

International Conference on Mathematics in (bio/food)Chemical Kinetics and Engineering (MaCKiE) 2025

September 3-5, 2025 // Altın Yunus Hotel & Spa // Çeşme (İzmir), Türkiye



SUBMIT YOUR ABSTRACT

ABSTRACT DEADLINE: Friday 6th June, 2025 11:59 (UTC+03.00)

MaCKiE 2025 is the eleventh event of the series, with previous meetings in Ghent, Houston, Heidelberg, Chennai, Budapest, Shanghai, and Berlin. Since its first event in 2002, the MaCKiE conference has been organized once every two years. This year, the meeting aims to include scientists and engineers interested in food applications. FOOD MaCKiE topics added this year will cover the themes summarized in the right column.

MaCKiE 2025 offers an unforgettable adventure to ancient city of Troy on September 6, 2025.

MEET KEYNOTE SPEAKERS



Anet Režek JAMBRAK
University of Zagreb, Croatia



Maria E. SOSA MORALES
Universidad de Guanajuato, México



Jorge SARAIVA
University of Aveiro, Portugal



J. Antonio TORRES
Technologico de Monterrey, México



Ferruh ERDOĞDU
Ankara University, Türkiye

Learn More

For specific questions on the FOOD MaCKiE program, please email

cyta.foodmackie@gmail.com

Please see the website for up-to-date information for MaCKiE 2025.

www.mackieturkey.com

Organizers

Abhishek DUTTA

Co-organizers

Kevin Van GEEM

Necip Berker ÜNER

Food Mackie Organizers

Esra Çapanoğlu Güven

Semanur Yıldız

Scientific Committee

Bariş Tuncel

Bart Nicolai

Filiz İçier

Francesco Marra

Gülsün Akdemir Evrendilek

İlkay Şensoy

Jasim Ahmed

Mecit Öztöp

Sevcen Ünlütürk

Sibel Uzuner

Themes of Food MaCKiE 2025

- Mathematical Modeling for Food Processing Design and Optimization
- Emerging Processing for Development of a Sustainable and Environmentally Friendly Food System
- Food Security by Retaining Food Wholesomeness and Using New Nutrient Sources
- Food Healthfulness and Delivering Consumer-Group Targeted Nutrition



We look forward to seeing you next September!

Get excited for:

- A one-day Workshop on “Probabilistic Food Product, Processing and Packaging Engineering Design”
- Keynote presentations by worldwide leaders
- Professional and student Oral and Poster presentations
- Round Table “Digitalization and Modeling of the Food Processing Plant”
- Open Access Fee Waiver Awards for best Oral and Poster presentations



MACKIE 2025 Conference

3-5 SEPTEMBER, 2025

FOOD THEMES

RESOLVING COMPLEXITY

Food Security by Retaining Food Wholesomeness and Using New
Nutrient Sources
Food Healthfulness and Delivering Consumer-Group Targeted
Nutrition

APPLICATION TO NEW PROCESSES

Mathematical Modeling for Food Processing Design and Optimization
Emerging Processing for Development of a Sustainable and
Environmentally Friendly Food System

ATTRACTIONS:

- WORKSHOP ON 3RD SEPTEMBER
- OPEN ACCESS FEE WAIVER AWARDS

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ALTIN YUNUS HOTEL & SPA
ÇEŞME (İZMİR)



MACKIE 2025 Konferansı

3-5 EYLÜL, 2025

GIDA TEMALARI

KARMAŞIKLIĞIN ÇÖZÜLMESİ

Yeni Besin Kaynaklarının Kullanımı ve Gıdanın Bütünlüğünü Koruyarak
Gıda Güvencesinin Sağlanması
Tüketici Gruplarına Yönelik Beslenmenin Sağlanması

YENİ SÜREÇLERE UYGULAMA

Gıda İşleme Tasarımı ve Optimizasyonu İçin Matematiksel Modelleme
Sürdürülebilir ve Çevre Dostu Gıda Üretim Sistemlerinin Geliştirilmesi
İçin Yenilikçi Gıda İşleme Yöntemleri

ÖNE ÇIKANLAR:

- 3 EYLÜL'DE WORKSHOP
- AÇIK ERİŞİM DERGİDE YAYIN FIRSATLARI

Gıda programına yönelik
sorularınız için

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MEET KEYNOTE & PLENARY SPEAKERS



Duygu DİKİCİOĞLU
University College of London, UK



Marc-Olivier COPPENS
University College of London, UK



Rebecca FUSHIMI
Idaho National Laboratory, USA



Carlos O. CASTILLO ARAIZA
Universidad Autónoma Metropolitana-
Iztapalapa, México



Erdal AYDIN
Koç University, Türkiye



Xinggui ZHOU
East China University of Science
and Technology, China



Evgeniy REDEKOP
University of Oslo, Norway



Shantanu ROY
Indian Institute of Technology
Delhi-Abu Dhabi, UAE

Learn More

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Please see the website for up-to-date information for MaCKiE 2025.

General Chair

Guy B. MARIN
Grigoriy S. YABLONSKY

Organizers

Abhishek DUTTA

Co-organizers

Kevin Van GEEM
Necip Berker ÜNER

Scientific Committee

Aniruddha Majumder
Dmitry Murzin
Kai Sundmacher
Nuno Reis
Rodney Fox
Vahide Nuran Mutlu
Vivek Ranade
Wenli Du
Yi Ouyang

Themes of MaCKiE 2025

- Applied Kinetic Modeling and Microkinetic Models
- Ab initio-based Kinetics or Stochastic Processes
- Multi-scale Modeling in Kinetics and Transport
- AI based (bio/food)Chemical Engineering Models and Applications
- (Bio/Food)Chemical Reaction Mechanisms and Process Design
- Modeling Sustainable Processes: Electrification and Decarbonization



We look forward to seeing you next September!
Get excited for:

- A one-day hands-on tutorial in reactor modeling using OpenFOAM
- Oral and Poster presentations
- Plenary and Keynote presentations given by worldwide leaders
- Evening "Quiz" sessions
- Strong student participation with Student Paper and Poster Awards



MACKIE 2025 Conference

3-5 SEPTEMBER, 2025

THEMES

EXPANDING THE FUNDAMENTALS

Applied Kinetic Modeling and Microkinetic Models
Ab initio based Kinetics or Stochastic Processes

RESOLVING COMPLEXITY

Multi-scale Modeling in Kinetics and Transport
AI-based (bio/food)chemical Engineering Models and
Applications

APPLICATION TO NEW PROCESSES

(Bio/Food)Chemical Reaction Mechanisms and Process
Design

Modeling Sustainable Processes: Electrification and
Decarbonization

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MACKIE 2025 Konferansı

3-5 EYLÜL, 2025

TEMALAR

TEMELLERİN GENİŞLETİLMESİ

Uygulamalı Kinetik Modelleme ve Mikrokinetik Modeller
Ab initio Temelli Kinetik veya Stokastik Süreçler

KARMAŞIKLIĞIN ÇÖZÜLMESİ

Kinetik ve Taşıma Süreçlerinde Çok Ölçekli Modelleme
Yapay Zeka Tabanlı (Biyo/Gıda) Kimya Mühendisliği Modelleri
ve Uygulamaları

YENİ SÜREÇLERE UYGULAMA

(Biyo/Gıda) Kimyasal Reaksiyon Mekanizmaları ve Süreç
Tasarımı

Sürdürülebilir Süreçlerin Modellemesi: Elektrifikasyon ve
Karbonsuzlaştırma

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