INTRODUCTION

Design of Experiments (DOE) techniques deal with planning, conducting the experiments, and then analyzing and interpreting the response to evaluate the factors, which control the value of a parameter or group of parameters. A strategically planned and executed experiment may provide a great deal of information about the effect on a response variable due to one or more factors. DOE simply helps to pin point the sensitive parts and sensitive areas in designs that cause problems in yield. Designers are then able to fix these problems and produce robust and higher yield designs prior to going into production.

Taguchi and Response surface methods are based on performing evaluation or experiments to test the sensitivity of a set of response variables to a set of control parameters (or independent variables) with an aim to attain the optimum setting of the control parameters. They are the highly appreciated and well defined techniques for the optimization of process parameters. Recently, Artificial neural network engrossed a large group of researchers from different field to predict the results with random set of variable, due to their competence to employ learning algorithms and determine input-response interactions for complex, nonlinear systems.

In this programme, lectures will be delivered on the basic principles of statistics, design of experiment, Taguchi method, RSM and ANN. Also, an exposure to softwares will be given to enhance the learning.

After the completion of the workshop, participants will be able to

- Understand the importance of the Taguchi method and response surface method (RSM) in research and in industry
- Apply Taguchi and RSM method in their field
- Analyse the effect of factors affecting the response
- Understand and apply Artificial Neural Network (ANN) in research and in industry

CONTENT OF PROGRAMME

Introduction to design of experiment, Taguchi method, Response Surface Methodology & Analysis of variance, Case studies utilising the Taguchi Method, Response Surace Methodology, and Artificial Neural Network

A research based problem will be given to the participants for achieving the optimum conditions and analyzing the factor effects.

FACULTY

The eminent speakers from NITs, reputed Universities and professionals from industries.

ELIGIBILITY

Faculty members of AICTE approved institutions/ Host institutions, Research Scholar and PG scholars are eligible to attend the course.

Name   :
Gender   :
Designation   :
Institution   :
Address for   :
correspondence

Phone   (O)   :
                   (M)   :
Email   :
Qualification   :
Accomodation   : Yes/ No
required

Date   :

Signature of Applicant

The applicant is sponsored for the workshop and he/she is permitted to attend the same.

Signature of Head
of the Institute with seal

ABOUT THE INSTITUTE

The institute was established in 1961 as a Regional Engineering College and was given a Deemed University status on 4th October 2002 as a National Institute of Technology with the objective to provide high quality technical education to meet the needs of the Nation in the present competitive world. At present, the Institute is offering 6 UG and 15 PG Programmes in various disciplines of Technology as well as three 5 Year Integrated M.Sc. Programmes. The Institute also offers Ph.D. Programmes in all disciplines of Engineering and Applied Sciences. Institute receives research project grants from MHRD, DST, CSIR, GUJCOST, BRNS, etc. SVNIT has an excellent placement record with a number of top ranking companies visiting the campus every year.

ABOUT THE DEPARTMENT

Chemical Engineering Department of S. V. National Institute of Technology, Surat was started in 1995. The Department has built up a comprehensive research infrastructure with top-notch facilities for carrying cutting-edge teaching and research. The department strives to provide facilities and environment that are conducive for creative and dynamic work. The Department is fully equipped with modern equipments and computer facilities which are being entertained by trained and experienced faculties.

COURSE FEE

There is no registration fee. Tea during sessions/ working lunch will be provided to the participants. On completions of the program on all the days, participanrts will be awarded certificate of participation by respective ATAL academy.

No TA-DA will be paid to any participants.

Numbers of participants are limited to 50.

Application (can be downloaded from the website: www.svnit.ac.in) in the prescribed format duly signed by the Head of the Institution should reach the Coordinator on or before **31st October 2019** by post or email (scanned copy).

ACCOMMODATION

Suitably furnished accommodation will be made available, if requested in advance and subject to availability, in the hostels/guest houses of the SVNIT on payment basis for outstationed candidates on twin sharing basis.

IMPORTANT DATES

Last date of registration: **31st October 2019**
Date of intimation: **1st Novemebr 2019**

COORDINATORS

Dr. Meghal A. Desai
Dr. Sanjaykumar R. Patel
Dr. Girirajsinh C. Jadeja

MAILING ADDRESS

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Faculty Development Program under AICTE Training And Learning (ATAL) Academies Programme

on

Design of Experiment & Artificial Neural Network

4th – 8th November, 2019

:: Organized by ::

Department of Chemical Engineering Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat-395007 (GUJARAT)