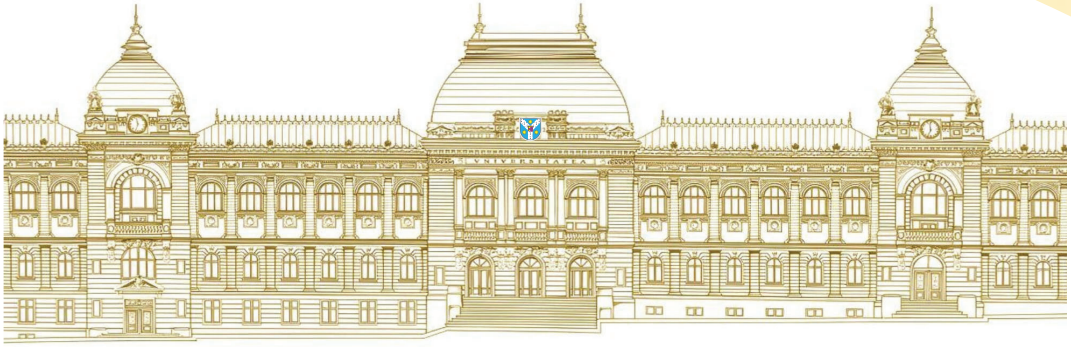
ALEXANDRU IOAN CUZA
UNIVERSITY of IAŞI

inter-academia

Program

The 23rd International Conference on Global Research and Education



31st August - 4th September 2026
Iași, Romania



IASI UNIVERSITY
of LIFE SCIENCES
1842



公益財団法人スズキ財団
SUZUKI FOUNDATION



SOPHYS
Societatea Absolvenților Facultății de Fizică din Iași



MINISTERUL EDUCAȚIEI ȘI CERCETĂRII

August 31 Aula Magna, Alexandru Ioan Cuza University of Iasi (UAIC)				
August 31	12:30 - 14:00	REGISTRATION		
	14:00 - 14:45	Opening ceremony: Welcome address of UAIC Rector, Prof. Liviu-George MAHA Address of His Excellency Mr. Takashi KATAE, Ambassador of Japan to Romania Address of Shizuoka University President, Prof. Kazuyuki HIZUME Address of IULS Rector, Prof. Gerard JITĂREANU Welcome address of the Conference chairs		
	Chair: Ionuț TOPALĂ			
	14:45-15:15	PL1	Liviu-George MAHA	The nexus between the institutional quality and trade dynamics: testing the EU-Japan Economic Partnership
	15:15 - 14:45	PL2	Kazuyuki HIZUME	The Current State of Higher Education in Japan
	15:45 - 16:15	Conference group photo Coffee break		
	Chairs: Toru AOKI, Aidas MATIJOŠIUS			
	16:15 - 16:30	O1	I MUE	Academic Writing in the Age of Generative AI: Rethinking Academic Integrity and the Role of Faculty
	16:30 - 16:45	O2	Imre KOCSIS	On Some Aspects of Innovation in Engineering Education
	16:45 - 17:00	O3	Mani NAVANEETHAN	Decoupling of Phonon and Charge Carrier Dynamics in Zintl Compounds for Efficient Thermoelectric Energy Conversion
	17:00 - 17:15	O4	Darius GAILEVICIUS	Deep-UV Written Sapphire Laue Lattices for Angular Beam Control
	17:15 - 17:30	O5	Pavels ONUFRIJEVS	Regime-dependent ice friction control on laser-textured stainless steel: from LIPSS to multi-scale surfaces
	17:30 - 17:45	O6	Agnieszka JASTRZĘBSKA	On the MXenes biocompatibility towards biotechnological applications
	17:45 - 18:00	O7	Yuusuke MATSUZAWA	Railway reforms in Central European countries: Achievements and prospects of passenger rail transport reforms under EU directives
	18:00 - 20:00	Welcome Reception Casa Universitarilor, Alexandru Ioan Cuza University of Iasi		

