends in Applications of Computational Fluid Dynamics (CFD) in Engineering

18th June 2012 to 7th July 2012

Organised by

Department of Mechanical Engineering
Jadavpur University
Kolkata 700 032

LOCATION
The campus of Jadavpur University is located in South Kolkata 8 km by local rail from Sealdah Railway Station; 15 km by road from Howrah Station and 25 km from Netaji Subhas Chandra Bose International Airport.

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Fax: (033) 23357254

LAST DATE FOR RECEIPT OF APPLICATION:   11th June, 2012