**REPORT**

**on scientific Journal of the Institute of Mathematics and Mechanics of Azerbaijan NAS – Transactions, issue Mechanics (series of physical-technical & mathematical sciences) for the 2023**

During the reporting period the next issue of the Transactions of the Azerbaijan National Academy of Sciences (issue Mechanics) was compiled and printed during the reporting period.

Journal’s website was created at [www.transmech.imm.az](http://www.transmech.imm.az) (email - [transactions@imm.az](mailto:transactions@imm.az)) (ISSN) - 2706-7726 (printed) and 2706-7734 (on-line). All publications of the issue are posted on the journal's website at www.transmech.imm.az (the journal's e-mail is [transactions@imm.az](mailto:transactions@imm.az). Scientific article submitted to the editorial board of the journal are pre-posted online at <http://transmech.imm.az/inpress/>.

“ANAS Transactions” (issue “Mechanics”) was officially registered by the Agency for Digital Object Identifiers (DOI) of the International DOI Crossref Foundation. It unites academic publishing houses (journals, monographs, conference proceedings).

In 2023, two issues of the ANAS Transactions (issue Mechanics) journal were published. The first issue of 43 (7), 2023 was released in July, 2023.

The following articles are published in the 7th issue of the journal:

1. Alı B. Aliyev, Kamala R. Rahimova Dynamics of incompressible viscous fluid flow in an elastic tube of varying cross-section

2. Vugar A. Hashimov Nonlinear feedback control of motion and power of moving sources during heating of the rod

3. Shakir A. Mammadov and Polad M. Sadikov and Tural Sh. Mammadli Development of a method for solving the problem of waves propagation in an elastic medium under the action of cylindrical inclusion

4. Rafail K. Mekhtiev and Alekber K. Mekhdiev Determination of the stress intensity factor during longitudinal displacement in a composite material reinforced with unidirectional fibers with linear cracks

5. Nazila B. Rassoulova and Tahmina M. Mahmudzade Investigation of non-stationary processes of an elastic half-space with a built-in elastic cylinder

6. Vusala B. Rzayeva Free vibrations of a nonhomogeneous rod-cylindrical shell-fluid system

7. Yusif M. Sevdimaliyev Mixed-type variational principle for creep problems considering the aggressiveness of external fields

8. Konul G. Suleymanova Boundary estimates of solutions mixed boundary problems for elliptic equations with VMO coefficients

9. Academician Azat Mirzajanzade – 95

10. In memory of Professor Yuri Ustinov.

The release of the second number 43(8) was carried out in December 2023. The articles published in volume 43, issue 8 of the Journal are:

1. Lala A. Azizova Ultrasonic sound velocities, density, adiabatic compressibility, coefficient of thermal expansion of aqueous ethanol at various temperatures (atmospheric pressure)

2. Emin T. Bagirov On the dispersion of axisymmetric waves propagating in the

initially strained highly elastic plate under two side contact with various fluids

3. Shahla M. Galandarova The mixed boundary value problems for uniformly elliptic equations in modified local generalized Sobolev-Morrey spaces

4. Fuad S. Latifov, Azber Sh. Sadayev Parametric vibrations of a viscous-elastic medium-contacting, damaged, orthotropic cylindrical shell stiffened with inhomogeneous rods

5. Akhmed G. Melikov, Shakhlar M. Babayev Development of innovative technological bases of sorting and granulation processes of fibrous raw materials

6. Geylani M. Panahov, Ibrahim J. Mamedov and Vusale D. Balakchi Modelling of colmatant mass transfer during in situ gas generation process

7. Rakiz M. Sattarov, Ilham R. Sattarzadeh Modelling of rheologically complex fluid flow in hard-to-recover fractal reservoirs.