



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY



**NATIONAL PROGRAMME ON DIFFERENTIAL
EQUATIONS**

THEORY, COMPUTATION & APPLICATION

NPDE-TCA-2016

(Sponsored by DST)

Announcement of

**ADVANCED LEVEL RESEARCH WORKSHOP ON “Mathematical Modeling of
Environmental, Ecological and Epidemiological systems”**

AT

**DST-Centre for Interdisciplinary Mathematical Sciences (CIMS), Banaras Hindu
University, Varanasi-221005**

August 24 - 29, 2016

BHU is organizing an Advanced Level Workshop on “Research Workshop on Mathematical Modeling of Environmental, Ecological and Epidemiological Systems” under National Programme on Differential Equations: Theory, Computation & Applications (NPDE-TCA) during August 24 -- 29, 2016.

AIM:

- To expose young researchers to the Mathematical Modeling and Simulation of Environmental, Ecological and Epidemiological Systems.
- To focus on recent developments like Delay Mathematical models, Bifurcation Theory.
- To provide a common platform for exchanging of ideas and results pertaining to the challenges in this area as well as some related areas.

TARGET AUDIENCE:

Ph.D. Students, Young Researchers, Post-doctoral Fellow and Young Faculties.

MAIN TOPICS:

Linear and nonlinear dynamical systems, Local Stability Analysis (Eigen value method), Routh-Hurwitz Criterion, Nonlinear Stability Analysis (Lyapunov's method). Mathematical Modeling, Modeling of Environmental, Ecological and Epidemiological systems. Bifurcation, Forward and Backward Bifurcation, Hopf-Bifurcation.

RESOURCE PERSONS:

Prof. Y. Takeuchi (AGU, Japan); Prof. J.B. Shukla (IIT Kanpur); Prof. V. Raghavendra (IIT Kanpur); Prof. Peeyush Chandra (IIT Kanpur); Prof. Sunita Gakkhar (IIT Roorkee); Prof. M. Saleem (Aligarh Muslim University); Prof. B. V. Rathish Kumar (IIT Kanpur).

LOCAL ORGANIZING COMMITTEE:

Prof. A. K. Singh, Dr. Arvind Kumar Singh, Dr. R. P. Gupta, Dr. Anupam Priyadarshi,
Dr. Krishnendu Bhattacharya.

PARTICIPATION:

To participate in the workshop, fill in the required form which can be available on the website: <http://www.npde-tca.math.iitb.ac.in/BHU2016/rwmmees2016.php> and request your Referees to send us your recommendation letter along with your application ID to this email : npde.atmp@gmail.com

CONTACT:

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Important Dead Lines:

Last date for applying/ submission of application: **29th July, 2016 till 5:00 PM**

Announcement of selected participants in the website: **1st August, 2016.**