Conference Day 1 – 30th November 2021

13:00 - 13:20 Conference Registration

13:20 - 13:55 Welcome and Introduction

- Representative of MoE
- Prof. Mustafa Babanli, Rector of ASOIU
- HE Zacharie Gross, Ambassador of France to Azerbaijan
- Prof. Michel Deneken, President of Unistra
- Prof. Latafat Gardashova, Vice-rector for Scientific Affairs of ASOIU
- Prof. Philippe Turek, Unistra, Head of Research Dept. UFAZ

14:00 - 15:00** Online Opening Session

• **Jean-Marie Lehn,** Nobel Prize in Chemistry, University of Strasbourg, Institute for Advanced Study, Steps Towards Life: Chemistry!

15:00 - 15:20 Coffee break

15:30 - 18:35 Parallel Sessions in Chemistry, Earth Sciences and Computer Science

Moderators: Dunya Babanli, Elshan Abdullayev, Ulviyya Abdulkarimova

	CHEMISTRY (Moderator Dunya Babanli)
15:30 - 16:15** KL* 1	Khashayar Saleh, Professor of Chemical Engineering, Université de Technologie de Compiègne, TIMR laboratory (CNRS EA 4297), France, <i>Chemical reaction engineering at the heart of clean cars</i>
16:15 - 16:50 Guest 1	Ulviyya Hasanova, Scientific Researcher, ASOIU, Supramolecular Nanoensembles: Preparations and Application
16:50 - 17:10	Coffee Break
17:10 - 17:45** Guest 2	Christophe Serra, Professor of Chemical Engineering, Institut Charles Sadron (CNRS UPR 22), Unistra, Microfluidic routes to the production of controlled-feature polymeric microcarriers for drug delivery
17:45 - 18:10 JR*1	Javid Abdurahim ¹ (PhD at Unistra), Ane Larrea ² , Victor Sebastian ² , Christophe A. Serra ¹ , Madeline Vauthier ^{1*} ¹ Université de Strasbourg, CNRS, Institut Charles Sadron UPR 22, F-67000 Strasbourg, France; ² University of Saragossa, INA, Campus Río Ebro, S-50018 Saragossa, Spain, <i>Nanoemulsions for biomedical applications: drug-loaded size-controlled biodegradable polymeric nanoparticles</i>
18:10 – 18:35 JR 2	Leyla Vazirova, Department of Chemistry and Technology of Inorganic Substances of the ASOIU, <i>Synthesis of nanostructures on the basis of diazacrown ether (mc) and magnetite nanoparticles loaded by cephalosporin antibiotics</i>

	EARTH SCIENCES (Moderator Elshan Abdullayev)
15:30 - 16:15 KL*1	Suzanne Leroy, Honorary Research Fellow, Aix-Marseille Université- LAMPEA (France) and University of Liverpool (UK), <i>The Caspian Sea</i> through time, a sea that remains mysterious
16:15 - 16:50 Guest 1	Elkhan Isgandarov, Assistant Professor, ASOIU, Transformation of Gravimagnetic Anomalies
16:50 - 17:10	Coffee break
17:10 – 17:45 Guest 2	Mathieu Schuster, Senior Researcher, CNRS, Earth & Environment Institute of Strasbourg, <i>The future of lakes: from reconstructing ancient lakes in the geological record to forecasting the evolution of large inland waterbodies of the world</i>
17:45 - 18:10 JR* 1	Maleyka Aghayeva, Assistant Professor, Geological Prospecting Faculty, ASOIU, Correlation of horizons and mapping of faults of Naftalan field based on seismic attribute analysis
18:10 - 18:35 JR 2	Clara Jodry, Associate Professor of Geophysics, UFAZ, Use of Electrical Resistivity Tomography to characterize fluid pathways on the Saribokha mud volcano, Azerbaijan

	COMPUTER SCIENCE
15:30 - 16:15** KL* 1	Paul Bourgine, President, UNESCO UniTwin Complex Systems Digital Campus, What is the Roadmap of Complex Systems Studies?
16:15 - 16:50 Guest 1	Latafat Gardashova, Vice-Rector for Scientific Affairs, ASOIU, Artificial intelligence and information processing in decision making problems
16:50 - 17:10	Coffee break
17:10 - 17:45 Guest 2	Anne Jeannin-Girardon, Pierre Collet, Professor of Computer Science, ICUBE lab. (CNRS, UMR 7357), UNISTRA, <i>An ALLIANCE between ontological and legislative AI systems for the development of controllable Autonomous, Explainable and Ethical AI systems</i>
17:45 - 18:10** JR* 1	Vugar Mirzakhanov, ASOIU, Value of Fuzzy Logic for Data Mining and Machine Learning: A Case Study
18:10 - 18:35 JR* 2	Samer El Zant, Assistant Professor and the Pedagogical Responsible of the Computer Science Department, UFAZ, <i>Google matrix analysis of Twitter network</i>

