



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)

1. Contact details and personal information

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¹ **Role/function** e.g. working group leader, managing director, postdoc, PhD etc.

² **Organisation type** e.g. university, research institution, small and medium enterprise (SME), industry etc.

Working Group:	<input checked="" type="checkbox"/> 1 Material Technologies <input checked="" type="checkbox"/> 2 Biotechnology, Genomics and Food <input type="checkbox"/> 3 Energy <input type="checkbox"/> 4 Information and Communication Technologies <input type="checkbox"/> 5 Environmental Protection, Climate Change and Sustainable Development
Areas of activity:	<input checked="" type="checkbox"/> research <input checked="" type="checkbox"/> technology development <input type="checkbox"/> demonstration <input checked="" type="checkbox"/> training <input type="checkbox"/> dissemination <input type="checkbox"/> other:
Keywords characterising your area of research:	Please choose the appropriate key words (max. 5) from the following list: http://www.cordis.lu/fp6/keywords Organic chemistry, Pharmaceutical chemistry, Homogeneous catalysis, Heterogeneous catalysis, Anticancer therapy
Expertise, technologies and infrastructures available in your institution:	Research activities / expertise: Development of new methods for chiral synthesis of biological active compounds, drugs, drug intermediates, Synthesis of bioactive compounds using biotechnological methods, enzyme catalyzed organic synthesis, Biodegradable polymers, Controlled release in cancer therapy. Methods: Organic synthesis methodology, biotechnological methodology, drug design, synthesis, controlled release Key technologies: Chemical technology and biotechnology Infrastructures: HPLC, GC-MS, LC-MS, • FLORESCENCE SPECTROMETER, • UV, • NMR, • MICROWAVE REACTOR, • FERMANTOR AND INCUBATOR • RAYONET, CV • Genetic Analyzer • High Throughput DNA Synthesizer • Protein Sequencing System • Confocal Microscope • Fast Performance Liquid Chromatography • UV-Vis Spectrophotometer • ELISA Reader • Agitator Bead Mill/Dyno-Mill Type Multilab • Vacuum Concentrator / Freeze Drier • High Pressure Cell Disrupter • Microisothermal Titration Calorimeter • Time Resolved Fluorescence Spectrometer • GeneAmp® PCR System 9700 • Pulsed Field Electrophoresis



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- Vertical Electrophoresis
- Horizontal Electrophoresis

Key publications:

Patents:

- A.S. Demir, C. Tanyeli, T. Burke, A. Chavan, T. Jang, Y. Pommier, Water- soluble derivatives of Camptothecin and homocamptothecin. USA Patent US, 6, 291,676, Sep. 18, 2001
- Danzhou Yang, Ayhan S. Demir, Ashok Chavan and Thomas G. Burke "Oligonucleotide Delivery Systems for Camptothecins
- Ayhan S. Demir, Martina Pohl, Michael Müller Nucleotide sequence encoding benzaldehyde lyase and method for the stereoselective synthesis of 2-hydroxy ketones. EU : 1297159, 2000
WO: 02002753, 2002.

Publications:

- Ayhan S. Demir and Özge Sesenoglu. " Enantioselective Synthesis of 2-(2-Arylcyclopropyl)glycines; Conformationally Restricted Homophenylalanine Analogs." *Helv. Chim. Acta* 2004, 87, 106.
- Ayhan S. Demir, Peruze Ayhan, A. Cigdem Igdir and A. Nese Duygu "Enzyme catalyzed hydroxymethylation of aromatic aldehydes with formaldehyde. Synthesis of hydroxyacetophenones and (S)-benzoins" *Tetrahedron* 2004, 60,6509-6512
- Demir, Ayhan S.; Reis, Oemer; Igdir, A. Cigdem; Esiringue, Ilker; Eymur, Serkan. "Generation of Acyl Anion Equivalents from Acylphosphonates via Phosphonate-Phosphate Rearrangement: A Highly Practical Method for Cross-Benzoin Reaction." *Journal of Organic Chemistry* (2005), 70(25), 10584-10587.
- Aktas, Yesim; Yemisci, Muge; Andrieux, Karine; Guersoy, R. Neslihan; Alonso, Maria Jose; Fernandez-Megia, Eduardo; Novoa-Carballal, Ramon; Quinoa, Emilio; Riguera, Ricardo; Sargon, Mustafa F.; Celik, H. Hamdi; Demir, Ayhan S.; Hincal, A. Atilla; Dalkara, Turgay; Capan, Yilmaz; Couvreur, Patrick. "Development and Brain Delivery of Chitosan-PEG Nanoparticles Functionalized with the Monoclonal Antibody OX26." *Bioconjugate Chemistry* (2005), 16(6), 1503-1511.
- Canan Unaleroglu, A. Ebru Aydin Ayhan S. Demir " Synthesis of novel norephedrine-based chiral ligands with multiple stereogenic centers and their application in enantioselective addition of diethylzinc to aldehyde and chalcone" *Tetrahedron:Asymmetry*, 2006 , 17, 742-749.



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2. Past and present research collaborations

Are you familiar
with the European
Framework
Programme?

Yes

No

- with Framework Programme 5
 with Framework Programme 6
 with Framework Programme 7

EU-projects you are
involved in:
Past projects

Programme title / contract number / title / acronym / your function
(coordinator / partner / contractor)

Present projects

Other international
collaborations:

TUBITAK-JUELICH
TUBITAK-CNRS
COST D-20

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).

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:

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