September 1 Iasi University of Life Sciences (IULS)				
September 1	IULS Main building – Aula Magna ” Haralamb Vasiliu”			
	08:30 - 08:50	REGISTRATION		
	08:50 - 09:00	Welcome address of IULS Rector, Prof. Gerard JITĂREANU		
	09:00 - 09:10	Address of His Excellency Mr. Takashi KATAE, Ambassador of Japan to Romania		
	09:10 - 09:20	Double Degree Diploma Signing Ceremony (Shizuoka University - IULS) President Prof. Kazuyuki HIZUME, Rector Prof. Gerard JITĂREANU		
	Break			
	Chair: Adam WOZNIAK			
	09:30 - 10:00	PL3	Futoshi IWATA	Recent Developments in Microfabrication and Nanoimaging Based on Optical and Probe Microscopy
	10:00 - 10:30	PL4	Daniel VIZMAN	Tailoring Optical Properties in Fluoride Crystals by doping with rare earth materials
	IULS TPPA building – B26			
	10:30 - 11:00	Coffee break		
	Chairs: Futoshi IWATA, Stefan MATEJCIK			
	11:00 - 11:15	O8	Ioana Cristina GERBER	Influence of environmental exposure on reactive nitrogen chemistry in plasma-treated water
	11:15 - 11:30	O9	Roxana STRUNGARU-JIJIE	Microplastics in the Danube Delta Biosphere Reserve: Characterization, Distribution and Removal by Advanced Oxidation Processes
	11:30 - 11:45	O10	Jaroslav KRISTOF	Medium-dependent delayed cytotoxicity of plasma-treated liquids in undifferentiated HL-60 cells
	11:45 - 12:00	O11	Marius BLAJAN	Blood Coagulation by Microplasma Endoscope Device
	12:00 - 12:15	O12	Kazuo SHIMIZU	Transient Modulation of the Blood–Brain Barrier by Cold Atmospheric Microplasma-Induced Redox Signaling
	12:15 - 12:30	O13	Ștefănica STOICA	Influence of a seaweed-based biostimulant on the content of stress-related pigments in Momordica charantia under salt stress

September 1	**12:30 - 12:45**	O14	Atsushi NAKAMURA	Toward Hybrid VR Interaction: Modeling Fingertip Tactile Responses to Hardness Using Vibration Analysis
	12:45 - 14:00	**LUNCH**		
	Chairs: Agnieszka JASTRZĘBSKA, Mani NAVANEETHAN			
	14:00 - 14:15	O15	László F. SIMON	Multiparametric SPRi and SH-SAW biosensing of recognition interfaces and dynamically evolving biomolecular systems
	14:15 - 14:30	O16	Ryosuke MATSUBARA	Preparation of vertically oriented aromatic polyester thin films by thermal chemical vapor deposition for piezoelectric devices
	14:30 - 14:45	O17	Tamara POTLOG	Composition and structure of chitosan conjugated ZnO NPs
	14:45 - 15:00	O18	Kazuhiko HARA	Influence of acetic acid addition to the source solution on the fabrication of ZnO nanocrystals-dispersed (Zn, Mg)O thin films by mist chemical vapor deposition
	15:00 - 15:15	O19	Mariana NEAMȚU	Spiropyran functionalized TiO2-based hybrid nanomaterials for enhanced photocatalytic response under simulated solar conditions
	IULS TPPA building – B37			
	Young iA Oral session			
	Chairs: Annamaria VARKONYI-KOCZY, Yoshimasa KAWATA			
	11:00 - 11:15	YO1	Takaya KANAMORI	Towards Enhancing Robustness in Cooperative Learning for Autonomous Driving Control through Dynamic Cooperative Example Generation Using Large Language Models
	11:15 - 11:30	YO2	Mădălina SPIRIDON	Comparative Analysis of Classical and Hybrid Quantum Models for Pharmaceutical Drug Classification
	11:30 - 11:45	YO3	Samunuru Tulasi VENKATA SAI VARMA	Controlled Synthesis and Spray Coated $Ti_3C_2T_x$ MXene on Textile Substrates for Wearable Thermoelectric Applications
	11:45 - 12:00	YO4	Laura NATU	Integrating Ocupational Exposure Parameters and Textile Engineering Principles for Enhanced UV Protection in Outdoor Work Environments

