

## INTRODUCTION

COMPUTATIONAL FLUID DYNAMICS (CFD) is a powerful simulation tool, which uses powerful computer and applied mathematics to design, analyze and optimize operating conditions. It has an enormous potential impact on industry because the solution of the equations of motion provides everything that is meaningful to know about the domain. Therefore, it is used today in a wide range of disciplines and industries, including aerospace, automotive, power generation, chemical manufacturing, polymer processing, petroleum exploration, medical research, meteorology, and astrophysics etc. The objective of this workshop is to open a plot form to the academicians to get knowledge on recent advances in Computational Fluid Dynamics (CFD) techniques and their applications to real-world problems.

## WORKSHOP CONTENTS

- ✚ Introduction to CFD
- ✚ Basics of Fluid Dynamics
- ✚ CFD Principles and Practices
- ✚ Governing equations
- ✚ Mathematical Modeling
- ✚ Overview Of CFD soft wares
  - Introduction to ANSYS Workbench
- ✚ Introduction to ANSYS Design Modeler
- ✚ GUI Layout
- ✚ Basic Modeling Techniques in Design Modeler
- ✚ Basic Meshing Techniques
- ✚ Introduction To CFX
- ✚ Heat Transfer Problem Solving In CFX
- ✚ Fluid Flow Problem Solving In CFX
- ✚ Introduction To Fluent Software
- ✚ Heat Transfer Problem Solving in Fluent

## ✚ Fluid Flow Problem Solving In Fluent

## ABOUT THE INSTITUTE

Sree Chaitanya College of Engineering (SCCE) was established in the year 2004-2005. It is managed by TAKSHASILA EDUCATIONAL SOCIETY, Karimnagar. The college is affiliated to Jawaharlal Nehru Technological University (JNTU) Hyderabad. SCCE is functioning with the motto of prosperity through technology and is continuously taking genuine and immense efforts to produce technically competent socially committed young engineers.

## ABOUT THE DEPARTMENT

The Department of Mechanical Engineering at SCCE continuously strives to achieve excellence in education, research as well as consultancy work with service to the society. The department has excellent infrastructure facilities with modern labs. The department has dynamic and well experienced faculty involved in research and are supported by dedicated technical staff. The department also offers PG program with specialization in Design for Manufacturing and also in Thermal Engineering.

## ABOUT THE CITY

The city of Karimnagar, lying on the banks of Manair river, is about 160 Km north of Hyderabad and connected by SH-1. It is endowed with vast agricultural area and mineral deposits serving industries such as NTPC, Singareni Collieries Coal Mines and Kesoram Cements. It is also home to several religious places such as Vemulawada, Dharmapuri, Kaleshwaram and Kondagattu.

## FACULTY DEVELOPMENT PROGRAM

on

COMPUTATIONAL FLUID DYNAMICS

9<sup>th</sup> - 10<sup>th</sup> Jan, 2015

*Organized by*

Department of Mechanical Engineering  
Sree Chaitanya College of Engineering  
Timmapur, Karimnagar (A.P) – 505527

## REGISTRATION FORM

1. Name:
2. Designation:
3. Department:
4. Institution:
5. Address:
6. Email:
7. Phone:
8. Highest Educational Qualification:
9. Experience in Teaching/Research/Industry:
10. DD Particulars
  - DD No: \_\_\_\_\_ Date: \_\_\_\_\_
  - Amount: Rs. \_\_\_\_\_
11. Any other Information:

## DECLARATION

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the course and shall attend the workshop completely. I also undertake the responsibility to inform the coordinator in case, I am unable to attend the workshop.

Place:

Date:

*Signature of the applicant*

## SPONSORSHIP CERTIFICATE

Dr/Mr/Ms..... is an employee/ of our Institute/Organization and is hereby sponsored to participate in the 2 day workshop on Computational Fluid Dynamics, during 9th -10th Jan 2014 at Sree Chaitanya College of Engineering, Karimnagar, Telangana.

Place:

Date:

*Signature of Head of Institution  
(with seal)*

## REGISTRATION FEE DETAILS

Academicians: Rs 500=00

## ACCOMODATION

No accommodation will be provided for participants.

## ELIGIBILITY AND SLECTION CRITERIA

This workshop is open to the faculty working in AICTE approved Engineering/Polytechnic colleges. The completed registration forms should reach the coordinator on or before January 8, 2015. Registration fee has to be paid along with the registration form by DD drawn in favor of **Principal, Sree Chaitanya College of Engineering, Karimnagar** payable at Karimnagar.

## RESOURCE PERSONS

Faculty from NIT Warangal & industry will form the core group for delivering lecture for the workshop.

### Chief Patron:

M. Lakshma Reddy, Chairman

### Patrons:

M. Ramesh Reddy, Secretary

K. Narender Reddy, Director

### President:

Dr. R.V.R.K.Chalam, Principal

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**SREE CHAITANYA**  
EDUCATIONAL INSTITUTIONS

Coordinator

**Dr. G.Venkateswarlu**

Co-coordinator

**T. Madhavi**

Organized by

**Department of Mechanical Engineering  
Sree Chaitanya College of Engineering  
(Affiliated to JNTU, Hyderabad)  
LMD Colony, Timmapur, Karimnagar – 505527  
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