
10th International Minisymposium on Nonlinear Analysis - Fixed Point Theory & Applications
Dedicated to the 20th anniversary of the Doctoral School of Mathematics, June 19-21, 2025, Baia Mare, Romania

Venue: Faculty of Sciences, Conference Hall, New Library, Victoriei 76, 430122 Baia Mare

SCIENTIFIC PROGRAMME

Friday, 20 June 2025

10.00-10.10: *Opening address*, Cosmin SABO, Head of Department of Mathematics and Computer Science

10.10-10.30: Petrică Claudiu POP-SITAR, Former Vice-Rector of Technical University of Cluj-Napoca

Scientific research background and the foundation of Doctoral Schools at Faculty of Sciences

10.30-11.30: Vasile BERINDE, Mihaela CHIRA, Dan MICLĂUȘ and Adina POP

20 years of activity of the Mathematics Doctoral School at North University (Center) Baia Mare

11.30-11.45: Coffee break & refreshments

11.45-12.45: *Invited lecture*, Professor Poom KUMAM, King Mongkut's University of Technology Thonburi (KMUTT), Bangkok, Thailand

Research Collaborative Network of the KMUTT Fixed Point Laboratory in Thailand and Beyond

12.45-13.00: *Research visits of PhD Students from KMUTT to CUN Baia Mare*, Abdulwahab AHMAD, PhD Student KMUTT

13.00-13.10: *Closing matters*

Organizing committee: Vasile Berinde, Mihaela Chira, Andrei Horvat, Monica Luran, Mara Măcelaru, Dan Miclăuș, Adina Pop, Petrică Pop, Cosmin Sabo

INVITED LECTURE: Abstract

Research Collaborative Network of the KMUTT Fixed Point Laboratory in Thailand and Beyond

Author: Poom Kumam

Fixed point theory has long been a fundamental area of mathematical research. Since the establishment of the KMUTT Fixed Point Laboratory in 2006, it has served as a major hub for research and collaboration in this field. In Thailand, the lab has developed a strong collaborative network and stands out as one of the most prolific contributors to this field. Over time, the lab has expanded its research focus beyond fixed point theory to include practical problems in optimization, fluid dynamics, and various forms of mathematical modeling. More recently, the lab's head and members have taken part in a major national project addressing carbon emissions and related challenges. Romania has become a key international partner of the KMUTT Fixed Point Lab. Over the years, affiliated members of the lab have conducted research visits and exchange programs at several Romanian institutions, such as the Technical University of Cluj-Napoca and Babeş-Bolyai University. These collaborations have led to numerous joint research outcomes between the two countries. According to Scopus records, KMUTT is currently one of the most prolific institutions in the world in the area of fixed point theory. This achievement is largely due to the strong and sustained collaboration between Thailand and Romania, initiated by Professor Suthep Suantai and later strengthened by Professor Poom Kumam and Professor Vasile Berinde. This talk will highlight some of the key activities and collaborative efforts of the lab, both within Thailand and internationally

Short Biography: Professor Dr. Poom KUMAM

POOM KUMAM received the B.S., M.Sc., and Ph.D. degrees in mathematics from Burapha University (BUU), Chiang Mai University (CMU), and Naresuan University (NU), respectively. In 2008, he received a grant from Franco-Thai Cooperation for short-term visits at the Laboratoire de Mathematiques, Universite de Bretagne Occidentale, France. He was also a Visiting Professor for short-term research with Professor Anthony To-Ming Lau at the University of Alberta, AB, Canada. In 2015, Poom Kumam completed the Certificate Training Program: Newton Fund Professional Development Programme for Mid-Career Researchers offered by the British Council UK.

He is currently a Full Professor at the Department of Mathematics, King Mongkut's University of Technology Thonburi (KMUTT), where he is also the Head of the KMUTT Fixed Point Theory and Applications Research Group and the Director of the Center of Excellence in Theoretical and Computational Science (TaCS-CoE) and also the head leader the CaRe Global Network Project. He has successfully advised 10 master's, and 75 Ph.D. graduates.

He has been a Thomson Reuters Highly Cited Researcher (HCR) since 2015, 2016, 2017, and 2022. **He has also been listed and ranked in the Twelfth Place in General Mathematics among the Top 2% of Scientists in the World in 2020**

(Published by Stanford University in the USA). In 2021, Professor Poom Kumam one of the leading professors of applied mathematics in Thailand who works at King Mongkut's University of Technology Thonburi (KMUTT), was ranked as the ***Mathematics Best Scientist in Thailand (Number 1 Mathematician in Thailand)*** according to the 2021 Alper-Doger Scientific Index (also known as *AD Scientific Index*). Furthermore, the *AD Scientific Index* also ranked Professor Kumam as the **Natural Science Best Scientist at King Mongkut's University of Technology Thonburi and number 6 in Thailand. He has also been listed and ranked in the 241st Place in General Mathematics among the Top 2% of Scientists in the World in 2020 (Published by Stanford University in the USA).** Professor Dr. Poom Kumam's locations in the list of the STANFORD UNIVERSITY NAMES WORLD'S TOP 2% SCIENTISTS out of a total of **17,766** mathematical scientists, Prof. Poom Kumam has been ranked at **138** (Applied Mathematics) and at **197** (General Mathematics) published on 20 October 2021.

Poom Kumam is a Thai mathematician recognized for his research in the areas of fixed point theory and optimization algorithms with applications in multi-disciplinary areas. Poom Kumam is one of the founders of multi-disciplinary fixed point iteration for computational science and applied to the image processing area.

Poom Kumam is a highly accomplished researcher with a wide range of interests. His areas of expertise include fixed point theory, variational analysis, optimization theory, approximation theory, fractional differential equations, differential game, fuzzy soft set, mathematical modeling for fluid dynamics and inverse problems, dynamic games in economics, traffic network equilibria, bandwidth allocation problem, wireless sensor networks, image restoration, signal and image processing, game theory, and cryptology. In addition to his research, Poom Kumam is also actively involved in Computational Science and Simulation and Computational Fluid Dynamics (CFD). He has made significant contributions to his fields, developing numerous mathematical tools over the years. With over 1,300 scientific articles and projects to his name, Professor Kumam is a highly respected figure in the academic community. He is also a valued member of the editorial board for more than 50 journals and is frequently invited to deliver talks at international conferences worldwide. He also published several books. He is Editor-in-Chief/ Managing Editors/ Editorial Board Member/ Guest Editors/Associate Editors/ of different national/international journals, and Invited Speaker/ Keynote Speaker/ Keynote Speaker of several local/international conferences/seminars/workshops/meetings, see <https://poomkumam.wordpress.com/>