INFORMATION CONTROL SYSTEMS AND INTELLIGENT TECHNOLOGIES.
ADVANCES AND APPLICATIONS

PREFACE

The present monograph compiles materials derived from articles submitted to the Program Committee and presented at the XIII International Scientific and Practical Conference *"Information Systems and Technology Management (ICST-Odessa-2025)."*

This collective volume reflects the outcomes of scientific investigations in the domains of information systems and technologies, intelligent systems, data analysis, modeling, and software engineering.

The monograph is organized in the form of research article-based chapters, grouped according to thematic sections that comprehensively represent the scope of studies conducted in the following areas: Information Control Systems, Intelligent Systems and Data Analysis, and Modeling and Software Engineering.

Special emphasis is placed on addressing issues such as: Implementation of Cryptographic Transformations Based on the Residue Number System to Enhance Digital Security; Development of an Intelligent Hybrid System for Big Data Volumes Health Harm Risks; Integrated Modeling of Reliability and Maintenance of Ship Power Plant Equipment Considering Degradation and Operational Conditions Analysis.

Considerable attention is also devoted to:

Intelligent Hybrid System Design for Big Data Health Risk Analysis, Modeling of Nonlinear Dynamics Using the Support Model Method, and Performance Metrics Evaluation for Load Testing Tools.

The results presented provide readers with valuable insights required for a deeper understanding of the challenges and solutions in the field of information systems and technologies.

All articles included in this monograph correspond to the original versions submitted by the authors. Full responsibility for the content of individual contributions rests solely with their respective authors.

The materials of the monograph will serve as a useful resource for postgraduate and master's students, as well as academic faculty engaged in research and education in the field of information systems and technologies.

The preparation of this collective work involved the contribution of scholars, including 14 Doctors of Science, 26 Candidates of Science, and 21 PhD applicants.