

**ODAK<sub>TR</sub>: Concentrating Solar Thermal (CST) as a key enabling technology for Turkey's Clean Energy Transition (in English)**

*Theme: Energy, European Research Area and SSH Aspects*

**Derek K. Baker**

**METU & ODTÜ-GÜNAM**

**Moderator: Semih Akçomak**

**Live Seminar Time and Date:** 12:00-13:00 (Turkish time / GMT + 3)

Friday, June 03, 2022

**Register at:** <https://forms.gle/xg5XQgK26Cq6zjTA6>

**Moderation:** Assoc. Prof Dr. Semih Akçomak

**Registration for live seminar closes at 20:00, Thursday, 02 June 2022:** To receive the link to the live seminar you must register by 20:00, Thursday 02 June 2022.

**Abstract:** This seminar targets both non-technical and technical researchers. ODAK<sub>TR</sub> is a bottom-up national initiative that aims to leverage METU and ODTÜ-GÜNAM's participation in a cluster of 7 accepted, on-going, or completed Concentrated Solar Thermal (CST) EU projects to accelerate Turkey's Clean Energy Transition (CET). A conceptual overview of CST technologies and applications is presented. The strategic role CST plays in Europe's CET and Green Deal that is motivating Europe's large investments in CST Research and Innovation (R&I), and the potential for CST to contribute to Turkey's CET and Green Deal Action Plan are discussed. All of METU and ODTÜ-GÜNAM's EU CST projects are strongly aligned with EU-SOLARIS, which is one of 41 European Research Infrastructure Consortium (ERICs) Landmarks on the European Strategy Forum on Research Infrastructures (ESFRI) 2021 Roadmap. The potential to use ERIC's as cost-efficient pathways to Turkish scientific excellence and to a secure, sustainable, and prosperous Turkey are defined. The current state of and future prospects for Turkey's affiliation with EU-SOLARIS and other strategic ERICs are discussed.



**Speaker:** Dr. Derek K. Baker is a Professor in the Department of Mechanical Engineering at Middle East Technical University (METU) and a researcher in the CST research division of Turkey's Centre of Excellence on Solar Energy ODTÜ-GÜNAM. He completed his PhD in Mechanical Engineering at The University of Texas-Austin in 2000, was an Assistant Professor at Humboldt State University, California, from 2000 to 2002, and joined METU in 2003. He is coordinating the multi-national European Union (EU) Horizon 2020 (H2020) SolarTwins project, and is the institutional principal investigator or a researcher on the accepted, on-going, or completed EU projects CST4ALL, Horizon-STE, GeoSmart, SFERA-III, INSHIP, and EU-SOLARIS. He has supported the evaluation of a diverse set of EU Horizon Europe, H2020, and Innovation Fund calls including for CST, decarbonization of energy-intensive industries, ocean energy technologies, energy storage technologies, smart grids, and cross-cutting solutions.

**About SolarTwins-TEKPOL Seminars:** The path to a prosperous, sustainable, and secure Turkey includes a Clean Energy Transition (CET) and Green Economy Transition (GET). Many of the largest challenges to be solved to realize these transitions lie at the intersection of technology and policy. Some of these challenges are unique to a specific technology, while others are cross-cutting challenges that underpin the competitiveness of Turkey's Research and Innovation (R&I) ecosystem. This SolarTwins-TEKPOL Pizza Seminar series aims to provide a scientific forum to increase awareness of these challenges and contribute to the co-creation of solutions to overcome these challenges. This series is designed as a part of SolarTwins Project Joint Research Line 9: Social Aspects of Sustainable Energy Transitions

**About SolarTwins:** SolarTwins is a European Union Horizon 2020 (H2020) project coordinated by ODTÜ-GÜNAM through METU with CIEMAT-PSA (Spain) and DLR (Germany) as partners. The objectives of the SolarTwins project are to

1. Step-up the scientific excellence of the Concentrating Solar Thermal (CST) Research Division ODAK of ODTÜ-GÜNAM through capacity building activities in collaboration with the globally leading CST institutions CIEMAT-PSA and DLR.
2. Strengthen METU, ODTÜ-GÜNAM, and Turkey's horizontal Research and Innovation (R&I) Capacities.

**About METU TEKPOL:** Science and Technology Policy Studies (STPS) program was founded in 1997 at the Middle East Technical University with the explicit objective to supply science and technology policy related human capital for the government bodies, agencies and other related organizations and to conduct research in science, technology and innovation policy issues. It has organic relations with the Research Center for Science and Technology Policies. Education and research elements integrate under METU-TEKPOL. TEKPOL is the only academic unit in Turkey that concurrently coordinates education and research activities. It operates M.Sc. and Ph.D. programs in science technology policy studies at the Graduate School of Social Sciences. TEKPOL also conducts interdisciplinary research on science and technology policy issues with the aim of addressing societal challenges.

#### PROGRAMME:

Date	Speaker, Institution	Seminar Title
15 April 2022	Arda MEVLÜTOĞLU, Kubilay YILDIRIM and Semih AKÇOMAK	TOGG and Beyond (in Turkish) – Panel
22 April 2022	Onur Çağdaş ARTANTAŞ	Promotion of Green Electricity: Legal and Political Perspectives (in Turkish)
29 April 2022	Serdar TÜRKELİ	Technological change and non-intervention, novel indicators and non-measurement (in Turkish)
13 May 2022	Barbel EPP	Cost Trends for Commercial and Industrial Solar Heat
20 May 2022	Pınar DERİN GÜRE	Gender and social sciences involvement in technology development projects in energy (in Turkish)
27 May 2022	Şuhnaz YILMAZ ÖZBAĞCI	Sustainable Energy and Climate Policies in the Light of Changing Global and Regional Dynamics (in Turkish)
3 June 2022	Derek BAKER	ODAK <sub>TR</sub> : Concentrating Solar Thermal (CST) as a key enabling technology for Turkey's Clean Energy Transition.
10 June 2022	Christian OLTRA	Introducing SSH aspects of Energy Transitions
17 June 2022	S. Banu AKKAŞ, Zela ÖZDEMİR	METU in New European Research Area (in Turkish)
24 June 2022	Seven AĞIR	Sustainability and AgroPV Potential in Turkish Agriculture From Social Sciences Perspective

#### Accepted, On-Going and Completed EU CST Projects Aligned with ODAK<sub>TR</sub>



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SolarTwins has received funding from the European Union Horizon 2020 research and innovation program under grant agreement No 856619.