

# HYDRODYNAMICS AND ACOUSTICS

ISSN 2616-6135 ◊ IS PUBLISHED QUARTERLY SINCE 2018

State Registration Certificate: Series KV, no. 22669-12569PR, April, 26 2017

2018 ◊ VOLUME 1(91) ◊ ISSUE 1

## CONTENTS

---

Editor's foreword . . . . .	5
<i>V. A. Voskoboinick, A. A. Voskoboinick, A. V. Voskoboinick, F. Lucherini, A. Redaelli, L. N. Tereshchenko, B. Fiore</i> Jet flow and hydrodynamic noise of the open mechanical bileaflet heart valve	7
<i>B. B. Kolupaev</i> A dynamic viscoelasticity of the metalnanodispersible polyvinylchloride . .	33
<i>A. S. Kotelnikova, V. I. Nikishov, S. M. Sribnyuk</i> Experimental study of interaction of a surface solitary wave with an underwater step . . . . .	42
<i>V. L. Polyakov</i> Calculation of the unsteady effect of reclamation drainage with in-depth consideration of the effect of the zone of aeration and infiltrations . . . . .	53
<i>V. N. Semenenko, O. I. Naumova</i> Dynamics of a partially cavitating underwater vehicle . . . . .	70
<i>K. V. Terletska</i> Energy dissipation of internal waves over underwater obstacles . . . . .	85
<i>V. V. Yakovlev, Yu. I. Kalugin, N. G. Stepova</i> Mathematical modeling of optimizing gas recovery in the stage of additional gas reservoir development . . . . .	99