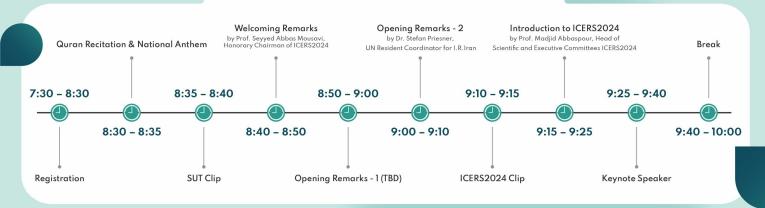
18 Apr 2024 / Day I , National Library of Iran, Tehran



10:00 - 12:00

"Energy Policy and Planning"

h 10 min. Discussion

Panel Coordinator: Prof. Janos Bogardi

(Ex. Vice Rector of United Nations University in Europe, Ludovika University of Public Service, Hungary)

Panelists:

- Prof. Janos Bogardi
- Prof. Abbas Maleki, Energy Department, SUT
- Prof. Hassan Badkoobehi, National University, San Diego, California
- Prof. Hashem Orace, President of Iran Energy Associations Syndicate
- Representative of the Ministry of Energy of Iran

Lunch Break



"Energy Governance and Management"



Panel Coordinator: Prof. Reza Ardakanian

(Founding Director of United Nations University Institute of Integrated Management of Material Fluxes and Resources (UNU-FLORES))

AQ)

h 10 min. Discussi

Panelists:

- Prof. Reza Ardakanian
- Prof. Nadejda Komendantova, Cooperation and Transformative Governance Group Leader at International Institute for Applied Systems Analysis (IIASA)
- Prof. Ali Akbar Matkan, Secretary General of the UNESCO National Commission, Iran OPEC Representative (TBD)
- Representative of the Ministry of Petroleum of Iran
- Prof. Majid Amidpour, President of Niroo Research Institute

Break



"Emerging Technologies and Industries"



h 10 min. Discussi

Panel Coordinator: Prof. Bahram Taheri (Amirkabir University of Technology, Iran)

Panelists:

- Prof. Bahram Taheri
- Dr. Maryam Javan shahraki, UNIDO Representative in Iran
- Prof. Seyed Moslem Mousavi Dorcheh, Chief Executive Officer at Iran Renewable Energy Association (IrREA)
- Prof. Nikolay Bobylev, St. Petersburg State University, Russia
- Prof. Azim Kalantari Asl, Head, Research Institute of Petroleum Industry, Iran
- Representative of Ministry of Industry, Mine and Trade, Iran



Panel Discussion II







Internaonal Conference on Energy Resilience, and Sustainability (ICERS2024)

19 Apr 2024 / Day II, National Library of Iran, Tehran



8:20 - 10:00

"Energy Financing and Investment"



AQ)

Panel Coordinator: Prof. Alinaghi Mashayekhi

(Professor of Management, SUT)

Panelists:

- Prof. Alinaghi Mashayekhi, Professor of Management, SUT
- Prof. Amadou Thierno Gaye, Former Director General of Research and Innovation at Senegal Ministry of Higher education, research and innovation
- Prof. Majid Ghassemi, Chief Executive Officer of Bank of Pasargad, Iran
- Representative of Plan and Budget Organization, Iran

Break



10:30 - 12:30

"Energy and Environment"



Panel Coordinator: Prof. Madjid Abbaspour

(Board Member of Sharif Energy, Water and Environment Institute, SUT)

Panelists:

- Prof. Madjid Abbaspour
- Prof. Saad Mekhilef, Director of Power Electronics and Renewable Energy Research Laboratory, University of Malaya, Malaysia
- Prof. Reza Maknoon, The Academy of Sciences, Iran
- Prof. Nadejda Komendantova, Cooperation and Transformative Governance Group Leader at International Institute for Applied System Analysis (IIASA)
- Representative of Department of Environment, Iran

Lunch Break



14:00-16:00

"Energy Security"



Panel Coordinator: Prof. Seyed Komail Tayebi

(Science Foundation of ECO)

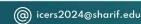
Panelists:

- Prof. Seyed Komail Tayebi
- Prof. Brian Norton, Vice-President of European Academies Science Advisory Council, Ireland
- Prof. Naser Bagheri Moghaddam, Energy Commission, Supreme Council of Science, Research and Technology of Iran
- Prof. Ali Akbar Salehi, Ex. Ministry of Foreign Affairs of Iran
- Mr. Hamid Chitchian, Ex. Minister of Energy of Iran
- Representative of the Ministry of Foreign Affairs of Iran



