





# Participant Profile

for the  
**Turkish-German Strategy Workshop 2006**  
**TÜBİTAK Marmara Research Center,**  
**Istanbul- Gebze Turkey**  
**13 – 15 December 2006**



International Bureau (IB)  
of the Federal Ministry of  
Education and Research  
(BMBF)

*B. Hock, H.-D. Lüdemann, M. Spiteller (Eds.): Refractory Organic Substances (ROS) in the Environment. Wiley-VCH, 1-38 (2002).*



# Participant Profile

for the  
**Turkish-German Strategy Workshop 2006**  
**TÜBİTAK Marmara Research Center,**  
**Istanbul- Gebze Turkey**  
**13 – 15 December 2006**



International Bureau (IB)  
of the Federal Ministry of  
Education and Research  
(BMBF)

## 2. Past and present research collaborations

Are you familiar  
with the European  
Framework  
Programme?

<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> with Framework Programme 5 <input checked="" type="checkbox"/> with Framework Programme 6 <input type="checkbox"/> with Framework Programme 7	

EU-projects you are  
involved in:

Past projects  Present projects	<b>Programme title / contract number / title / acronym / your function (coordinator / partner / contractor)</b> <b>Wasseraufbereitung für die Lebensmittelindustrie</b> EU-INTAS
---------------------------------------	--

Other international  
collaborations:

Turkey -Tübitak-BMBF-project, Israel - GIF-projects, Israel and Jordan - DFG project
--

Name(s) and  
contact details of  
potential partners:

If you would like to suggest the participation of particular partners from the partner country based on existing contacts or collaboration experience, you are welcome to indicate their names and contact details below:
---

## 3. Presentation at the Workshop

I will give a presentation at the workshop (approx. 10 min.) to present my institution, my expertise, and my collaboration interests. The contents of my presentations is summarised below (max. 1 page).

The division of the water chemistry at the Engler-Bunte-Institut of the Universität Karlsruhe (TH) has a staff of more than 30 persons (including the Research Institute of the German Gas and Water Works Association (DVGW)). Researchers and Ph. D. students (chemists, biologists, geoecologists, and engineers) work on projects investigating the transport and reactions of natural organic matter (NOM) as well as organic and inorganic pollutants in the aquatic environment, and on their removal by various treatment methods. NOM of different origin has been characterized using various combinations of sample fractionation and identification of structural groups. In the field of the analysis of individual organic pollutants, the focus recently has been set on pharmaceutical compounds, diagnostica (X-ray contrast agents) as well as on selected compounds found in personal care products (UV filters in sunscreens etc.) The analytical methods have been applied to samples from model-scale biological treatment systems as well as from groundwater polluted by leakage of waste water. For the determination of selected (polar) disinfection by-products (DBPs), sensitive and selective LC-MS/MS methods have been developed. Volatile compounds such as various pesticides have been analyzed using SPME-GC-MS. In the field of water technology, the expertise lies in research on the optimization and application of advanced treatment methods such as membrane filtration, advanced oxidation processes (AOP), and heterogeneous photocatalysis. Ultra- and nanofiltration have been used for the removal of NOM from different raw waters. The combination of powdered activated carbon (PAC) and ultrafiltration is currently being investigated with respect to its suitability for the removal of selected pharmaceuticals from water. Photocatalytical water treatment using TiO<sub>2</sub> as a catalyst has been used to degrade different pharmaceuticals and X-ray contrast agents in



# Participant Profile

for the  
**Turkish-German Strategy Workshop 2006**  
**TÜBİTAK Marmara Research Center,**  
**Istanbul- Gebze Turkey**  
**13 – 15 December 2006**



International Bureau (IB)  
of the Federal Ministry of  
Education and Research  
(BMBF)

water.

Collaboration interests are mainly in the research fields of water treatment and quality of natural water.

**I agree with the publication of my data on the Workshop website!**

**PLEASE FILL IN THIS FORM UNTIL 22 SEPT. 2006 AND RETURN IT TO:**

**Internationales Buero des BMBF**  
[s.krummacher@fz-juelich.de](mailto:s.krummacher@fz-juelich.de);  
[Christian.schache@dlr.de](mailto:Christian.schache@dlr.de)

**TÜBİTAK-Marmara Research Center**  
[Sunullah.Ozbek@mam.gov.tr](mailto:Sunullah.Ozbek@mam.gov.tr);  
[Artac.Turker@mam.gov.tr](mailto:Artac.Turker@mam.gov.tr)