



**National Seminar  
On**



**“Mathematical Modeling and Its Applications” (NSMMIA)**

**March 18<sup>th</sup> & 19<sup>th</sup>, 2024**

**(Sponsored by C S J M University, Kanpur, U. P)**

**Organized**

**By**

**Department of Mathematics**

**D.A-V. College, Kanpur, U.P**

**(Affiliated to NAAC accredited A<sup>++</sup> CSJM University, Kanpur, U. P.)**

**Organizing Secretary**

**:Dr. Subal Chandra Ghosh**

Department of Mathematics

D.A-V. College Kanpur

**Convenor**

**:Prof. Pushpendra Kumar Tripathi**

Department of Mathematics

D.A-V. College Kanpur

**National Seminar**  
**On**  
**“Mathematical Modelling and Its Applications” (NSMMIA)**  
**March 18<sup>th</sup> & 19<sup>th</sup>, 2024**  
**(Sponsored by C S J M University, Kanpur, U. P)**  
**Organized**  
**By**  
**Department of Mathematics**  
**D.A-V. College, Kanpur, U.P**  
**(Affiliated to NAAC accredited A<sup>++</sup> CSJM University, Kanpur, U. P.)**

**Introduction:** - The Department of Mathematics, D.A-V. College, Kanpur has organized a two-day National Seminar on the topic “Mathematical Modelling and Its Applications” (NSMMIA), which was sponsored by Chhatrapati Sahu Ji Maharaj University, Kanpur. The National Seminar was conducted at The **Dr. Nagendra Swarup Smart Lecture Hall, D.A-V. College, Kanpur, U.P.** This national seminar has provided an opportunity to participants including students, research scholar and teacher to gain knowledge and skills through lectures, discussions and other interactive activities. Seminar was designed to provide a comprehensive overview of the topic and was aimed at providing in-depth training on mathematic Modelling. Also, the seminar also attempted to bring new approach in teaching with tactical improvisations to mathematical modelling.

**Inaugural Session: - Dated 18<sup>th</sup> March-2024**

The Inaugural session of the national seminar happened on March-18, 2024 at 10 AM. It was hosted by Prof. Abhishek Kumar and Prof. Anila Tripathi. Prof. Vinay Kumar Pathak, Vice Chancellor, Chhatrapati Shahu Ji University, Kanpur was the Chief Guest of the inaugural occasion. His erudite address enlightened the participants on practical applications of Mathematical Modelling in various fields of applied sciences. The occasion was also graced by Hon’ble Secretary of our college management, Madam Kumkum Swarup, as the chief patron. Hon’ble, Er. Gauravendra Swarup, Joint Secretary, Board of Management, D.A-V. College, Kanpur, U.P was also there to grace the occasion with his august presence. Respected principal of our college, Prof. Arun Kumar Dixit, offered his welcome address to the guests and participants of the inaugural session with finely touching upon the topic the seminar in terms of its practical applications in modern research models He wished the organizers a successful conduction of the seminar. Convener of the Seminar, Prof Pushpendra Kumar Tripathi, also shed insightful light on the topic while conveying his Vote of Thanks. Organizing Secretary of the national Seminar, Dr. Subal Chandra Ghosh, delivered opened

the topic of the seminar for a detailed discourse. Prof. Ram Naresh Tripathi, HOD, HBTU, Kanpur finally delivered his keynote address beautifully elucidating various facets of the topic of the seminar and dwelt upon its immense usefulness in modern day research.

### **First Technical Session: -Dated 18<sup>th</sup> March-2024**

The first technical session started at 12:00 noon. This session was hosted by Dr. Nidhi Nagar and chaired by Dr. S. S. Pandey & co-chaired by Dr. R. B. Tiwari. In this session the invited talk was delivered by Prof Maloy Banerjee, Department of Mathematics & statistics, IIT, Kanpur, Dr. Ritabrata Biswas, Department of mathematics, University of Burdwan, Burdwan, W.B and Prof. Rekha Bali, Department of Mathematics, HBTU, Kanpur, U. P, on sub-topics namely, **“Spatiotemporal Pattern formation: New Mechanisms”**; **“Study of Nearby Quasars: Spectroscopic Ideas”**. **“Mathematical Models for the use of Nanoparticle in the treatment of cardiovascular diseases** respectively. Also, in this session seven research papers were presented by the Research Schoolers from the different Colleges and Universities.

