

# IT&MathAZ2018

## Preface

The International Research Workshop on Information Technologies and Mathematical Modeling for Efficient Development of Arctic Zone (IT&MathAZ2018) was held on April 19–21, 2018 at the Graduate School of Business and Management in Yekaterinburg (Russia).

The objectives of the conference were to present novel and fundamental advances in the different fields of information technologies, applied mathematics, economic-environmental applications for modeling of various phenomena and processes and to provide the opportunity for participants to share their ideas with their colleagues.

IT&MathAZ2018 was organized jointly by Ural Federal University named after the first President of Russia B.N.Yeltsin and Krasovskii Institute of Mathematics and Mechanics of the Ural Branch of the Russian Academy of Sciences (Yekaterinburg, Russia). In the framework of the workshop, the different branches of applied system analysis as well as computer science and their applications to the efficient development of Arctic zone, were discussed. The range of problems related to these areas was quite wide. It included both fundamental and practical researches that were reflected in the reports of Russian and foreign scientists presented at the conference. The agenda of the conference consisted of section talks. The youth section was also organized.

There were 30 reports at the workshop, 20 of them were submitted for reviewing, 11 of which were selected for publication in this volume. All the papers were reviewed by independent experts and members of the organizing committee.

We would like to express our gratitude to all the authors for their valuable contribution to IT&MathAZ2018 and to the reviewers for their opinions and very helpful comments.

The papers and presentations are available on the website of IT&MathAZ2018: <https://gsem.urfu.ru/ru/science/international-research-workshop-itmathaz2018>.

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## Table of Contents

Application of a metallurgical enterprise information system for collection and analysis of big data and optimization of multi-agent resource conversion processes . . . . .	1
<i>A.S. Antonova, K.A. Aksyonov</i>	
On dynamical reconstruction of an input in a nonlinear system . . . . .	7
<i>M.S. Blizorukova</i>	
Local innovative ecosystems of "smart cities" in the context of effective development of the Arctic spaces of Russia . . . . .	14
<i>G.F. Detter</i>	
On boundary conditions setting for numerical simulation of thermal fields propagation in permafrost soils . . . . .	18
<i>M.Yu. Filimonov, N.A. Vaganova</i>	
Information security in the context of the digital economy . . . . .	25
<i>P.Yu. Filyak</i>	
On multirobot system operation plan formalization . . . . .	31
<i>A.S. Kruglikov, S.V. Kruglikov</i>	
Awareness of climate change (focus on the Russian Arctic zone) . . . . .	38
<i>S. Lösch, O. Okhrin, H. Wiesmeth</i>	
Database of the regional waste cadastre of the Yamal-Nenets autonomous district . . . . .	43
<i>I.L. Manzhurov, K.L. Antonov, D.B. Berg, D.I. Denisov</i>	
Development of IT-Infrastructure for the providing system of educational process in sparsely populated areas of the Arctic zone of the Russian Federation . . . . .	49
<i>Yu. Nazarova, Yu. Bozhko</i>	
Informational and analytical support of the network of intelligent situational centers in Russian Arctic . . . . .	57
<i>A.G. Oleynik, A.Ya. Fridman, A.V. Masloboev</i>	
The computational technology for estimating average fields of atmospheric contaminant concentrations in remote areas of the Arctic . . . . .	65
<i>V.A. Poddubny, E.S. Dubinkina</i>	