



Webinar on

Energy Efficiency and Cleaner Production Practices in Industry Based on Sustainable Development

Wednesday, 25th November 2020
at 03:00 p.m. (GMT +5)

The rapid population expansion and urbanization has led to an increasing demand of energy in almost all the sectors including residential, industrial and commercial sectors. The increase of energy need has various negative effects such as environmental degradation, price increases, decrease in resources and dependency on foreign resources.

Furthermore, energy consumption is one of the main drivers of economic growth around the world and most countries rely largely on different types of fossil fuels to meet their growing energy demands. For this reason, there is a need to make energy use efficient not only because of the scarcity of resources and the rising prices of fossil energy fuels, but also reducing the adverse impacts of climate change.

Energy efficiency, is a necessity for sustainable development, can be viewed as a set of efficiency enhancing measures such as preventing energy losses, waste recovery, and utilization, reducing energy demand through advanced technological processes, energy recovery systems and more efficient renewable energy resources such as solar, hydro, wind and biomass energy. In this context, one of the most important sectors is the industry, which has an important share in primary energy consumption.

Energy efficiency is among the key mitigation actions for the industry sector, and the energy intensity of the sector can be reduced by approximately 25% with the implementation of best available techniques. For this reason, it is extremely important to prioritize energy efficiency studies in the industrial sector and to increase the share of alternative and renewable energy sources.

COMSATS Centre for Climate and Sustainability (CCCS) in partnership with Environment and Cleaner Production Institute of Turkish Scientific and Technological Research Council (TUBITAK) is organizing a Webinar on 25 November 2020 to discuss Sustainable Development Goal 7 with reference to promoting clean energy, renewable energy, energy efficiency and clean energy technology.

SPEAKERS



Prof. Zhiguang Zhu
TIB, China



Ms. Jehan Haddad
RSS, Jordan



Dr. Farrukh Raza Amin
CCRD, CUI, Pakistan



Dr. Lugano Wilson
TIRDO, Tanzania



Dr. Emrah SIK
TUBITAK MRC, TURKEY

Meeting Link:

[https://us02web.zoom.us/j/87579831319?](https://us02web.zoom.us/j/87579831319?pwd=a0lpb3EyWDBXN0NFSkhHZDZHNzZDZz09)
[pwd=a0lpb3EyWDBXN0NFSkhHZDZHNzZDZz09](https://us02web.zoom.us/j/87579831319?pwd=a0lpb3EyWDBXN0NFSkhHZDZHNzZDZz09)

Meeting ID: 875 7983 1319 **Passcode:** 490299

for Information Please Contact

Mr. Saifullah Dilazak
Email: saif.cccs@comsats.org

PROGRAMME

Prof. Zhiguang Zhu

Prof. Zhiguang Zhu has been serving as Professor at Tianjin Institute of Industrial Biotechnology, Chinese Academy of Sciences, since 2016. He received his Ph.D. in Biological Systems Engineering at Virginia Tech in 2013 and a B.S. in Biotechnology at Huazhong University of Science & Technology in 2007. His research is focusing on the field of biochemical engineering, biocatalysis, biofuel cells and bioelectrochemical synthesis. He uses the tools and principles of synthetic biology, bioelectrochemistry, and bionanotechnology to investigate fundamental sciences behind biocatalysis and electron transfer, and construct bioelectrocatalytic systems for real applications. He has published nearly 40 papers on the journals such as Chemical Reviews, Nature Communications, Metabolic Engineering, and Biosensors and Bioelectronics, and authored 4 book chapters. He is also holding 5 patents in the area of enzymatic biofuel cells.

Ms. Jehan Haddad

Ms. Jehan Haddad is a Chemical Engineer holds Msc degree in Environment Technology and Management. With 18 years of experience in air quality, Resource Efficient and Cleaner Production (RECP), climate change mitigation, environmental audit, environmental impact assessment and UNIDO developed Transfer of Environmentally Sound Technology (TEST), she is the Manager of Air Studies at Water and Environment Centre at the Royal Scientific Society in addition to her position as senior specialist at the Cleaner Production Unit.