September 1	**12:00 - 12:15**	YO5	Daris ALFAFA	Electron-Wave Interference in Band-to-Band Tunneling of Highly-Doped Silicon pn Junctions
	12:15 - 12:30	YO6	Vivien CSÖRGŐOVÁ	Fuzzy Logic-Based Image Enhancement
	12:30 - 12:45	YO7	Marcell György GYURÁSZIK	Algorithmic search of debt cycles in an economic environment
	12:45 - 14:00	**LUNCH**		
	Chairs: Jun KONDOH, Kazuo SHIMIZU			
	14:00 - 14:15	YO8	Yuta NAGAI	Development of Biomimetic Speech Robot for Vowel Production Using Airflow-Controlled Vocal Cord
	14:15 - 14:30	YO9	Nusser DÁVID	Data driven modelling of chaos
	14:30 - 14:45	YO10	Robert MIKUSKA	Bridging Linear and Nonlinear Control Education Through DC Motor Modeling and TP Model Transformation
	14:45 - 15:00	YO11	Gabriel ANDRIŞAN	The Influence of TVA Configuration on Thrust and Specific Impulse
	15:00 - 15:15	YO12	Mirabela BABIN	Modification of polydimethylsiloxane surface properties of by atmospheric-pressure plasma in air
	15:15 - 20:00	**IULS Visiting**		

September 2	
September 2	**EXCURSION**

September 3 Casa Universitarilor, Alexandru Ioan Cuza University of Iasi				
	Chairs: Imre KOCSIS, Claudiu COSTIN			
September 3	**09:00 - 09:15**	O20	Krisztina CSIBA	About Some of the Obstacles to the Development of Engineering Communication Skills
	09:15 - 09:30	O21	Flavius SOLOMON	Research Eco-Systems in Japan and Romania: Comparisons, Experiences, and Lessons to Be Learned
	09:30 - 09:45	O22	Yusuke SUMI	The familiolect of a Rromani family in Iași
	09:45 - 10:00	O23	Andrei DUMBRAVĂ	Why most published research findings in psychology are false
	10:00 - 10:15	O24	Yumiko TACHIBANA	Curatorial Taste and Public Preferences: Exploring the Gap between Museum Programmes and Audience Engagement in Japanese Public Art Museums
	10:15 - 10:30	O25	Ai YASUNAGA	Music Beyond Borders: Vladimir Jankélévitch on Musical Experience and Human Understanding
	10:30 - 11:00	**Coffee break**		
	11:00 - 12:45	**Poster session** **in the Hall of Lost Steps (*Sala Paşilor Pierduți*) – in front of Aula Magna, Alexandru Ioan Cuza University of Iasi**		
	11:00 - 12:45	P1	Cătălin AGHEORGHIESEI	Data-Driven Multi-Modal Electro-Optical Diagnostic Framework for Atmospheric Plasma Systems
		P2	Cătălin AGHEORGHIESEI	Integrating Artificial Intelligence with Spectroscopic and Surface Analysis for Plasma-Treated Polymer Characterization
		P3	Amir MOSAVI	Responsible AI and Explainable Machine Learning for LLMs
		P4	Masaki TAKAHASHI	Synthesis and Semiconductor Properties of π-Extended Perylene Diimides Bearing Hydrogen-Bonding Substituents
		P5	Mariana NEAMȚU	Novel photochromic materials for micropollutants removal
		P6	Christiana Brigitte SANDU	Do resource efficiency actions reduce production costs? Evidence from circular economy practices in European firms
		P7	Petra GLIGAN-SPANIOL (BALAZS)	Analysis of the 2023–2027 CAP Strategic Plan in the Context of Regional

				Convergence and the Digital Transformation of Agriculture
September 3	11:00 - 12:45	P8	Hiromu HAMASAKI	Thermoelectric Cotton fabrics using Ionic Liquid and Fiber Structure
		P9	Tudor FILIP	Engineering new functionalities in screen-printed electrodes towards integrated manipulation and detection platforms
		P10	Lucel SÎRGHI	Modification of the electrical signature of surface DBD in atmospheric air by a top dielectric layer
		P11	Ana-Nicoleta GRIGORE	Classroom Management in Physical Education: An Integrative Self-Regulatory Framework Based on Pre-Service Teachers' Perceptions
		P12	Andrei DUMBRAVA	Why psychology is not physics
		P13	Simona Catrinel AVARVAREI	The Missing Term: AI and the Future Metaphor of Human Cognition
		P14	Gabriela-Monica ASSANTE	An Adaptive Pedagogical Model for Developing Evidence-Based Reasoning in Digital Learning Environments
		P15	Elena STRATULAT	Comparison of photophysical properties of zinc phthalocyanine derivatives functionalized with carboxy and sulfur groups
		P16	Mariana RUSU	Soil Physical Properties and Climate-Linked Physiological and Foliar Responses of Plum Cultivars in North-Eastern Romania
		P17	Mariana RUSU	Toward Climate-Resilient Agriculture: Linking Soil–Plant–Atmosphere Interactions, Low-Emission Management, and Next-Generation Crop Improvement
		P18	Diana GABUR	Grape pomace valorization strategies: from winery waste to circular economy applications
		P19	Diana GABUR	Reducing crop carbon footprint by using wheat breeding and genomics
		P20	Roxana TUCALIUC	Plant chemistry and the psychology of well-being
		P21	Roxana TUCALIUC	Multifunctional role of fruit trees within The Green School Concept

