Scientific report: AMNS 2019 Conference, Pokhara, Nepal (June 27-30, 2019)

The Second International Conference of Applications of Mathematics to Non-linear Sciences (AMNS-2019) was successfully held in Pokhara, Nepal from June 27 to 30 of 2019. In addition, just before the conference, we also organized the Summer School in Mathematical Biology (SSMB-2019) in Kathmandu, Nepal on June 17-26, 2019. The conference drew 218 participants from 16 countries around the world. The participants were from Bangladesh, Canada, China, England, France, Germany, Hungary, India, Indonesia, Italy, Japan, Nepal, Pakistan, Philippines, Sri-Lanka, and USA.

The conference began with the opening ceremony conducted by Dr. Naveen Vaidya (The conference convener) in the morning of June 27. The chief guest of the opening ceremony was Mr. Prithvi Subba Gurung, Honorable Chief Minister of Gandaki Province of Nepal. In addition, other guests Ms Nara Devi Pun Magar, Honorable Minister of Social Development of Gandaki Province and Mr. Man Bahadur G. C., Mayer of Pokhara Metropolitan City, were also present. During the ceremony, Dr. Keshav Pokhrel (ANMA President), Dr. Dinesh Panthi (NMS General Secretary), Dr. Elissa Schwartz (an SMB Board of Director), and Dr. Kedar Nath Uprety (Mathematics Central Department Head of Tribhuvan University) delivered a short speech highlighting the importance of AMNS-2019 conference to promote mathematical research in Nepal.

After the ceremony, the conference began with the first Plenary talk. Typical schedule for each day was one plenary talk in the morning followed by special invited talks and invited/contributed sessions, and one plenary talk in the afternoon followed by special invited talks and invited/contributed sessions. In addition, there were poster sessions, social activities, banquet and excursion.

Major themes of the AMNS-2019 conference were “Differential Equations”, “Nonlinear Analysis”, “Mathematical Biology”, “Probability, Statistics, and Big Data”, “Algebra and Topology”, “Mathematical Education”, “Numerical Analysis, Scientific computation, and Optimization”, and “Physical Sciences”. The total of 128 talks and 14 posters were presented during the conference. The distribution of talks among the themes was as follows:

- Plenary Speakers – 6
- Special Invited Speakers – 10
- Differential Equations and Nonlinear Analysis – 37
- Mathematical Biology – 27
- Probability, Statistics, and Big Data – 4
- Algebra and Topology – 6
- Mathematical Education – 18
- Numerical Analysis, Scientific computation, and Optimization – 20
- Physical Sciences – 6
- Posters – 14

The Plenary Speakers of the conference were:

- Dr. Jerry Bona, The University of Illinois at Chicago, USA
- Dr. Gianni Dal Maso, Scuola Internazionale Superiore di Studi Avanzati (SISSA) Italy
- Dr. Philip Maini, University of Oxford, United Kingdom
- Dr. Ian W. McKeague, Columbia University, USA
- Dr. Chris Rasmussen, San Diego State University, USA
- Dr. Gail S. K. Wolkowicz, McMaster University, Canada

The detailed abstract and the other conference information are found in the conference website: http://anmaweb.org/AMNS-2019/index.html

With a continuous effort of organizing body (2 conveners, 13 organizing committee members, 16 local organizing committee members, and 9 Scientific Committee members), the AMNS-2019 conference was a huge success. The participants left extremely positive feedback. We are very confident that this meeting has helped promote, to some degree, state-of-the art mathematical researches in Nepal. During the Summer School (SSMB-2019), just before the conference, we taught 31 students from Nepal, India, Pakistan, Indonesia, Philippines, and USA. These students presented six research posters related to Mathematical Biology (product of summer school) during AMNS-2019. We believe that this conference and the summer school helped enrich collaboration between Nepalese and international researchers while providing an opportunity for mathematicians and other scientists in Nepal and neighboring countries to develop mathematical skills that can be applied to address real-life issues.