### **Second Technical Session: - Dated 18<sup>th</sup> March-2024**

The Second Technical session started at 02:30PM after the lunch break. The session chaired by Dr. Meera Srivastava & Co-chaired Prof. Manjari Srivastava. In this session invited talk delivered by the resource persons Prof. Amit Kumar Tripathi, Department of Applied Science & Humanities R.E.C, Banda, U.P. and Prof Pankaj Mathur, Department of Mathematics, Lucknow University, Lucknow, U.P., on the sub-topic topics namely **“Modeling and Analysis of Optimization Problems using Evolutionary Algorithms”** and **“Electrostatic representation of the zeros the orthogonal polynomials”** respectively. In this session 12 research Papers presented by the research scholars and the faculty members from different Institutions. The session was ended on 05:00PM.

### **Third Technical Session: - Dated 19<sup>th</sup> March-2024**

The third technical Session of the National Seminar started at the morning 10:00 AM. The session was chaired by Prof. A. K. Srivastava & Co-Chaired by Prof. Parijat Sinha. In this session the invited talk delivered by resource persons, Prof. A. L. Pathak, HOD, Department of Mathematics, B.N.D.P.G. College, Kanpur, U.P. and Prof. A. K. Mishra, Department of Mathematics, BHU, Varanasi, U.P. on the sub-topic, **“Evolutionary Model of Mathematics in Bharat”** and **mathematical Modeling and Analysis of Chemical and Biological Control of Increase Crop yield”** respectively. In this session Prof. S. N. Mishra Department of Mathematics, B.N.D.P.G. College, Kanpur, U.P, also given his valuable lecture on the topic **“Mathematical Models in**

**Communicable Diseases”**. After the tea break at 11: 45 this session was continued and 07 research papers presented by the research Schoolers from different colleges and Universities on the topic related to Mathematical Modeling.

#### **Fourth Technical Session: - Dated 19<sup>th</sup> March-2024**

The Fourth session was started at 12:30 PM. In this session resource Person Prof. Mukesh Kumar, Principal, Armapur P.G. College, Kanpur, U.P., delivered an invited Talk on the topic **“Mathematical Counting Principals in Algebra and Analysis”**. After that the resource person, Prof. A. C. Pandey, Principal, Akbarpur Degree College, Kanpur Dehat, U.P. delivered his talk on the topic **“Development of tensor and Riemannian Geometry”**. Also 14 research Papers presented by research Scholler and faculty members.

#### **Valedictory Session: - Dated 19<sup>th</sup> March-2024**

The last session of the national Seminar was valedictory Program. The Valedictory program hosted by Prof. Anila Tripathi. The Valedictory Program graced by the presence of our chief guest, Prof. R. K. Dwivedi, Director, CDC, Chhatrapati Shahu Ji University, Kanpur, U.P. He encouraged us for our successful program. His Scholarly address enlightened to the participants about Mathematical Modeling, which gives new dimension of research for the research Scholler. In this session our respected Principal Sir, Prof. Arun Kumar Dixit ji delivered the welcome address and he blessed us for our successful two days seminar. His blessing sentences encourage us forever. In this session, the chairperson of the National seminar, respected Prof. S.K. Srivastava, HOD, Department of Mathematics, D.A-V. College, Kanpur & Dean of faculty of Science, Chhatrapati Shahu Ji University, U.P, delivered his blessing words for the successful seminar. The Convener of the Seminar, Prof. Pushpendra Kumar Tripathi given his blessing words to all the faculty members of the department, students, and research Scholler. Organizing Secretary, Dr. Subal Chandra Ghosh, Department of Mathematics, D.A-V. College, Kanpur, given Vote of thanks. Our respected Principal Sir, Prof. Arun Kumar Dixit, always help us, given his valuable times and guidelines to success the program. We also thanks to all the faculty members, research scholar, students and staff of the department, whose heard working gives the success the seminar.

#### **Benefit:**

Our Successful national seminar reached to the purpose of education, where the participants engage in the discussion of an academic subject for the aim of gaining a better insight into the subject and meet other Faculties, Scientists, and participants different part of India with similar interests.



- In this event the keynote speaker and resource persons shared their valuable lecture, literatures and research knowledge in their field and it has motivated researchers to achieve their own professional goals.
- This Seminar has focused on applications Mathematical science, its Applications on Mathematical Modeling, and technology. Which is a multidisciplinary area covering many different branches of Mathematics, physics, Engineering Science, Technology, Architectural Sciences, biological Sciences, environmental Sciences and medical Sciences.
- It was a new approach, to teaching one to apply new tactics which might not have known about before. Participants has learned to create an effective plan and better time management how to be better research can be done and to help the bater research can be done by attending the right seminar.

\*\*\*\*\*



























































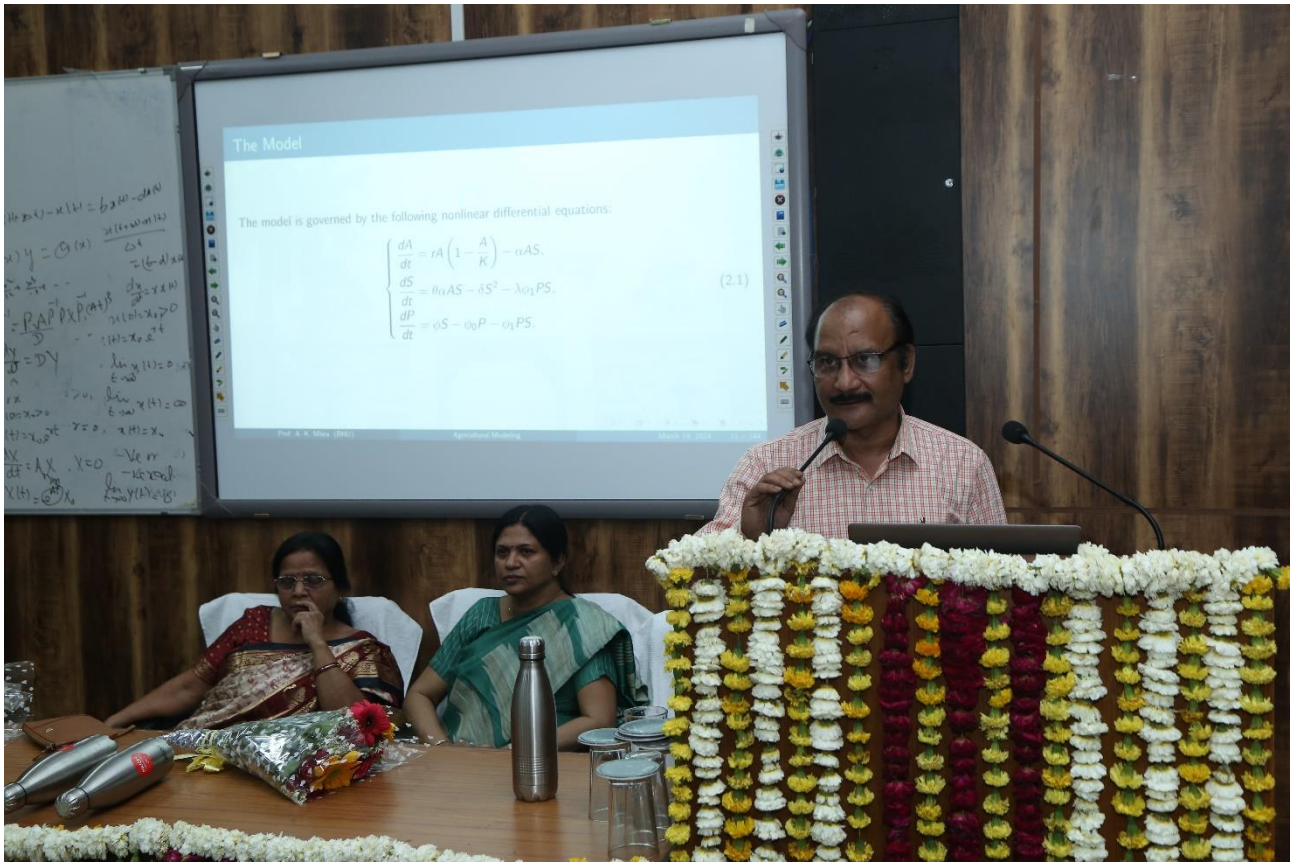




















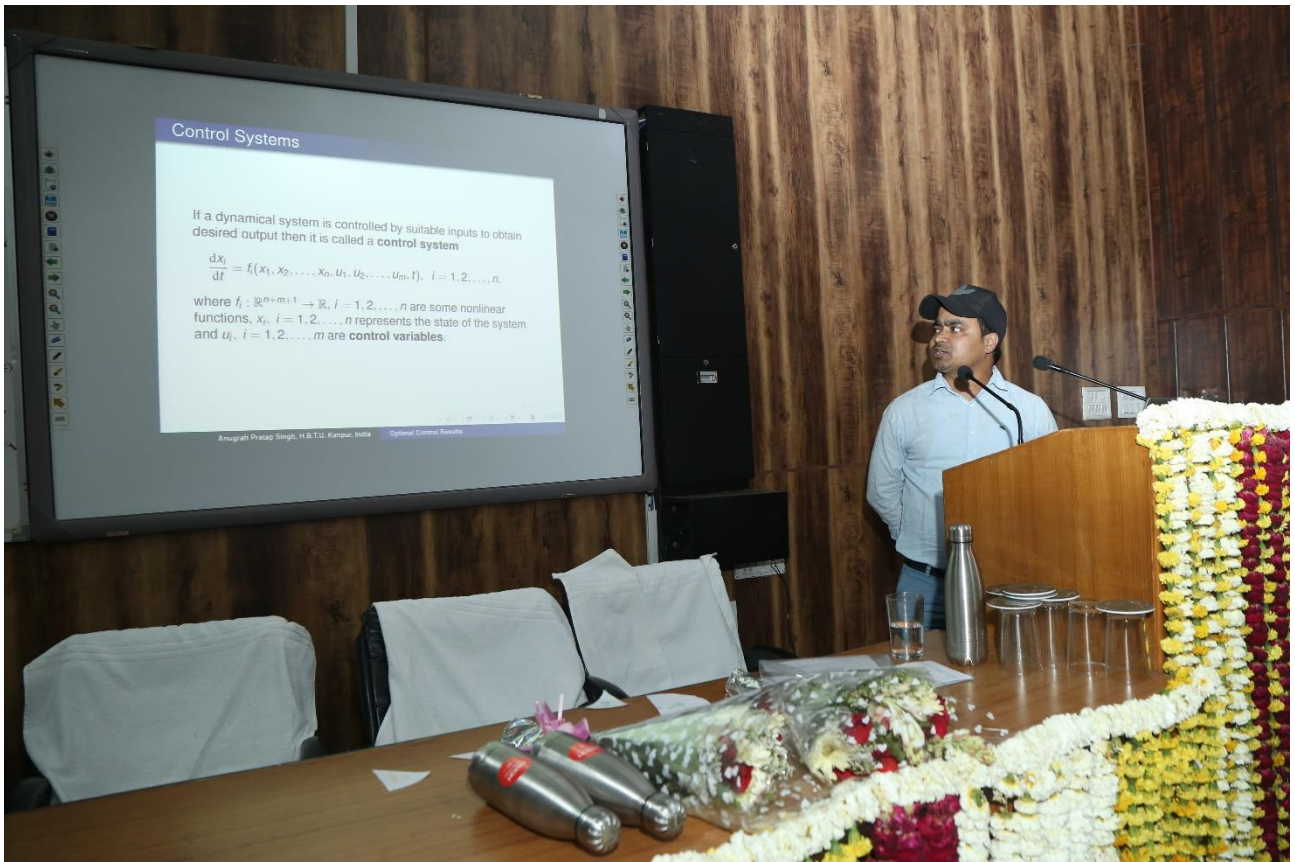






























































THANKS