18:35 - 20:00 Evening snacks

18:35 - 20:00 Poster session***

*JR Junior Lecturer

*KL Keynote Lecturer

** Online

*** A poster session or poster presentation is the presentation of research by an individual or group for a class or academic/professional conference. Participants who are willing to present their research in the form of posters can attend the Poster Session to be held on November 30, at 18:30-20:00

Conference Day 2 – 1st December 2021

09:00 – 12:30 Parallel Sessions in Chemistry, Earth Sciences and Computer Science

Moderators: Maxime Florent, Clara Jodry, Samer El Zant

	CHEMISTRY
KL 2 Analytical chem	Nazilya Salmanova, Associate Professor of Inorganic chemistry and Analytical chemistry, ASOIU, Reactivity of fullerenes and carbon nanotubes in chain reactions of hydrocarbons and polymers oxidation
09:45 - 10:20** Guest 3	Maurice Millet, Professor at Institut de Chimie et Procédés pour l'Energie, l'Environnement et la Santé (ICPEES), Unistra, Speciation and origin of atmospheric particles
10:20 - 10:50	Coffee break
10:50 - 11:25 Guest 4	Vagif Baghiyev, Professor at Chemistry and Technology of Inorganic Materials Department, ASOIU, Ethanol conversion over binary cobalt oxide catalysts
11:25 - 11:50 JR 3	Narmina Guliyeva, Assistant, ASOIU, Synthesis and Transformation of Nitrogenous Polycarbonyl Compounds of Cyclohexane Series
11:50 - 12:15 JR 4	Dunya Babanly, Local coordinator of Chemistry Department, UFAZ, Novel advanced materials – topological insulators (TIs) for future spintronics and quantum computing

	EARTH SCIENCES
09:00 - 09:45 KL 2	Gulam Babayev, Head of "Seismology, geomagnetism and petrophysics" Department, Geology & Geophysics Institute of ANAS, Applying the elements of deterministic hazard assessment for the north-eastern part of Azerbaijan
09:45 - 10:20 Guest 3	Cecile Robin, Associate Professor, Université de Rennes 1, Signal Propagation in Source to Sink for the Future of Earth Resources and Energy
10:20 - 10:50	Coffee break

10:50 - 11:25 Guest 4	Shalala Huseynova, Scientific Secretary, Oil and Gas Institute of ANAS, Modelling of Petroleum Systems within the South Caspian Basin
11:25 - 11:50 JR 3	Elshan Abdullayev, Geoscience Program Coordinator, UFAZ, The role of clay minerals in the preservation of fossils in sedimentary rocks
11:50 - 12:15 JR 4	Guilherme Bozetti, Associate Professor in Sedimentary and Field Geology, Unistra, New insights into deep-lacustrine architectural elements; examples from the Upper Triassic Yanchang Formation, Ordos Basin.

	COMPUTER SCIENCE
09:00 - 09:45 KL2	Ehsan Mousavi, Professor at Computer Engineering Department, Shahed University, The Future of Computing is Distributed
09:45 - 10:20** Guest 3	Christian Rolando, CNRS Distinguished Senior Scientist, University of Lille, From mass spectrometry raw signal to results which make sense in proteomics, metabolomics and petroleomics. From deterministic algorithms to machine learning.
10:20 - 10:50	Coffee break
10:50 - 11:25 Guest 4	Samir Guliyev, Associate Professor, ASOIU, Building Efficient Optimization Software Packages with the Application of Parallel Computing
11:25 - 11:50 JR 3	Ulviyya Abdulkarimova, Local Coordinator of the Mathematics team, UFAZ, PARSEC: PARallel System for Evolutionary Computing
11:50 - 12:15 JR 4	Shamil Ahmadov, Scientist at "ETAM" Science-Education Analytic Center, Application of fuzzy logic in real life problem
12:15 – 12:30	Closing Session

	Industrial Partnership Session / Chair Ph. Turek
13:30 - 13:50	Welcome & Coffee
13:50 - 14:00	Introduction by Prof. Philippe Turek, Head of UFAZ Research Department
14:00 - 15:10	University - Business Partnership for Research and Innovation: some testimonies about current and future R&D projects from local companies
15:10 - 15:40	Panel discussion – The solutions: how we can work together
15:40 - 16:00	Coffee break