

Попечительского совета мех.-мат. ф-та МГУ. 2014. 515 с.
<https://istina.msu.ru/publications/book/6738800/>

2. M. U. Nikabadze Topics on tensor calculus with applications to mechanics. *Journal of Mathematical Sciences*, Vol. 225, No. 1, 2017. 194 p. DOI: 10.1007/s10958-017-3467-4
3. Nikabadze M., Ulukhanyan A. On the Decomposition of Equations of Elasticity and Thin body Theory. *Lobachevskii Journal of Mathematics*. 2020; 41(10), 2059-2074. <https://dx.doi.org/10.1134/S1995080220100145/>

HYDROELASTICITY PROBLEM FOR AN ELASTIC PLATE IN A VISCOUS INCOMPRESSIBLE LIQUID

**Tamaz Obgadze, Gela Kipiani, Otari Kemularia, Marina
Kurdadze**

Georgian Technical University

t.obgadze@gtu.ge gelakip@gmail.com oto.kemularia@gmail.com

In this paper, we discuss the two-dimensional flow problem over a linearly elastic plate, with a viscous fluid. The velocity and pressure fields the plate are studied as well as the dynamics of the plate in the elastic-deformed state. In the case of a viscous fluid the separation occurs at the ends of the plate, which causes deformation of the elastic plate and, consequently, a change in its geometry, which in turn affects the impulse of the separated flow. The dynamics of the expected flatter event at different flow velocity conditions are studied.

References

1. T. Obgadze, Mathematical modeling, 839 p, monography, GTU, Tbilisi (2016)
2. T. Obgadze, Solving of Hydrodynamic stationary problems with Rvachev-Obgadze RO method, 116 p, monography, GTU, Tbilisi (2017)

PHYSICS TASKS IN MATH COMPETITIVE TESTS

Svimon Okhanashvili

Iakob Gogebashvili Telavi State University, Telavi, Georgia

ok-svi@tesau.edu.ge

Studies have shown that in math competition tests: Georgian University entrance national exams, Olympiads and school competitions, there are frequent cases in which math tasks contain contents from; physics, astronomy, chemistry,