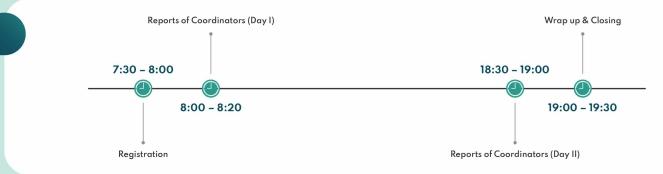
Panel Discussion VI







19 Apr 2024 / Day II , National Library of Iran, Tehran



Break



16:30 - 18:30

"Energy Resources"



vention FAQ)

Panel Coordinator: Prof. Brian Norton

(Vice-President, Science Advisory Council of European Academies, Ireland)

Panelists:

- Prof. Brian Norton
- Prof. Halil Hasar, Directorate of Climate Change at Ministry of Environment, Urbanization and Climate Change, Turkey
- Prof. Ali Akbar Salehi, Ex. Ministry of Foreign Affairs of Iran
- Prof. Amadou Thierno Gaye, Former Director General of Research and Innovation at Senegal Ministry of Higher education, research and innovation
- Representative of Atomic Energy Organization, Iran





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International Conference on Energy Resilience and **Sustainability (ICERS2024)**

21 Apr 2024 / Day IV, Prof. Rabiee Auditorium, Sharif University of Technology

Registration

8:20

Oral Presentations

Poster Presentations

8:20 - 8:40

Title: Energy Policy in Iran: The proper path to the clean energies

Presenter: Prof. Abbas Maleki

8:40 - 9:00

Title: Russia's Cyber Security Policy for Atomic **Energy Sector**

Presenter: Prof. Radomir Bolgov

9:00 - 9:20

Title: Energy Conservation and Sustainability Methodology to predict the alternative future Iranian Energy

Presenter: Prof. Hassan Badkoobehi

9:20 - 9:40

Title: Greenhouse gas inventories on disturbed peatlands as part of the Carbon Supersite Programme in the Russian sector of the Baltic Region

Presenter: Prof. Maxim Napreenko Dr. Leyla Bashirova

9:40 - 10:00

Title: The Main Research Directions of the Consortium "Global Earth Changes: Climate, Ecology, and Quality of Life"

Presenter: Prof. Victor Dyomin

8:20 - 8:40

> Title: Specialists Training 4.0 for Sustainable **Development Goals**

Presenter: Prof. Svetlana Kuzmina

8:40 - 9:00

Title: Developing a PESTLE based model for the Factors that Drive Implementation of Synergistic Energy Solutions in the Middle East

Presenter: Maryam A. Borojerdi

9:00 - 9:20

Title: Leveraging Natural Gas for Enhanced **Energy Security: A Comprehensive Analysis of** Iran's Role in the Global Energy Landscape

Presenter: Parinaz Soleimani

9:20 - 9:40

Title: Integrated Resource Management in the Wake of Climate Change: A Nexus Approach for Water, Food, and Energy Security

Presenter: Hamidreza Esmaeilinejad

9:40 - 10:00

Title: Integrated Resource Management Under Climate Change: A Strategy Framework for an **Arid Central Iranian Watershed**

Presenter: AmirArdalan Amiri

Break 10:00 - 10:20









21 Apr 2024 / Day IV, Prof. Rabiee Auditorium, Sharif University of Technology

Oral Presentations

10-20-10:40

Title: Presentation of Iran's Proposed MRV Model Based on National Conditions and a Comparative Study of the World's MRV Systems

Presenter: Dr. Dordaneh Aghajani

10:40 - 11:00

Sequestered Title: Carbon in the **Above-Ground Phytomass of Forests Affected** by Fires of Different Intensity

Presenter: Prof. Matveev Sergei

11:00 - 11:20

Feasibility Title: Techno-Economic of Underground Hydrogen Storage in Iran: A Path to Sustainable Energy Integration

Presenter: Dr. Hassan Mahani

11:20 - 11:40

Title: Techno-Economical Evaluation of Hydrogen -fueled Gas Turbines for Electricity Generation in Iran

Presenter: Dr Hossein Khajehpour

11:40 - 12:00

Title: Efficiency of geothermal energy as a renewable energy source: Energy performance of energy pile and energy diaphragm wall

