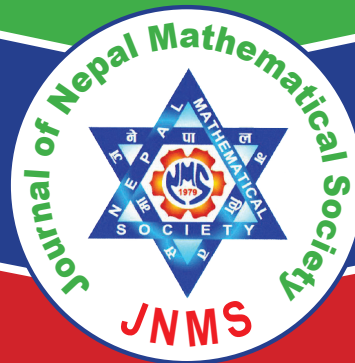


ISSN : 2616-0153 (Print), 2616-0161 (Online)

Developing the Society Through Mathematical Research

# Journal of Nepal Mathematical Society (JNMS)



**Volume 1, Issue 2**

**2018**

**Published by**

**Nepal Mathematical Society (NMS)**

# Editorial Board Members

## *Editor-in-Chief*

### **Tanka Nath Dhamala**

Central Department of Mathematics, Tribhuvan University, Kathmandu, Nepal

**e-mail:** amb.dhamala@daadindia.org.np, dhamala\_tn@cdmathu.edu.np

## *Board of Editors*

**Sergio R. Canoy, Jr.** [Mindanao State University, Institute of Technology (IIT), Iligan, Philippines]

**Yuhong Dai** [Academy of Mathematics and Systems Science, Chinese Academy of Sciences, China]

**Satya Deo, Harish-Chandra** [Research Institute, R.D.University, Jabalpur, India]

**Sharmistha Ghosh** [School of Basic and Applied Sciences, Galgotias University, New Delhi, India]

**Yunqing Huang** [Xiangtan University, Hunan Province, P. R. of China]

**Md Shafiqul Islam** [Department of Applied Mathematics, University of Dhaka, Bangladesh]

**Kanhaiya Jha** [School of Natural Sciences, Kathmandu, University, Dhulikhel, Nepal]

**Ivan Meznik** [Institute of Informatics, Faculty of Business and Management, Brno, Czeck Republic]

**Alexander Pott** [Institute of Algebra and Geometry, Faculty of Mathematics, University of Magdeburg, Germany]

**Yuri N. Sotskov** [United Institute of Informatics Problems of NAS of Belarus 6, Belarus]

**Xiaotao Sun** [Center for Applied Mathematics, School of Mathematics, Tianjin University, China]

**Kedar Nath Uprety** [Central Department of Mathematics, Tribhuvan University, Kathmandu, Nepal]

**D.R. Sahu** [Department of Mathematics, Faculty of Science Banaras Hindu University, India]

**A.P. Singh** [Department of Mathematics, Central University of Rajasthan, Ajmer, Rajasthan, India]

**Francesco Pappalardi** [Dipartimento di matematica e Fisica Universita Roma Tre Roma, Italy]

## *Advisory Board*

**Edy Tri Baskoro** [Institut Teknologi Bandung (ITB), Bandung, Indonesia]

**Hom Nath Bhattarai** [Central Department of Mathematics, Tribhuvan University, Kathmandu, Nepal]

**Faqir Md Bhatti** [Centre for Advanced Studies in Mathematics, Lahore University of Management Sciences, Pakistan]

**James Cochran** [Rogers-Spivey Faculty Fellow; Fellow, American Statistical Association, USA]

**Stephan Dempe** [TU Bergakademie Freiberg, Department of Mathematics and Computer Science, Germany]

**Sompong Dhompongsa** [Department of mathematics, Chiang Mai University, Chiang Mai, Thailand]

**Martin Henk** [Technical University of Berlin, Institute of mathematics, Germany]

**Shankar Raj Pant** [Central Department of Mathematics, Tribhuvan University, Kathmandu, Nepal]

**Ram Man Shrestha** [Central Department of Mathematics, Tribhuvan University, Kathmandu, Nepal]

**Bhadra Man Tuladhar** [School of Natural Sciences, Kathmandu, University, Dhulikhel, Nepal]

**Michel Waldschmidt** [Institut de Mathématiques de Jussieu, Université Pierre et Marie Curie, France]

**Roger Wiegand** [Department of Mathematics, University of Nebraska-Lincoln, USA]

## *Managing Editors*

### **Narayan Prasad Pahari (Managing Director)**

Central Department of Mathematics, Tribhuvan University, Kathmandu, Nepal