She is the National Coordinator of EU funded SwitchMed (TEST) III project in Jordan (2019-2023) and participated as RECP and Environmental Policy Expert in the EU funded SwitchMed TEST II project (2015-2018). She is a member of the national technical committee set up by the Ministry of Environment to follow-up on the arising issues related to the implementation of the National Green Growth Action Plan, and JISM's air quality standards reviewing, updating, and issuing committee.

Dr. Farrukh Raza Amin

Dr. Farrukh Raza Amin is serving as researcher in Centre for Climate Research and Development (CCRD), COMSATS University Islamabad. He has earned a Ph.D. degree in Chemical Engineering and Technology from Beijing

University of Chemical Technology (BUCT), Beijing, China. His doctoral research revolves around the conversion of lignocellulosic biomass to bioenergy using anaerobic digestion (AD) technology. During his stay at BUCT, he has written collaborative research project entitled "National Key Research Plan for Strategic International Cooperation in Scientific and Technological Innovation *"Development and Demonstration of New Energy and Renewable Energy Systems"*. He has published several research articles (SCI) in international journals. He has also won the award of Excellent International Research Student Award by Chinese government, for his contribution in the field of research.

Dr. Lugano Wilson

Dr. Lugano Wilson is the Director of Engineering Development (DED) and Head, Energy Technologies Division with Tanzania Industrial Research and Development Organization (TIRDO). While with TIRDO in a period of over 25 years, he has supervised and implemented industrial projects; energy research projects; and consultancy projects in the field of energy management (industrial, commercial centres, and households), renewable energy technologies and environmental management. These projects were implemented at both national and international level.

He holds a degree of Licentiate of Philosophy in Engineering (Furnace Technology) from the Royal Institute of Technology (KTH) in Stockholm Sweden and a Doctorate of Philosophy (Ph.D.) in Energy Engineering from the University of Dar es Salaam Tanzania where he was also awarded a Masters degree (Mechanical Engineering). He has attended various professional trainings. As a result of his professional work, Dr. Lugano has produced over 60 papers and technical writings

Dr. Emrah SIK

Dr. Emrah SIK is a chemist and also has PhD degree. He has been working as a researcher since 2014 at TUBITAK MRC. He has experience especially in electrochemistry, electrochemical water and wastewater treatment and recycle/reuse, precious metal recovery from industrial wastewater, membrane process, metal cutting fluids and research methods and research management. Recently, he focus on cleaner production and resource efficiency applications in industries. Moreover, he is skilful planning new research topics, reporting, preparing scientific articles, knowledge and current scientific developments on issues. In addition, he has 12 publications are cited more than 200 times and several conference papers.



Moderator
Dr. Ozgur DOGAN
ECPI, TUBITAK, Turkey



Ambassador Shahid Kamal
Head CCCS

3:00-3:05 - Welcome Remarks
Ambassador Shahid Kamal, Head CCCS

Technical Session
03:05-03:40 (7 min for each speaker)

Prof. Zhi Guang, Tianjin Institute of Industrial Biotechnology (TIB), China

Ms. Jehan Haddad, Manager, Air Studies, Royal Scientific Society (RSS), Jordan

Dr. Farrukh Raza Amin, Researcher, Centre for Climate Research & Development (CCRD), COMSATS University, Islamabad, Pakistan

Dr. Lugano Wilson, Head of Energy Technologies, Tanzania Industrial Research and Development Organization (TIRDO), Tanzania

Dr. Emrah SIK, Researcher, TUBITAK, Turkey

03:40-04:10 - Panel Discussion

04:10-04:20 - Q&A

4:20-4:25 - Closing Remarks - Dr. Ozgur DOGAN, ECPI, TUBITAK, Turkey