Presenter: Prof. Mohammad Mahdi Ahmadi

Poster Presentations

10:20 - 10:40

Title: Corporate Social Responsibility in the **Energy Management and Sustainability**

Presenter: Dr. Sadaf Estanesti

10:40 - 11:00

Title: Strategic Decision-Making for Petrochemical Plants: Evaluating and Selecting Optimal Hybrid Renewable Energy Systems **Through Sustainability and Resiliency Criteria**

Presenter: Samaneh Habibzadeh

11:00 - 11:20

Title: Digital Transformation of Oil and Gas **Companies:** Energy **Transition** and **Hydrocarbon Reduction**

Presenter: Ali Dehghanchaharabi

11:20 - 11:40

> Title: The Role of Energy Governance in the **National Security of Oil Producing Countries**

Presenter: Dr. Reyhaneh Loni

11:40 - 12:00

> Title: Developing Energy Hub as a Key to **Improve Energy Governance**

Presenter: Dr. Revhaneh Loni

Lunch 12:00 13:30

13:30 - 13:50

Title: Introducing a Novel Method to Produce **Energy from Marine Turbines Installed on the** Persian Gulf Bridge

Presenter: Dr. Reyhaneh Loni



13:30 - 13:50

Title: Investigating and Comparing the Methods of Providing Capital in the Electricity Industry (Comparing the Two Methods of Mutual Sale and Guaranteed Purchase)

Presenter: Mousa Mehdikarami









21 Apr 2024 / Day IV, Prof. Rabiee Auditorium, Sharif University of Technology

Oral Presentations

Poster Presentations

13:50 - 14:10

Title: Fault Diagnosis of Power Grid Equipment based on Artificial Intelligence with Limited **Data**

Presenter: Prof. Svetlana Petrova

14:10 - 14:30

Title: Autonomous Hybrid Power Plants Based on Renewable Energy Sources for Off-Grid **Rural Electrification**

Presenter: Prof. Georgii A. Konoplev

14:30 - 14:50

Title: A Review of Vehicle-to-Grid (V2G) Technology as a Solution to Increasing **Renewable Integration and Electrification**

Presenter: Prof. Mohamad Taghi Ahmadian

14:50 - 15:10

Title: Autonomous Solar Measurement System for Sustainable Solar Energy

Presenter: Prof. Fedor A. Gubarev

15:10 - 15:30

Title: An Efficient Solar Desalination System for Oil Fields, Increasing the Water Output by **Modifying the Condensing Glass Surface**

Presenter: Prof. Shahab Ayatollahi

15:30 - 15:50

Title: Simultaneous supply of energy and water by rainwater harvest from the roof of the greenhouse structure with a solar panel

Presenter: Eng. Majid Zarezadeh

13:50 - 14:10

> Title: Economic Study of the Idea of Selling the **Capacity Certificate in Financing the Energy Sector**

Presenter: Mousa Mehdikarami

14:10 - 14:30

Title: Determination of Thermal Properties of Soil in Solar Greenhouses

Presenter: Prof. Afdandil Vardiyashvili

14:30 - 14:50

Title: The Global Outlook of the Renewable **Energy Resources from Oceans**

Presenter: Dr. Shahnaz Bahmanyar

14:50 - 15:10

Title: Design Parameters Optimization of Micro-hydro Archimedean Screw **Sustainable Energy Generation**

Presenter: Dr. Kazem Shahverdi

15:10 - 15:30

Title: Computational comparison among different biomass feedstocks

Presenter: Vanoosheh Ghazanfari Savadkoohi

15:30 -15:50

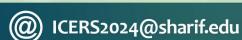
Title: Optimizing Energy Efficiency in Building Sector through the Use of Solar Energy: Case **Study of Daylight Control Systems**

Presenter: Ali Kangazian

Break 16:10 15:50









21 Apr 2024 / Day IV, Prof. Rabiee Auditorium, Sharif University of Technology

Oral Presentations

Poster Presentations



16:10 - 16:30

Title: economic and environmental improvement of the simultaneous production of electricity and heat from photovoltaic panels in residential houses and small industries based on the goals of energy subsidies in Iran

Presenter: Dr. Ebrahim Gogonani



16:30 -16:50

Title: A Framework for Optimizing the Environmental, Technical, and Economic Performances of Natural Gas Liquids (NGL) Recovery Process