**e-mail:** pahari\_np@cdmathu.edu.np, nppahari@gmail.com

**Dil Bahadur Gurung** [School of Natural Sciences, Kathmandu, University, Dhulikhel, Nepal]

**Jeevan Kafle** [Department of Mathematics, Balmeeki Campus, Nepal Sanskrit University, Nepal]

**Parameshwari Kattel** [Tri-Chandra Multititle Campus, Tribhuvan University, Kathmandu, Nepal]

**Tulasi Prasad Nepal** [Central Department of Mathematics, Tribhuvan University, Kathmandu, Nepal]

**Dinesh Panthi** [Department of Mathematics, Valmeeki Campus, Nepal Sanskrit University, Nepal]

**Chinta Mani Pokhrel** [Himalayan College of Engineering, Kathmandu, Nepal]

**Samir Shrestha** [School of Natural Sciences, Kathmandu, University, Dhulikhel, Nepal]

**Raj Narayan Yadav** [Postgraduate Campus, Biratnagar, Tribhuvan University, Nepal]

# Editorial

The Journal of Nepal Mathematical Society (JNMS) is the official journal published by Nepal Mathematical Society (NMS). JNMS welcomes the original mathematical papers devoted to mathematical sciences with mathematical treatment of questions arising in the real-life problems, like computer science/informatics, physics, chemistry, biology, medicine, geophysics, engineering, management and all applied sciences.

This is our second issue published both online and in print form. It contains five research papers in different fields of pure and applied mathematics. We would like to thank all the authors of this issue for sharing their scientific research outcomes in their papers through this journal. We are highly obliged to all the reviewers and editors for their voluntary and painstaking job to uplift the quality of the papers.

We would like to request and invite research scientists/scholars throughout the globe to submit their papers for the third and other upcoming issues. We would also like to request you to give us your valuable comments/suggestions/feedback for the betterment of the journal.

Editor-in-Chief

Prof. Tanka Nath Dhamala, PhD

**August 5, 2018**  
Kathmandu, Nepal

# Contents

SN	Paper number	Author(s)	Page
1	JNMS-2018-014	Adhikari K and Raya H B	1-8
<b>Title</b>	<b>Population Projection of Nepal: A Logistic Approach</b>		
2	JNMS-2018-006	Attaullah	9-31
<b>Title</b>	<b>Solving Some Linear and Nonlinear PDEs Using Laplace Adomian Decomposition Method</b>		
3	JNMS-2018-017	Jnawali J	32-39
<b>Title</b>	<b>Higher Order Convergent Newton Type Iterative Methods</b>		
4	JNMS-2018-011	Kattel P and Tuladhar B M	40-52
<b>Title</b>	<b>Interaction of Two-phase Debris Flow with Lateral Converging Shear Walls</b>		
5	JNMS-2018-003	Panthi D	53-59
<b>Title</b>	<b>A Meir-Keeler Type Common Fixed Point Result in Dislocated Metric Space</b>		



# Nepal Mathematical Society

(नेपाल गणित समाज)

Nepal Mathematical Society (NMS) is a non-profit organization, was established in 1978 in Nepal with the purpose to create a network of mathematicians throughout Nepal and outside, for promoting mathematical research and education. NMS also promotes the professional ethics, creates opportunities for mathematicians, and advocates for their welfare. NMS has affiliations with various national and international networks such as AMS, IMU and SEAMS, and has recently become a member society of the Silkroad Mathematics Center, Beijing, China and The Mathematics Consortium (TIMC), India.

