#### Preamble

There are many real life problems involving uncertainty and vagueness in their measurement, control and operation. Applications of fuzzy logic to these systems are found very useful. Fuzzy logic enables the computer and machines to think like human and take the instructions in human language. The knowledge acquired by human during operations of a system can be transferred to machines through Fuzzy logic.

Also, there are many engineering systems requiring prediction of their performance under various operating environment. These systems are generally nonlinear and complex to describe. Therefore, conventional modeling techniques face many limitations. The fuzzy modeling techniques are very useful for modeling the nonlinear systems such as reservoir operation, operation of a treatment plant etc.

Fuzzy logic was invented by Lofi Zadeh in 1965. Now days, fuzzy logic is gaining increased popularity in post graduate education and research in engineering field. Also, there is a need to provide the exposure of fuzzy logic for the undergraduate studies. To provide this exposure to the teachers and students, One week faculty development program on "Fuzzy Logic and it's Engineering Application will be very useful to research scholars, academicialns and industry personnel in their further research and development.

This workshop will be useful to U.G. and P.G. students and teachers perusing Ph. D work and research work.

## \* Date & Venue \* December 11-15, 2017

#### Sir Visvesvaraya Hall,

Civil Engineering Department,
K. K. Wagh Institute of Engineering Education
and Research, Nashik

#### Who Can Attend?

- Faculty from any discipline from engineering colleges, polytechnics, science colleges, law colleges, agricultural colleges, pharmacy colleges, management institutes.
- U. G., P. G. Students
- Research Scholars
- Scientists, Innovators, R&D Team members.
- Industry personnel.

#### Registration:-

Registration fees of Rs. 2000/- non refundable (includes registration kit, tea, lunch and dinner) will be charged from each delegate. No T.A. & D.A. is admissible. The amount of registration fees is to be paid by D.D. in favour of the Principal, K.K.W.I.E.E.&R, Nashik, payable at Nashik. The last date of registration is 09/12/2017. Delegates may use photo copy of the application form enclosed herewith for multiple entries. Course material will be provided along with registration kit.

#### Accommodation:-

Outstation participants have to make arrangement for accommodation on their own. However, the organizers can help in getting accommodation near to venue.

#### REGISTRATION FORM

# One Week Faculty Development Program On Fuzzy Logic and its Applications

December 11-15, 2017

Name:
Designation:
Organization:
Address:
Phone:
Fax:
Mobile No:
E-mail ID:  Payment Details:  Registration Charges Rs. 2000/-
D.D. No Dated: / /20
Signature of Participant :
Seal & Signature of Sponsoring Authority

#### **Resource Persons**

- Dr. Ashok Deshpande (Ex. Deputy Director, NEERI, Nagpur, Professor Emeritus, University of California, Berkely. Prof. Deshpande worked with the father of fuzzy Logic; Dr. Lotfi Zadeh.
- 2. Dr. D. G. Regulwar, Professor, Government College of Engineering, Aurangabad.
- 3. Dr. D. Datta, Scientist H+, BARC, Mumbai
- Dr. P. J. Pawar, Professor in Production Engineering, K. K. Wagh Institute of Engineering Education and Research, Nashik.
- Dr. A.L.Varne, Professor in Civil Engineering, K. K. Wagh Institute of Engineering Education and Research, Nashik.

#### Topics to be covered

- 1. Mathematical foundation of Fuzzy Set theory.
- 2. Theory of Fuzzy Logic, Fuzzy relations and Composition, Fuzzy Inference systems.
- 3. Fuzzy application in modeling of complex system.
- 4. Performance Index of using Fuzzy Similarity theory.
- 4. Fuzzy optimization
- 5. Dempster Shafer Theory of Evidence, and Prospect Theory with applications

#### \* Patrons \*

Hon. Balasaheb Wagh Chairman, Hon. Sameer Wagh Trustee, K. K. Wagh Education Society, Nashik

#### \* Convener \*

Prof. (Dr.) K. N. Nandurkar Principal, KKWIEE&R, Nashik

#### \* Coordinators \*

Dr. A. L. Varne, Dr. P. J. Pawar

#### \* Address for Correspondence \*

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K. K. Wagh Institute of Engineering Education and Research, Nashik. Hirabai Haridas Vidyanagari, Amrutdham, Panchavati, Nashik - 422 003.

### One Week Faculty Development Program

On

Fuzzy Logic and its Applications

**December 11-15, 2017** 



Organized by

Department of Civil Engineering &

Department of Production Engineering K. K. Wagh Institute of Engineering Education and Research, Nashik.

Hirabai Haridas Vidyanagari, Amrutdham, Panchavati, Nashik - 422 003.