September 3	**11:00 - 12:45**	P1	Ioana BUȚERCHI	Bio-based innovations for sulphur dioxide replacement in enology: From biomass valorization to sustainable wine protection
		P23	Ioana BUȚERCHI	Upcycling by-products from horticultural crop processing: Next-generation functional foods with enhanced nutritional profiles
		P24	Lucian GORGAN	Selective antitumor effects of indirect cold atmospheric plasma treatment on human osteosarcoma cells
		P25	Iuliana MOTRESCU	Combined Plasma-Activated Water and Bacteriophage Treatment Against Pseudomonas aeruginosa Biofilms
		P26	Camelia LUCHIAN	Consumer oriented sensory profiling of Lepidium sativum sprouts obtained from non-thermal plasma-treated seeds
		P27	Camelia LUCHIAN	Cold plasma and plasma-activated water priming as sustainable strategies for enhancing the nutraceutical composition of edible plant sprouts
		P28	Ștefănica STOICA	Influence of some commercial biostimulants on growth and the accumulation of bioactive compounds in microgreens
		P29	Roxana STRUNGARU-JIJIE	Enhanced piezo-photocatalytic degradation of ciprofloxacin using nanostructured ZnO films
		P30	Leontin PĂDURARIU	From Phase Coexistence to Functional Enhancement in $BaTiO_3$-Based Ceramics
		Young iA Poster session		
		YP1	Beatrice PĂDURARU	Artificial Intelligence in Financial Audit at the Level of Economic Entities in Agribusiness
		YP2	Gabriela RADU	Risks in the Auditing of EU Agricultural Funds during the 2014–2025 Period
		YP3	Ioan PRIGOREANU	Financial Sustainability and Economic Performance in Agriculture: A Bibliometric and Bibliographic Review
		YP4	Ioan PRIGOREANU	Management Strategies and Resilience of Agricultural Systems under Climate Uncertainty: A Systems Approach
		YP5	Andreea Grigore SAVA	Assessing Economic Resilience and Social Performance for Sustainability Readiness in Romanian Wineries

September 3	**11:00 - 12:45**	YP6	Eva Helena PETROVA	Direct Laser Interference Patterning of Steel for Friction Reduction Under Dry Sliding and Ice-Contact Conditions
		YP7	Kaito MATSUNO	Effect of chamfer width on tool fracture in intermittent cutting
		YP8	Ștefania ROȘCA	Translational Regenerative Medicine in Veterinary Neurology: Integrating Conventional Therapy and Platelet-Rich Plasma in Canine IVDD
		YP9	Andrei SCUTARAȘU	Circular valorization of fruit tree and grapevine pruning residues for sustainable oenology and bio-based applications
		YP10	Andrei SCUTARAȘU	Digitalizing Viticulture via AI Multi-Agent Systems: A Case Study on 10 Romanian Grapevine Cultivars
		YP11	Bettina BUICAN	Circular evaluation of low-sulfite wines linking amino acids, biogenic amines, higher alcohols, phenolic stability, and antioxidant activity
		YP12	Bettina BUICAN	Long-macerated white wines: Phenolic enrichment and sustainability potential in low-intervention winemaking
		YP13	Madalina PITEI (DUSMANESCU)	Home-Scale Winemaking and Quality Control: Low-Cost Practices Influencing Microbial Safety and Sensory Typicity
		YP14	Dragos-Petrica VASILAS	Automated Electrical Characterization of Air Above Water Dielectric Barrier Discharges in Large-Scale Data Sets
		YP15	Mihai BUȚA	Numerical study of metal target vaporization using a thermionic electron gun
		YP16	Stefana Bianca RAȚĂ	Synthesis of p-type Cu3N/n-type Cu3N homojunction by reactive high power impulse magnetron sputtering
		YP17	Beatrice-Andreea SPÎNU	Long-Term Advanced Monitoring of an Atmospheric Pressure Dielectric Barrier Discharge Plasma Source for Water Treatment: Preliminary Evaluation of Environmental Condition Influences
	12:45 - 14:00	**LUNCH**		

