

ABSTRACTS

INTERNATIONAL SCIENTIFIC
CONFERENCE

INFORMATION TECHNOLOGIES IN
THE RESEARCH OF BIODIVERSITY

(BIT - 2018)

SEPTEMBER 11-14, 2018
IRKUTSK, RUSSIA

ТЕЗИСЫ

МЕЖДУНАРОДНОЙ НАУЧНОЙ
КОНФЕРЕНЦИИ

ИНФОРМАЦИОННЫЕ ТЕХНОЛОГИИ В
ИССЛЕДОВАНИИ
БИОРАЗНООБРАЗИЯ

(BIT - 2018)

11-14 СЕНТЯБРЯ, 2018
ИРКУТСК, РОССИЯ

MATROSOV INSTITUTE FOR SYSTEM DYNAMICS AND CONTROL
THEORY OF SIBERIAN BRANCH OF RUSSIAN ACADEMY OF SCIENCES

SIBERIAN INSTITUTE OF PLANT PHYSIOLOGY AND BIOCHEMISTRY OF
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BRANCH OF THE KELDYSH INSTITUTE OF APPLIED MATHEMATICS OF
THE RUSSIAN ACADEMY OF SCIENCES

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“INFORMATION TECHNOLOGIES IN THE
RESEARCH OF BIODIVERSITY”
(BIT-2018)

IRKUTSK, RUSSIA, SEPTEMBER 11-14, 2018

IRKUTSK
ISDCT SB RAS

ФГБУН Институт динамики систем и теории управления
имени В.М. Матросова СО РАН

ФГБУН Сибирский институт физиологии и биохимии
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(РФФИ)

ТЕЗИСЫ ДОКЛАДОВ КОНФЕРЕНЦИИ
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ИССЛЕДОВАНИИ БИОРАЗНООБРАЗИЯ”
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Abstracts of the conference “Information Technologies in the Research of Biodiversity” (BIT - 2018). Irkutsk: ISDCT SB RAS, 2018. 124 p.

This volume contains proceedings of the Information Technologies in the Research of Biodiversity (BIT-2018). The conference tells about the latest developments in the field of integration of modern information technologies and classical research methods. New research requirements are being put forward, requiring the union of all researchers, standardization and unification of data and methods.

This volume is intended for researchers in the field of biology and computer science.

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Этот том содержит материалы конференции по Информационным Технологиям в Исследовании Биоразнообразия (BIT-2018). Конференция рассказывает о последних событиях в области интеграции современных информационных технологий и классических методов исследования биоразнообразия. Выдвигаются новые требования к проведению научных исследований, требующие координации всех исследователей, стандартизации и унификации данных и методов.

Этот том предназначен для исследователей в областях биологии и информатики.

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Preface

This volume contains abstracts of the International Scientific Conference “Information Technologies in the Research of Biodiversity” (BIT - 2018) that was organized in Irkutsk, Russia, during September 11-14, 2018.

The main purposes of the conference are.

- Coordination of research interactions to digitize, standardize and publish data on biodiversity in Russia and other countries, as well as promoting and spreading modern international principles, resources and tools for working with biological data.
- Consideration of modern principles for creating and integrating local and regional information system projects for biodiversity research in Russia and other countries.
- Creation of infrastructures for implementing technological and information support to organizations seeking to exchange data and data analysis methods.
- Development of specialized software for handling biodiversity research tasks.
- Networking and exchange of experience, advanced technologies and trends in the field of distributed databases and data processing.

The main topics of the conference are.

- Global biodiversity data portals: data integration, use in knowledge generation tasks.
- Information and analytical systems on biodiversity. Virtual natural history collections.
- National data on biodiversity: the current state of digitization. Copyright issues, methods and concepts for assessing data quality.
- Theoretical fundamentals and organization technologies of the information and telecommunications infrastructures. Standards for describing digital data, processing services, etc.
- Methods, models, software systems and Web services for the analysis of biodiversity data.
- Application of remote methods in vegetation mapping and biodiversity research.

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