## Highlights

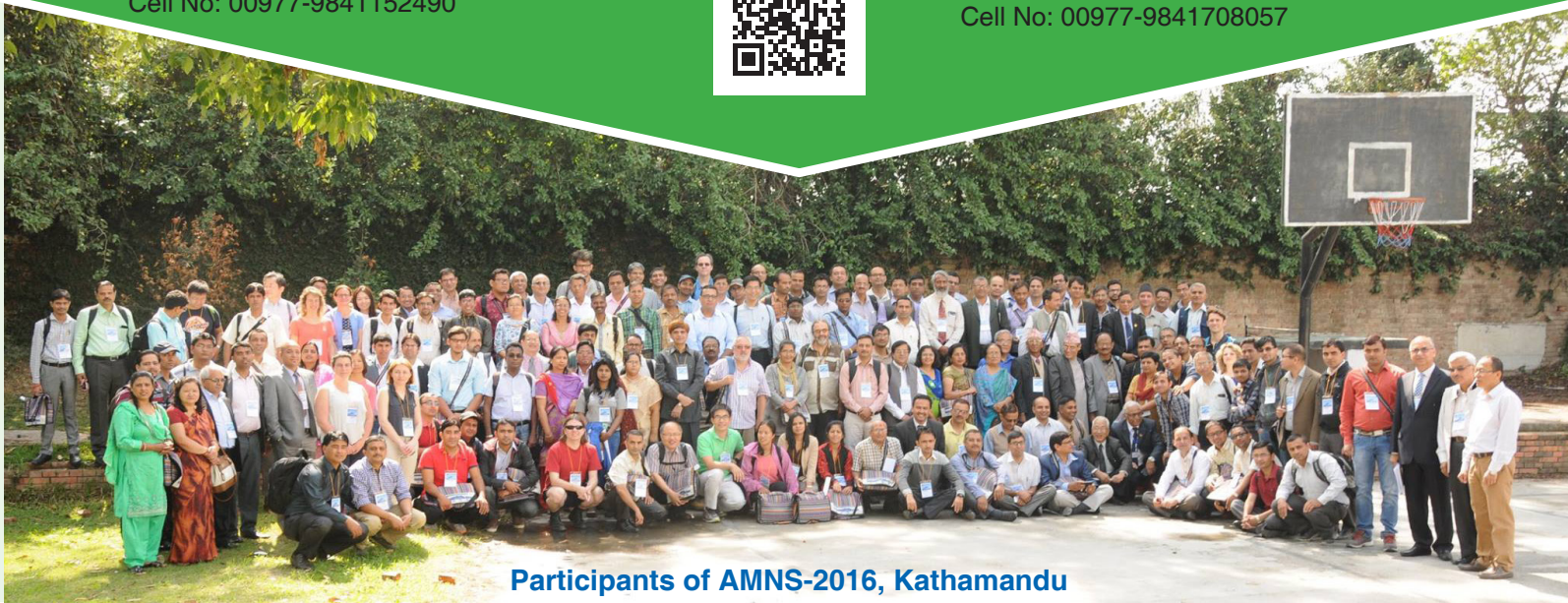
### Nepal Mathematical Society (NMS)

- ◆ conducts national and international conferences independently, as well as in collaboration with other organizations.
- ◆ conducts seminars/workshops focusing in particular areas of pure and applied mathematics.
- ◆ conducts regular talk programs with leading mathematicians and scientists.
- ◆ publishes conference proceedings.
- ◆ publishes newsletters, periodically highlighting its major activities and achievements of its members.
- ◆ continues to publish journal (JMNS) bi-annually.
- ◆ has established NMS-ANMA Fellowship, and has recently awarded fellowships for PhD research scholars of Mathematics from different universities of Nepal.
- ◆ collaborates with national and international institutions for activities related to mathematics.

President, NMS  
Tanka Nath Dhamala, PhD  
Professor, Central Department of Mathematics  
Tribhuvan University, Kathmandu, Nepal  
E-mail: [amb.dhamala@daadindia.org.np](mailto:amb.dhamala@daadindia.org.np)  
[dhamala\\_tn@cdmathtu.edu.np](mailto:dhamala_tn@cdmathtu.edu.np)  
Cell No: 00977-9841152490



Secretary, NMS  
Kanhaiya Jha, PhD  
Professor, School of Science  
Kathmandu University, Dhulikhel, Nepal  
E-mail: [jhkn@ku.edu.np](mailto:jhkn@ku.edu.np)  
Cell No: 00977-9841708057



Participants of AMNS-2016, Kathamandu

NMS has over 600 life members, and we welcome all mathematicians from Nepal and abroad to register as NMS life member and contribute in the development of mathematics through this platform.

For details, please visit our website: <http://nms.org.np>