September 3	**14:00 - 14:30**	PL5	Adrian IFTENE	Artificial Intelligence for Smart Health and Education: From Research to Real-World Impact
	14:30 - 14:45	O26	Kálmán BOLLA	Benchmarking Document-to-Table Conversion Pipelines
	14:45 - 15:00	O27	Mihaela LUCA	Artificial Intelligence – Based Video Colonoscopy Analysis: Perspectives on Inflammatory Bowel Disease and Irritable Bowel Syndrome
	15:00 - 15:15	O28	Balázs TUSOR	A Novel Training Method for Compact Sequential Fuzzy Indexed Search Trees Classifiers
	15:15 - 15:30	O29	Noriaki MATSUMURA	Semantic Structure Analysis of SIM3 Version 2: A Comparative Study of Description-Only and Guidance-Augmented Representations
	15:30 - 15:45	O30	Hiroki KASE	Haptic Presentation of 3D X-ray CT Data Using Mixed Reality and Force Feedback Devices
	15:45 - 16:10	**Coffee break**		
	Chairs: Santhana Krishnan HARISH, Darius GAILEVICIUS			
	16:15 - 16:45	PL6	Aidas MATIJOŠIUS	VU LRC: Emergence of OPA/OPCPA technology expertise, towards high intensities
	16:45 - 17:00	O31	Stefan MATEJCIK	Ion Mobility Spectrometry studies of Corona Discharge treatment of alkanes in air
	17:00 - 17:15	O32	Jun KONDOH	Machine-Learning-Based Damage Classification of Fixed-End Beams Using a Surface Acoustic Wave Device with a Geophone
	17:15 - 17:30	O33	Balázs RAKOS	Arithmetic and Routing Blocks in FRET-STED Molecular Logic: Designing All-Optical Half-Adders and Demultiplexers
	17:30 - 17:45	O34	Adam WOŹNIAK	Metrologically Traceable Reference Artifacts for Validation of X-ray Computed Tomography in Active Volume Determination of Ionization Chambers
	19:00 - 22:00	**Conference Diner UNIREA Hotel, "PANORAMIC" Restaurant (13th floor)**		

September 4 Casa Universitarilor, Alexandru Ioan Cuza University of Iasi			
September 4	**Chairs:** Yukinori ONO, Iuliana MOTRESCU		
	09:00 - 09:30	PL7	Daniel MORARU	Dopants as quantum dots in silicon nanoscale devices towards quantum applications
	09:30 - 09:45	O35	Toru AOKI	Design and Performance Evaluation of a Compact D–D Fusion Neutron Generator
	09:45 - 10:00	O36	Santhana Krishnan HARISH	Scalable Chalcogenide-Based NO_2 Sensors: Bridging Materials Innovation and Practical Environmental Monitoring Devices
	10:00 - 10:15	O37	Tudor-Alexandru FILIP	Tailoring the electrical properties of functional polymer composites: AC Dielectrophoretic alignment of Ti3C2Tx MXenes for advanced flexible sensors
	10:15 - 10:30	O38	Nobuhide YOKOTA	Manipulation of electron spin polarization in birefringent vertical-cavity surface-emitting lasers
	10:30 - 11:00	**Coffee break**		
	Chairs: Daniel MORARU, Pavels ONUFRIJEVS		
	11:00 - 11:15	O39	Cristian BABAN	Absolute Separability and the Limits of Entanglement Generation by Global Unitary Dynamics
	11:15 - 11:30	O40	Costin LUCHIAN	A Prototype Twin-Field Quantum Key Distribution System for Long-Reach Secure Communication
	11:30 - 11:45	O41	Madhurya CHANDEL	Engineering MXene-Based 2D/2D Heterostructures for optoelectronic devices
	11:45 - 12:00	O42	Jevgenijs KAUPUZS	Advanced Finite-Difference Frequency-Domain Simulations of Light Propagation in Structures with Metal Nanoparticles by Optimized Steepest Descent Algorithm
	12:00 - 12:15	O43	Iuliana MOTRESCU	Comparative Assessment of Non-Thermal Plasma Processing of Seeds for Micro-greens Production
	12:15 - 12:30	O44	Marius DOBROMIR	WO_3/ZnO and ZnO/WO_3 bilayers: structure, composition, and optical properties
	12:30 - 12:45	**Closing ceremony**		
	12:45 - 14:00	**LUNCH**		

