



This project is co-financed by the European Union  
and the Republic of Türkiye



**ICTürkiye2025**  
10 April, İstanbul

PRESENTER FULL NAME: Dr. Aşan BACAK

ORGANIZATION: University of Ankara

WORKSHOP NAME: WS 3

E-MAIL: [abacak@tarla-fel.org](mailto:abacak@tarla-fel.org)

## Description of the Organisation

AnkaTheraHub, Ankara University  
Cancer Research Institute.

Prof. Dr. Hakan AKBULUT

Atmospheric and Environmental  
Chemistry Laboratory.

Dr. Aşan BACAK

School of Chemistry, Bristol  
University.

Prof. Dr. Dudley SHALLCROSS

## Your Teams' Expertise



Dr. Akbulut is actively engaged in both clinical and pre-clinical research in Ankara and participates in various national and international research projects, both basic and clinical. His primary focus is on gene therapy for cancer, and he is poised to initiate a phase I clinical trial for a gene therapy product developed by his team. Additionally, he is working on the development of next-generation antibodies and antibody fragments to enhance cancer diagnostics and therapeutics.



Dr. Bacak have extensive experience in atmospheric chemistry and physics his research based on laboratory experimental studies and field observations. Dr. Bacak has extensive knowledge of several different instrument types but in particular have worked with many kinds of mass spectrometers used in atmospheric research. My recent projects include the construction of spectrometry laboratories (mass spectrometry, photoelectron spectrometry), design and development of accelerator-based radiation interface to the spectrometry laboratories, the design and construction of a state-of-the-art

## Your Research Fields

**Prof. Dr. Hakan Akbulut** earned his MD degree from Hacettepe University and specialized in medical oncology at Ankara University in Ankara, Turkey. He is currently a professor of Internal Medicine and Medical Oncology in the Department of Medical Oncology at Ankara University. Dr. Akbulut is actively engaged in both clinical and pre-clinical research in Ankara and participates in various national and international research projects, both basic and clinical. His primary focus is on gene therapy for cancer, and he is poised to initiate a phase I clinical trial for a gene therapy product developed by his team. Additionally, he is working on the development of next-generation antibodies and antibody fragments to enhance cancer diagnostics and therapeutics. Dr. Akbulut is a member of the COVID-19 Turkey Platform, where he contributes to vaccine development against SARS-CoV-2 and has played a role in producing the first adenoviral vector-based vaccine for the virus. He has published over 100 peer-reviewed articles and has been a UICC Fellow since 2008. Furthermore, he serves as the chief of the Medical Oncology Department at Ankara University's School of Medicine and Cancer Research Institute.



### Prof. Dr. Dudley Edmund Shallcross

OBE is a professor of chemistry at the University of Bristol, best known for his research in atmospheric chemistry and innovations in the remote teaching of science in schools. He was awarded an OBE in the King's Birthday Honours of 2024.

Shallcross was awarded the Nyholm Prize for Education in 2017 by the [Royal Society of Chemistry](#), and the [George C. Pimentel Award in Chemical Education](#) by the [American Chemical Society](#) in 2021. In 2024, Shallcross was awarded the OBE in the King's Birthday honours, for his outstanding contribution to science education in the UK and overseas.

### Dr. Aşan Bacak

- Atmospheric Chemistry and Physics
- Reaction kinetics
- Quadruple mass spectrometry & spectroscopy
- Isotope ratio mass spectrometry & spectroscopy
- Aerosol mass spectrometry & spectroscopy
- Ultra-Violet photoelectron spectrometry & spectroscopy
- Time of flight mass spectrometry & spectroscopy

Using the techniques to gather novel information on:

- Gas phase free radical reactions
- Long range transport of aerosols and their effects on pollution
- Aerosol and gas phase reaction kinetics
- Electrochemical sensors and network apps for molecular detec. and atmo. pollution
- Molecular dispersion, transportation, and infiltration into the buildings
- Molecular tracing of explosives
- Phenomenon of lightning and its effects on the Chemistry of atmosphere

## Your On-going Projects

**Ankara University Cancer Research Institute**

**AnkaTheraHub Project**

*Center of Excellence for Innovative Product Development Against Cancer and Epidemic Viral Diseases*

AnkaTheraHub project was approved by the Ministry of Industry and Technology of Turkey within the scope of the Competitive Sectors program of the European Union under IPA II: the EU's Instrument for Pre-accession Assistance.

2232 International Fellowship for Outstanding Researchers

Name of the Project Coordinator: Dr. Asan Bacak

Project Number: 118C211

Project Title: Quantification of natural oxidation capacity of the atmosphere and exploring free radical chemistry

## Project Idea

**Call Topic:**

**Deadline Dates:**

☐ **Objectives:**

☐ **Expected Results:**



## Project Idea

**Call Topic:**

**Deadline Dates:**

☐ **Objectives:**

☐ **Expected Results:**

**Consortium - profile of known partners (if any)**

No	Partner Name	Type	Country	Role in the Project
01				
02				
03				
04				
05				



**Consortium – required partners**

No	Expertise	Type	Country	Role in the project
01				
02				
03				
04				



PRESENTER CONTACT  
DETAILS:  
COUNTRY: