

“Indian Women and Mathematics (IWM): Regional Workshop on Research and Opportunities” at IIT Bhilai

The Department of Mathematics, IIT Bhilai in association with Indian Women and Mathematics (IWM) organized “**IWM Regional Workshop on Research and Opportunities**”. The workshop was funded by the National Board for Higher Mathematics (NBHM), under the Department of Atomic Energy (DAE), Government of India. While the majority of speakers and delegates participated in the workshop online, a limited audience from Raipur, Bhilai, and other nearby regions attended the workshop physically, following all the necessary Covid-19 precautions.

Prof Rajat Moona, Director of IIT Bhilai, Prof P. D. Srivastava, Head of the Department of Mathematics, IIT Bhilai, Prof Neela Nataraj, Chairperson IWM Executive Committee, and Prof Geetha Venkataraman, the convener of the workshop, motivated and encouraged more women mathematicians to pursue higher education in mathematics during the inaugural session. Prof Neela Nataraj also introduced the various objectives and activities of Indian Women and Mathematics (IWM) organization.

In the technical sessions, Prof Rukmini Dey from International Centre for Theoretical Sciences (ICTS-TIFR), Bangalore, discussed Weierstrass-Enneper representation of minimal surface using hodographic coordinates. Dr Amit Kulshrestha, from the Department of Mathematics, IISER Mohali, spoke about extracting roots in groups and matrices. He considered a special matrix group and showed how the problem of extracting roots can be connected to solutions of equations involving Fibonacci-like polynomials. Prof Rama Rawat, Department of Mathematics and Statistics, IIT Kanpur, defined and discussed the basic properties of Euclidean Fourier transform, while Sri Padmavati, Department of Mathematics and Statistics, University of Hyderabad, demonstrated a new approach to Stokes flow past porous bodies of arbitrary shape.

Dr Swagata Sarkar from UM-DAE CEBS, Mumbai, highlighted the various educational qualifications in higher mathematics. She also elaborated on the various scholarships such as KVPY Scholarships, Research Fellowships of CSIR, DST INSPIRE, GATE Teaching Assistantship, NBHM - Nurture Program, and various UG and institute scholarships and tuition fee waivers. She concluded her talk with an overview of the various academic and non-academic career opportunities in mathematics over and above the traditional career paths within the discipline, such as in biomathematics, climatology, computer animation, and finance.

There was also an interactive session where the speakers, the EC members of IWM, and all the participants shared their views and experiences and the young researchers were given the opportunity to interact directly with some of the senior mathematicians present. The event coordinators Dr Asrifa Sultana, Dr Lakshmi Kant Patra and Dr Avijit Pal thanked all the participants who joined in both online and offline modes and the workshop concluded with a distribution of certificates.

Indian Women and Mathematics



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