NOTES

NOTES

NOTES

NOTES

NOTES

NOTES

NOTES

NOTES



interAcademia 2026

EVENTS Map

	31.aug	01.sept		03.sept	04.sept
8:30-8:50		REGISTRATION			
		08:50 – 9:20 Opening Ceremony at IULS			
9:00-9:15				O20 CSIBA	PL7 MORARU
9:15-9:30		Break		O21 SOLOMON	
9:30-9:45		PL3 IWATA		O22 SUMI	O35 AOKI
9:45-10:00				O23 DUMBRAVĂ	O36 HARISH
10:00-10:15		PL4 VIZMAN		O24 TACHIBANA	O37 FILIP
10:15-10:30				O25 YASUNAGA	O38 YOKOTA
10:30-11:00		Coffee break		Coffee Break	Coffee Break
11:00-11:15		O8 GERBER	YO1 KANAMORI	Poster session	O39 BABAN
11:15-11:30		O9 STRUNGARU-JIJIE	YO2 SPIRIDON		O40 LUCHIAN
11:30-11:45		O10 KRISTOF	YO3 VENKATA SAI VARMA		O41 CHANDEL
11:45-12:00		O11 BLAJAN	YO4 NATU		O42 KAUPUZS
12:00-12:15		O12 SHIMIZU	YO5 ALFAFA		O43 MOTRESCU
12:15-12:30		O13 STOICA	YO6 CSÖRGŐOVÁ		O44 DOBROMIR
12:30-12:45	REGISTRATION	O14 NAKAMURA	YO7 GYURÁSZIK		Closing ceremony
12:45-13:00		LUNCH		LUNCH	LUNCH
13:00-14:00					
14:00-14:15	Opening ceremony at UAIC	O15 SIMON	YO8 NAGAI	PL5 IFTENE	
14:15-14:30		O16 MATSUBARA	YO9 DÁVID		
14:30-14:45		O17 POTLOG	YO10 MIKUSKA	O26 BOLLA	

14:45-15:00	**PL1** MAHA	**O18** HARA	**YO11** ANDRIȘAN	**O27** LUCA
15:00-15:15		**O19** NEAMȚU	**YO12** BABIN	**O28** TUSOR
15:15-15:30	**PL2** HIZUME	**Visiting IULS**		**O29** MATSUMURA
15:30-15:45				**O30** KASE
15:45-16:15	**Conference group photo Coffee Break**			**Coffee Break**
16:15-16:30	**O1** Mue I			**PL6** MATIJOŠIUS
16:30-16:45	**O2** KOCSIS			
16:45-17:00	**O3** NAVANEETHAN			**O31** MATEJCIK
17:00-17:15	**O4** GAILEVICIUS			**O32** KONDOH
17:15-17:30	**O5** ONUFRIJEVS			**O33** RAKOS
17:30-17:45	**O6** JASTRZĘBSKA			**O34** WOŹNIAK
17:45-18:00	**O7** MATSUZAWA			
18:00-19:00	**WELCOME RECEPTION**			
19:00-20:00				**CONFERENCE DINNER**
20:00-22:00				


ALEXANDRU IOAN CUZA
UNIVERSITY of IAŞI
IASI UNIVERSITY
of LIFE SCIENCES
1842
静岡大学
Shizuoka University
ÓBUDAI EGYETEM
ÓBUDA UNIVERSITY
John von
Neumann
University
inter-academia
VILNIAUS UNIVERSITETAS
1579
UNIVERSITAS VILNENSIS
UNIVERSITAS COMENIANA BRATISLAVENSIS
MCMXIX
BME
BUDAPEST UNIVERSITY
OF TECHNOLOGY
AND ECONOMICS
1862
RĪGAS TEHNISKĀ
UNIVERSITĀTE