International Workshop on

Engineering Optimization: Recent Developments & Applications



15-17 December 2018, Bennett University Greater Noida, India

By

Prof. S.S Rao University of Miami, Florida, USA

(http://www.coe.miami.edu/faculty-directory/name/singiresu-rao)



Organized by

Department of Mechanical and Aerospace Engineering, Bennett University, Greater Noida

About the Workshop:

The ever-increasing demand on engineers to lower production costs and improve the performance of products and systems have made them resort to optimization methods, enabling efficient design and production. Today optimization is a powerful tool of trade for the engineer in virtually every discipline. It provides them with a rigorous, systematic method for rapidly zeroing in on the most innovative, cost-effective solutions to some of today's most challenging engineering design problems. This course provides an in-depth coverage of several optimization methods, including linear, nonlinear, integer and stochastic programming techniques. Also included are the modern methods, such as evolutionary (Genetic algorithms), particle swarm and ant colony algorithms and fuzzy optimization techniques. In addition, an introductory presentation will be made on the metaheuristic methods that are being developed in the last 5 to 6 years (such as Honey bee, bat, firefly, harmony search, cuckoo search, and teaching-learning algorithms). Some practical engineering optimization examples will be presented. The use of MATLAB software for solving optimization problems will also be discussed with examples.

About the speaker:

Dr. Singiresu S. Rao is currently a Professor in the Department of Mechanical and Aerospace Engineering at University of Miami, Coral Gables, Florida. He has extensive teaching and research experience at Miami, San Diego State University, Indian Institute of Technology Kanpur and NASA Langley Research Center.

Prof. Rao has published more than 175 technical papers in internationally reputed journals and more than 125 papers in conference proceedings, in engineering optimization, reliability-based design, fuzzy systems, active control of structures, and vibration engineering. Dr. Rao has published eight books which are being used as text books at hundreds of universities throughout the world. He served as the Associate Editor for ASME Journal of Mechanisms, Transmissions and Automation in Design, and the Journal of Microelectronics and Reliability. He has also edited several conference proceedings and served as the Conference Chairman and papers Review Chairman for the ASME Design Automation Committee. Currently, he serves on the editorial boards of Engineering Optimization and Reliability Engineering and System Safety.

Registration Fee:

FOR PARTICIPANTS FROM INDIA

For students/ research scholars (from India):

- INR 3000 (without food and accommodation)
- INR 5500 (with food and accommodation in hostel)

For faculties from University/Colleges/Institutions (from India):

- INR 10000 (without food and accommodation in hostel)
- INR 12500 (with food and accommodation in hostel)

For participants from Indian industries:

- INR 15000 (without food and accommodation in hostel)
- INR 17500 (without food and accommodation in hostel)

DISCOUNTS: For the registered participants of 36th International Conference on VIBROENGINEERING (https://jveconferences.com/conference/DELHI-2018) during 13-15 December, 2018), the following discounts in registration fee are available:

- For students/ research scholars (from India): Discount of INR 1000
- For faculties from University/Colleges/Institutions (from India): Discount of INR 2000
- For participants from Indian industries: Discount of INR 2000

NOTE: The seats are limited in hostel. So early registration is requested to avail this opportunity.

FOR PARTICIPANTS FROM ABROAD

For students/ research scholars/faculties/others:

- Euro 200 (without food and accommodation)
- Euro 250 (with food and accommodation in University hostel)

Discounts: For the registered participants of 36th International Conference on VIBROENGINEERING (13-15th December, 2018), a discount of EURO 50 will be provided. (https://jveconferences.com/conference/DELHI-2018).

NOTE: The seats are limited in hostel. So early registration is requested.

Certificates:

Every participants will get participation certificate for attending the workshop.

<u>Last date of registration</u>: **15 November, 2018.** To avail the hostel facility, early registration is required.

Registration fee includes:

- Course bag to each participant
- Pad/ pen to each participant
- Certificate

Process of registration:

Step 1: Please online transfer the registration fee to the undermentioned bank details.

Step 2 : Fill the registration google form available at https://goo.gl/forms/JgguXEYQN3mNZ0Qj2

OR send the scanned copy of registration form with online transfer details to vinayakranjan@gmail.com, vinayak.ranjan@bennett.edu.in

| KOTAK BANK DETAILS | |
|--------------------|--|
| Full name of | Bennett University |
| Beneficiary | |
| Type of Account | Savings A/C |
| A.C No. | 0111845583 |
| City | Greater Noida |
| Bank | Kotak Mahindra Bank |
| Address | Alfa-1, Commercial Belt, Greater Noida-201308 |
| Branch | Alfa-1, Commercial Belt, Greater |
| | Noida |
| IFSC Code | KKBK0005028 |
| PAN No. | AAAJB1388A |

Contact:

Dr. Vinayak Ranjan

Professor and Head

Department of Mechanical and Aerospace Engineering,

Bennett University,

Plot Nos 8-11, Tech Zone II, Greater Noida 201310, Uttar Pradesh, India.

Phone: +91 120 719 9312 (direct) Cell: +91 9523455774, 9470383975

Official email: vinayak.ranjan@bennett.edu.in, vinayakranjan@gmail.com

REGISTRATION FORM

(https://goo.gl/forms/JgguXEYQN3mNZ0Qj2)

NAME (as you like to print on certificate):

Highest Educational Qualification:

Affiliation: (Name of the University/ institute/ college)

Gender (Male/ Female):

Do you need Hostel accommodation? (Yes / No):

Date of birth:

Your citizenship:

Passport Number (for the participants outside India):

Online transfer details of the registration amount: