**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 2019**

During the reporting period, the first issue of the new Journal - Transactions of Azerbaijan National Academy of Sciences (issue Mechanics) (series of physical-technical and mathematical Sciences) was formed and printed.

Journal’s website was created at [www.transmech.imm.az](http://www.transmech.imm.az) (email - transactions@imm.az). Scientific articles submitted to the Journal posted on the web at <http://transmech.imm.az/inpress/>.

During the reporting period, new international standard serial numbers of the printed and electronic versions of the publication (ISSN) - 2706-7726 (printed) and 2706-7734 (on-line) were received for the “Mechanics” issue.

In 2019, 2 issues of the journal AMEA Transactions (issue Mechanics) were published. The first issue of 39 (7), 2019 was released in July 2019.

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

1. Elkhan M. Abbasov · Keklik O. Rustamova // Mathematical simulation of influence of heredity on the character of contact pressure distribution between semi-cylindrical surface with a hole and sealing element.
2. Jafar H. Agalarov · Guldasta A. Mamedova // Plate oscillations on the vingler base, elastic based on the circuit and preserving the horizontal position oververse of edge
3. Tahir S. Gadjiev · Konul N. Mamedova // Uniqueness classes of generalized solutions for degenerate parabolic equations in unbounded non-cylindrical domains
4. Vaqif C. Haciyev · Gulnar R. Mirzayeva · Ayten H. Movsumova // Natural vibration of inhomogeneous orthotropic cylindrical shell with regard to visco-elastic resistance
5. Tarana V. Huseynova // Parametric investigation of the forced vibration of a “plate + compressible viscous fluid + rigid wall” hydroelastic system
6. Shusha A. Kerimova // Simulation of oil flow in conjugated bed-well system
7. Geylani M. Panahov · Ali B. Aliyev · Gulnar M. Salamanova · Nazrin B. Naghiyeva // Wave flow of viscous fluid in elastic tube
8. Babek N. Sultanov // Elastic parameters of materials at high and ultrahigh deformations in case of their description by harmonic potential
9. Ramiz A. Yuzbekov · Sevinc R. Rasulova // On the solution of thermo viscoelasticity problems with a weakly inhomogeneous temperature field.

The second issue of the Journal 39 (8), 2019 was published on January 21, 2020:

1. Alı B. Aliev · Kamilla R. Ragimova // Pulsating fluid flow in a finite length pipe with a narrowing effect
2. Natavan S. Hasanova // Analysis of elasticity theory problem for a radially inhomogeneous sphere with fixed lateral surface
3. Jalala J. Ismayilova // Studying elastic equilibrium of a small thickness isotropic cylinder with variable elasticity module
4. İlgar Sh. Jabbarov · Tarana V. Huseynova // Convergence numerical results related to the vibration of the hydro-elastic system consisting of an anisotropic plate, compressible viscous fluid and rigid wall
5. Ibrahim J. Mamedov · Saida G. Panahova · Vusal H. Huseynov // Mobility control under selective water isolation of highly permeable reservoirs by in-situ quasi periodic foaming
6. Magomed F. Mekhtiyev · Nihan A. Aliyev · Laura F. Fatullayeva // Multipoint boundary value problem for the equation elliptic type first order
7. Yusif M. Sevdimaliyev · Yashar Mehraliyev · Aysel T. Ramazanova · Kalyskan Matanova // An inverse boundary value problem for the equation of flexural vibrations of a bar.