



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

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

<b>Working Group:</b>	<input checked="" type="checkbox"/> 1 Material Technologies <input 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
<b>Areas of activity:</b>	<input checked="" type="checkbox"/> research <input type="checkbox"/> technology development <input type="checkbox"/> demonstration <input type="checkbox"/> training <input type="checkbox"/> dissemination <input type="checkbox"/> other:
<b>Keywords characterising your area of research:</b>	<b>Please choose the appropriate key words (max. 5) from the following list:</b> <a href="http://www.cordis.lu/fp6/keywords">http://www.cordis.lu/fp6/keywords</a>  HIGH PERFORMANCE MAGNETIC MATERIALS
<b>Expertise, technologies and infrastructures available in your institution:</b>	<b>Research activities / expertise:</b> Synthesis and production of magnetocaloric and hard magnetic materials. Investigation of magnetocaloric and magnetic materials.  <b>Methods:</b> X-Ray Diffraction, Electron Diffraction, Magnetic measurements, Heat Capacity measurements, DTA-DSC Measurements, Atomik ve Manyetik kuvvet Mikroskopisi.  <b>Key technologies</b> MAGNETIC COOLING; SPINTRONIC; PERMENANT MAGNETS  <b>Infrastructures:</b> PPMS, SEM-TEM, X-RAY POWDER DIFFRACTOMETER ; ATOMIC FORCE MICROSCOPE ; MAGNETIC FORCE MICROSCOPE; ARCMELTING FURNACE; INDUCTION FURNACE: MELT SPINNING SYSTEM; HIGH TEPERATURE FURNACES; LIQUID HELYUM SYSTEM  <b>Key publications:</b>  1. I. Dincer, <b>Y. Elerman</b> , A. Elmali, H. Ehrenberg, H. Fuess, G. André "Neutron diffraction study of the $La_{1-x}Pr_xMn_2Si_2$ ( $x = 0.4, 0.7$ and $1$ ) compounds and the general description of the magnetic behaviour of Mn in $RMn_2Ge_2$ and $RMn_2Si_2$ " Phys. Rev. B, submitted. 2. I. Dincer, <b>Y. Elerman</b> , A. Elmali, H. Ehrenberg, H. Fuess, C. Baetz "Magneto-structural correlations in $Pr_{0.15}Gd_{0.85}Mn_2Ge_2$ " Solid State Commun. (2006) in press.



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3. E. Duman, M. Acet, I. Dincer, A. Elmali, **Y. Elerman**  
“Competing magnetic interactions in rare earth manganese silicides and germanides”  
J. Magn. Magn. Mater. (2006), in press.
4. A. Yucel, **Y. Elerman**, S. Aksoy  
“Change in the phase structure and magnetic characteristics of  $Gd_5Si_2Ge_2$  when alloyed with Mn”  
J. Alloys and Comp. 420 (2006) 182
5. I. Dincer, A. Elmali, **Y. Elerman**, H. Ehrenberg, H. Fuess, G. André  
“Neutron diffraction study on  $PrMn_{2-x}Fe_xGe_2$  and general magnetic phase diagram for  $RMn_{2-x}Fe_xGe_2$  (R: La-Sm)”  
J. Alloys Comp. 416 (2006) 22
6. O. Cakir, I. Dincer, A. Elmali, **Y. Elerman**, H. Ehrenberg, H. Fuess  
“Magnetic phase transitions in the  $Gd_{1-x}Tm_xMn_6Sn_6$  compounds”  
J. Alloys Comp. 416 (2006) 31
7. **Y. Elerman**, A. Yücel, A. Elmali, R. Çakir  
“Competing magnetic interactions in  $Dy_{1-x}Sm_xFe_{10}Si_2$  compounds”,  
Solid State Communications 135 (2005) 745
8. I. Dincer, **Y. Elerman**, A. Elmali, H. Ehrenberg, H. Fuess, A. Daoud-Aladine  
“Investigation of  $LaMn_{2-x}Fe_xSi_2$  ( $0 \leq x \leq 1.2$ ) by magnetic measurements and neutron diffraction”  
J. Alloys Comp. 403 (2005) 53
9. A. Elmali, **Y. Elerman**, C. T. Zeyrek  
“Synthesis and crystal structures of a new  $\mu$ -Bis(tetradentate)Schiff Base Ligand and its Mononuclear Iron (3) Complex Iron(3) Induced Imidazolidine Ring Hydrolysis of Binucleating Schiff Base Ligand”  
Z. f. Naturforschung 60b (2005) 520
10. A. Elmali, A. Yücel, E. Duman, **Y. Elerman**  
“Magnetic characteristics of  $ErCo_{10}Mo_{2-x}V_x$  family of compounds”  
J. Alloys Comp. 402 (2005) 1
11. **Y. Elerman**, I. Dincer, A. Elmali, H. Ehrenberg, H. Fuess, E. Duman, M. Acet  
“Magnetic Properties of  $Pr_{1-x}Gd_xMn_2Ge_2$ ”  
J. Phys.: Condens. Matter 16 (2004) 405
12. I. Dincer, A. Elmali, **Y. Elerman**, H. Ehrenberg, H. Fuess, O. Isnard  
“Neutron diffraction study on the magnetic structures of  $PrMn_{2-x}Co_xGe_2$  ( $x=0.4, 0.5$  and  $0.8$ ) with a new refinement procedure”  
J. Phys.: Condens. Matter 16 (2004) 208
13. A. Elmali, **I. Dincer**, Y. Elerman, H. Ehrenberg, H. Fuess  
“Magnetic phase transitions in  $Pr_{1-x}Dy_xMn_2Ge_2$  and  $Ce_{1-x}Dy_xMn_2Ge_2$ ”  
J. Phys.: Condens. Matter 15 (2003) 653
14. H. Ehrenberg, I. Dincer, A. Elmali, **Y. Elerman**, H. Fuess  
“Magnetic and crystal structure correlations in  $PrMn_{1.5}Co_{0.5}Ge_2$  : a synchrotron diffraction study”  
Solid State Commun. 124 (2002) 429



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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:

Humboldt-Partnership Project, Julich-TUBITAK PROJECTS, SPP 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:  
Prof.Dr.Mehmet Acet ,Univ.Duisburg-Essen, macet@tphysik.uni-duisburg.de

## 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:**

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