

## Dedicated to Professor Norair Yengibaryan on the Occasion of His 80th Birthday

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Norair Bagratovich Yengibaryan, Professor, Doctor in Physics and Mathematics, one of the greatest mathematicians of Armenia, celebrated his 80th birthday on November 12, 2021. N.B. Yengibaryan taught at the Yerevan State University and other universities for 35 years, headed mathematical chairs, supervised 16 Candidate's, and consulted 5 Doctoral dissertations. Norair Yengibaryan deserves credit for a series of fundamental studies in the theory of radiative transfer, in the theories of differential and integral equations, in the theory of operators, determining the novel approaches to various problems of mathematical physics. The works of N.B. Yengibaryan and, later, of his descendants developed the theory of matrix and operator Riccati equations and the theory of factorization of convolution-type operators based on the involvement of nonlinear functional equations. Applications of the elaborated approaches to boundary value problems of differential equations, to linear and nonlinear integral equations, and to problems of gas dynamics allowed obtaining multiple important scientific results. It is also worth mentioning that, in the modern theory of convolution-type integral equations, an important (and sometimes, a key) role is played by nonlinear factorization equations of N.B. Yengibaryan.

The current issue of the journal is mostly dedicated to the papers of N.B. Yengibaryan and his descendants. In the paper of L.G. Arabadzhyan he studies the possibility of decomposition of the integral Wiener–Hopf operator in the form of product of two Volterra operators and applies this factorization to the Wiener–Hopf equations of the first kind. Paper by N.B. Yengibaryan is devoted to the general form of nonlinear factorization equations in rings and normed rings. In a joint paper by B.N. Yengibaryan and N.B. Yengibaryan, they examine the multiple factorizations of skew-symmetric matrices. Paper by V.N. Margaryan and H.G. Ghazaryan is dedicated to comparison of power of partially hypoelliptic operators. The paper of M.G. Muradyan proposes an approach to construct a general solution to a system of differential equations based on the solution of nonlinear matrix Riccati equations. The paper by Kh.A. Khachatryan and H.S. Petrosyan is devoted to construction of summable solutions for nonlinear two-dimensional Volterra-type equations on a quarter of the plane. The paper of A.Kh. Khachatryan and Kh.A. Khachatryan is focused on the questions of existence, absence, and uniqueness of the nontrivial solution for a system of integral convolution-type equations with a convex nonlinearity.

The current issue of the *Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences)* is dedicated to the 80th birthday of Professor N.B. Yengibaryan whose contribution to this area is invaluable.

*Khachatur A. Khachatryan*  
*Yerevan, June 2022*