



TMMOB CHAMBER OF CHEMICAL ENGINEERS (KMO) ISTANBUL BRANCH

INTERNATIONAL SYMPOSIUM ON BIOREFINERIES AND PROCESS SAFETY

17 NOVEMBER 2023, İSTANBUL

The symposium will be held in two sessions under two special and important topics. The title of the first session is **biorefineries**, which is an increasingly important topic. Recent developments in the energy transition and sustainability field have opened up discussion of the future role of petroleum. Electric vehicles offer an environmentally friendly and low-emission transportation alternative that improves air quality and reduces dependence on fossil fuels. As a result, it is predicted that the use of petroleum, especially in the transportation sector, will decrease in the future. Similarly, as electricity generation shifts to renewable energy sources, the use of petroleum in this sector may be restricted. This changing energy paradigm requires a new perspective on oil production and use.

This is the point where biorefineries play a transformative role. Biorefineries contribute to the establishment of a cleaner energy ecosystem by producing biofuels from renewable sources such as agricultural wastes, algae and organic matter. Biofuels produced through biorefinery processes can integrate seamlessly into existing fuel infrastructure, reducing the carbon footprint of transportation and advancing the growth of the electric vehicle market. In addition, biorefineries process biomass and biocompounds to obtain a variety of bio-based products and offer alternative raw materials that meet the needs of the chemical industry.

The topic of the second session is **process safety**, which has not lost its popularity since the beginning of the industrial revolution. One of the primary reasons why process safety is crucial is to protect the well-being of workers, nearby communities, and the environment. Chemical processes can involve high pressures, temperatures, and reactive substances, which, if not carefully managed, can lead to catastrophic incidents with severe consequences. By implementing and adhering to robust process safety protocols, chemical engineers can minimize the risk of accidents, ensuring the safety of personnel and preventing harm to the environment. Another key aspect of process safety is the protection of assets and infrastructure. Industrial accidents can result in significant damage to equipment, facilities, and production capabilities. By proactively identifying potential hazards, assessing risks, and implementing appropriate safeguards, chemical engineers can safeguard valuable assets, preventing costly disruptions and downtime.

Since 1953 the **European Federation of Chemical Engineering (EFCE)** has promoted scientific collaboration and supported the work of engineers and scientists in 30 European countries.

Today, the EFCE represents more than 100,000 chemical engineers in Europe. With its Working Parties and Sections it covers all areas of Chemical Engineering.

For more information: <https://efce.info>

The Chamber of Chemical Engineers (KMO) is a professional organization established by the Union of Chambers of Turkish Engineers And Architects (TMMOB) Law, in the year 1954. It operates as a public institution. According to the relevant legal regulations, its objectives include the development of organization for Chemical Engineers, Biomedical Engineers, Polymer Engineers, Bioprocess Engineers, and Chemical-Process Engineers; the defense of the interests of the country within the integrity of professional and national issues, and the protection of the professional rights of these disciplines; the enhancement of their professional knowledge; and the establishment of relationships between the Chamber and workplaces. KMO, headquartered in Ankara, has 9 branches. The Chamber has nearly 25,000 registered member.



Location: Mustafa Kemal Amfisi, ITU Maçka Campus, Istanbul (QR Code for Google Maps)



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Time Period	Speaker	Topic
09:00-10:00		<i>Registration*</i>
10:00-10:10	Gürkan Ergin <i>Chair of KMO-İstanbul Branch</i>	Opening Speech
10:15-11:15 <i>(with Q&A)</i>	Prof. Dr. Flavio Manenti <i>Chair of CAPE Working Party</i>	Biorefineries Session Chair: Prof. Dr. Metin Türkay <i>Koç University</i>
11:15-12:15 <i>(with Q&A)</i>	Assist. Prof. Berat Haznedaroğlu <i>Boğaziçi Üniversitesi</i>	
12:15-14:00		<i>Lunch Break</i>
14:00-15:00 <i>(with Q&A)</i>	Dr. Tijs Koerts <i>Operations Director of the European Process Safety Center</i>	Process Safety Session Chair: Serkan Küçük <i>Arme Consulting, General Manager</i>
15:00-15:30	<i>Coffee Break</i>	
15:30-16:30 <i>(with Q&A)</i>	Ziya Gürün <i>Consultant for Refining, Petrochemical, Chemical, and Energy Companies, Lecturer in Kocaeli University</i>	
16:30-16:40	Hasan Küçük <i>Chair of KMO Board</i>	Closing Speech

* Participation is free of charge.

The event will be held in English.



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