HAPPY 65TH BIRTHDAY PROFESSOR MEHMED NURKANOVIĆ !

It is a great pleasure to congratulate Professor Mehmed Nurkanović, Managing Editor of Sarajevo Journal of Mathematics, on the occasion of his 65th birthday. We dedicate this issue to him in recognition of his significant scientific contributions to mathematics – particularly in the fields of difference equations and discrete dyna-mical systems – as well as for his devoted service to our journal.

Professor Mehmed Nurkanović was born in Seona near Srebrenik in 1960. He graduated from the Gymnasium in Tuzla in 1979. As a high school student, he participated in numerous mathematics and physics competitions, winning several awards. He earned a B.S. degree in Mathematics from the University of Sarajevo, Bosnia and Herzegovina, in 1983 with the highest honors, receiving the *Golden Badge of the University of Sarajevo*.

He began his graduate studies in mathematics at the University of Belgrade and later transferred to the University of Sarajevo, where he completed his master's

degree in 1997 by defending the thesis Wavelet Theory, under the supervision of Professor Muharem Avdispahić.

In 2002, Professor Nurkanović earned his Ph.D. in Mathematics from the University of Sarajevo. His dissertation, entitled Asymptotic Behavior of Solutions of Some Two-Dimensional Systems of Difference Equations with Applications, was written under the supervision of Professor Mustafa Kulenović. He held the position of Assistant Professor at the University of Tuzla from 2003 to 2008, Associate Professor from 2008 to 2014, and has been a Full Professor since 2014.

Professor Nurkanović has supervised nine master's theses and three Ph.D. dissertations (serving as co-advisor on one of them), and has advised 43 bachelor's theses. He has published five books and 45 refereed research papers indexed in major reference databases, including Web of Science, Scopus, Mathematical Reviews, and Zentralblatt für Mathematik. He has also developed several software packages. His research has been widely cited, with more than 695 citations on Google Scholar, including citations in several monographs and at least 20 Ph.D. dissertations in the United States. To date, he has collaborated with 12 co-authors.

The research interests of Professor Nurkanović encompass both theoretical and applied aspects of difference equations and discrete dynamical systems, ranging from global behavior of solutions to KAM (Kolmogorov–Arnold–Moser) theory and Li–Yorke chaos. He has made substantial contributions to the development of the theory of discrete dynamical systems, as well as to its computational aspects, including the design of sophisticated computational procedures necessary for applying KAM theory and bifurcation theory. His work addresses various types of bifurcations, such as period-doubling and Neimark–Sacker bifurcations. His results have been cited in major monographs in his research areas and in applied fields such as mathematical biology and epidemiology. He has participated in 12 research projects supported by the Ministry of Research of Bosnia and Herzegovina and served as principal investigator on four of them.

Professor Nurkanović has presented his research in more than 25 invited and contributed lectures at major international conferences on difference equations in the United States and Europe. A number of these presentations were delivered by his collaborators.

In addition to his research activities, Professor Nurkanović has co-authored 19 pedagogical papers and has delivered more than 30 lectures and seminars for high school mathematics teachers in Bosnia and Herzegovina.

Since 2015, Professor Mehmed Nurkanović has been a member of the Editorial Board of the *Sarajevo Journal of Mathematics*, and since 2025, he has served as its Managing Editor. From 2023 to 2025, he served as Review Editor for Dynamical Systems for the journal *Frontiers in Applied Mathematics and Statistics*, and since July 2025, he has been serving as a Communication Reviewer. He was a Guest Editor of a special issue of *Discrete Dynamics in Nature and Society* in 2021 and

co-editor, together with Academician Mirjana Vuković, of a special issue of the *Sarajevo Journal of Mathematics* in 2022. He also co-edited, with Academician Mirjana Vuković, the special issue of the *Proceedings of the Academy of Sciences and Arts of Bosnia and Herzegovina* dedicated to the Conference held on March 14, 2024—International Day of Mathematics.

Professor Nurkanović was a member of the Editorial Board of the journal *Triangle* from 1996 to 2003, a journal primarily devoted to high school mathematics. Since 2018, he has served as Editor-in-Chief of the journal *Evolventa*, published by the Mathematical Association of Tuzla Canton. He also served as the editor of *Collected Works in Mathematics at University of Tuzla* for several years. Finally, he is the member of ISDE (International Society for Difference Equations).

Professor Nurkanović has been a member, and on several occasions the chair, of the committee for high school mathematics competitions and participated in the International Mathematical Olympiad (IMO) in Taipei in 1998. On numerous occasions, he has organized summer and winter schools for young and talented mathematicians. He also served as Chair of the Department of Mathematics at the University of Tuzla. From April 2007 to November 2017, he was President of the Mathematical Association of Tuzla Canton. In 2010, he organized a highly successful international mathematics conference at the University of Tuzla, which attracted leading mathematicians in the areas of difference equations and mathematical physics.

In 2025, Professor Nurkanović received the *Charter of the City of Srebrenik* for his contributions to the development of education and science and for his role in the defense of Bosnia and Herzegovina. An interesting personal note is that his entire family – his wife Zehra and daughters Merima and Ajla – hold Ph.D. degrees in Mathematics. I had the privilege of serving as the Ph.D. advisor to both Professor Nurkanović and his wife Zehra, and we continue a very fruitful collaboration that has resulted in many joint publications.

We extend our sincere congratulations to Professor Mehmed Nurkanović on his 65th birthday and wish him good health, continued success, and many further achievements in his scientific work in the years to come.

Most cited publications

1. M. R. S. Kulenović and M. Nurkanović, Asymptotic behavior of a two dimensional linear fractional system of difference equations, Dedicated to the memory of Prof. Dr. Naza Tanović-Miller, *Rad. Mat.*, 11 (2002), 59–78.

2. M. R. S. Kulenović and M. Nurkanović, Asymptotic behavior of a system of linear fractional difference equations. *J. Inequal. Appl.*, 2005, no. 2, 127–143.

3. M. R. S. Kulenović and M. Nurkanović, Asymptotic behavior of a competitive system of linear fractional difference equations. *Adv. Difference Equ.*, 2006, Art. ID 19756, 13 pp.

4. M. R. S. Kulenović and M. Nurkanović, Global asymptotic behavior of a two-dimensional system of difference equations modeling cooperation. In honour of Professor Allan Peterson on the occasion of his 60th birthday, Part II. *J. Difference Equ. Appl.* 9 (2003), no. 1, 149–159.

5. M. Garić, M. R. S. Kulenović and M. Nurkanović, Global behavior of four competitive rational systems of difference equations in the plane, *Discrete Dynamics in Nature and Society*, 2009 (1),34 p., Art. ID 153058

6. M. R. S. Kulenović, S. Moranjkić, M. Nurkanović and Z. Nurkanović, Global Asymptotic Stability and Naimark-Sacker Bifurcation of Certain Mix Monotone Difference Equation, *Discrete Dynamics in Nature and Society*, 2018 (1), Art. ID 7052935, 22 pp.

Mustafa Kulenović
University of Rhode Island
Department of mathematics
Kingston, RI 02881, USA
e-mail: *mkulenovic@uri.edu*