Presenter: Dr. Abolghasem Kazemi



16:50 - 17:10

Title: Performance Evaluation of Hydrogen-Natural Gas Blends in Gas Turbines: a Case Study of the MAPNA MGT-75 Gas Turbine

Presenter: Dr. Ramin Haghighi Khoshkhoo



17:10 - 17:30

Title: Energy Supply of Natural Gas Liquefaction Process Using Renewable Energy Sources: Technical, Economic and Environmental Study

Presenter: Dr. Mehdi Sharifzade



16:10 - 16:30

Title: The Feasibility of Installing FPV on the Reservoirs of Dams in Hormozgan Province to Produce Energy and Reduce the Amount of Water Evaporation

Presenter: Majid Zarezadeh



16:30 - 16:50

Title: Optimal Design of Renewable Energy Hybrid Systems Using MATLAB: A Comparative Analysis with PV Syst Software and Sensitivity Analysis

Presenter: Hassan Bazoubandi



16:50 - 17:10

Title: Study of Diesel Operation on Diesel and Bioethanol-Containing Fuel

Presenter: Dr. Sobir Utaev









20 Apr 2024 / Day III, Prof. Rabiee Auditorium, Sharif University of Technology

7:30	Registration	8:20
8:20	Welcome Notes	8:30
8:30	TED Talk 1	9:30



Title: The Concept of Sustainable Development: a Critical Analysis

Presenter: Prof. Janos J. Bogardi

Goals: The proposed TED talk, while acknowledging the importance to guide development according the principles of sustainability would highlight some problems which are related to and make the practical implementation of the concept of sustainability difficult. Some proposals which may facilitate the practical realization of the principle of sustainability will be made.





Title: Role of Policymaking in Accelerating the Energy Transition

Presenter: Prof. Halil Hasar

Goals: To provide the audience and attendees with the insights into the role of policymaking in the energy transition with its limitations and potential to accelerate the transition.

10:20	Break	10:40
10:40	TED Talk 3	11:40



Title: Cooperation and Transformative Governance of Energy Resilience and Sustainability

Presenter: Prof. Nadejda Komendantova

Goals: To provide the audience with insights from various projects and good practices on energy resilience and sustainability with the focus on cooperation and transformative governance including cooperation models, decision support systems and good practices from various countries and regions.









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TED Talk 5

20 Apr 2024 / Day III, Prof. Rabiee Auditorium, Sharif University of Technology



11:40 -

TED Talk 4

12:00



Title: TBD

Presenter: Prof. Aliakbar Matkan

Goals: TBD



12:00

Lunch

13:30



13:30

TED Talk 5

14:00



Title: TBD

Presenter: Prof. Seyed Komail Tayebi

Goals: TBD



14:00

Workshop 1

15:20





Goals: The Workshop will touch upon:

- International Political Instruments and Local Policy Options
- Technological Nexus
- Circular and NBS Innovations and Solutions
- Economic Instruments
- National and Border Taxes
- Allowances and Carbon Markets
- Social Inclusivity and Involvement within a Just Transition,
- It will finally explore the ways in which COP 29 can be instrumental in enhancing the efficacy of instruments?









TED Talk 7

20 Apr 2024 / Day III, Prof. Rabiee Auditorium, Sharif University of Technology

15:20



16:00



Title: Dynamic Analysis and Design Assessment of Offshore Renewable Energy Systems

Presenter: Prof. Madjid Karimirad (online)

Goals: Understanding the challenges and opportunities in offshore renewable; Being familiar with the importance of dynamic analysis in the proper design of offshore wind, floating solar, wave energy and hybrid marine platforms

16:00 Break 16:20





Title: Power Electronics as the Enabling Technology for a Modern Carbon Neutral Society

Presenter: Prof. Saad Mekhilef

Goals: The objectives of power electronics as an enabling technology for a modern carbon-neutral society revolve around improving energy efficiency, integrating renewable energy, supporting electrified transportation, enabling smart grids, facilitating energy storage, promoting demand response, and enhancing the electrification of various industrial processes. These objectives collectively contribute to building a sustainable and environmentally friendly energy ecosystem.





Title: Decarbonisation of Buildings

Presenter: Prof. Brian Norton

Goals: To provide an understanding of the challenges and constraints reducing the operational and embodied greenhouse gas emissions and energy particularly in existing buildings whilst maintaining the health and amenity of the building for its occupants.







