

**Kamil KİRAZ, M.Sc.**

**R&D Engineer**  
**Chemist, Material Scientist**

  
Koç University Rumelifeneri Yolu  
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Sarıyer Istanbul Turkey  
  
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**EDUCATION**

*Ph. D. Candidate*  
**Energy Materials and Devices**  
Eindhoven University of  
Technology, The Netherlands  
2009 – Recent

*Master of Science*  
**Material Science and  
Engineering**  
Koç University, Turkey  
2006 – 2009

*Bachelor of Science*  
**Chemistry**  
Koç University, Turkey  
2001 – 2006

**WORK EXPERIENCE****KU – Akkim Boron Research Center – İstanbul, TR***Team Leader*

R&D and Mid-Scale Production of Boron Carbide as advanced shield material  
2017 – Recent

**Pavezyum Advanced Chemicals – İstanbul, TR***Project Leader*

Product Development of Aluminum Borides as solid rocket propellant  
Product Development and Prototype generation of Airbag igniters & inflators  
2014 – Recent

**Eindhoven University of Technology – Eindhoven, NL***Researcher, Ph.D. Candidate*

Electrochemical hydrogenation of Mg based thin film energy storage electrodes  
2009 – 2014

**Koç University – İstanbul, TR***Research Assistant*

Synthesis and Analysis of inorganic compounds  
2001 – 2009 (Part Time)

**INTERNSHIPS****Darmstadt Technical University – Darmstadt, D***Research Assistant*

Synthesis and EPR analysis of Piezoelectric PbTiO<sub>3</sub> crystals  
2007 (7 months)

**Leipzig University – Leipzig, D***Summer internee*

Synthesis and NMR analysis of organometallic P<sub>7</sub> units  
2004 and 2005 (3 months each)

**Degussa AG (Evonik-Degussa)– Hanau, D***Summer internee*

Summer internee at Q&C laboratories  
2003 (3 months)

**Koç University– Hanau, D***Resident Assistant, Student Mentee*

Part time jobs  
2001 – 2009

**MOTIVATION**

I am well educated and internationally experienced on the synthesis and analysis of mainly inorganic chemicals. Recently, working as team and project leader in several projects aiming to develop boron based pyrotechnic compounds used as the airbag igniters, rockets propellants, vehicle shields and energy storing devices.




I am looking forward to spend my efforts on non-regular, challenging tasks.

Born in 1983 in Balıkesir and happily married.

## TRAININGS and CERTIFICATES

Search and Rescue Team	KUAK	November 2017
First Aid Specialist	Turkish Ministry of Health	August 2015
Scanning Electron Microscope	FEI Company & KUYTAM	2009 & 2014
X-Ray Diffraction Spectrometer	KUYTAM	August 2014
FT – Infrared Spectroscopy	KUYTAM	July 2014
Radiation Safety	TU/e	August 2009
Electron Paramagnetic Resonance	TUD	July 2007
First aid training	American Hospital	2003 & 2009
Mentorship and Leadership	Pusula	2002 & 2003

## SKILLS and PERSONAL INFORMATION

Laboratory		Synthesis and characterization of wide range of inorganic and organo-metallic materials. Glove Box and Vacuum Line system experience for air & moisture sensitive materials
Equipment		SEM, XRD, XRF, DLS, DSC, RAMAN, IR, UV, EPR, NMR, TGA/DTA, Calorimeter Potentiostats / Galvanostats, FRA and battery analysis tools CCD Image Acquisition and Processing Tools PVD and Magnetron Sputtering devices for thin film production
Computer literacy		Labview, C, Fortran, Matlab, Autolab/Nova, Maccor, Data handling via Origin, SPSS Modeling and animation knowledge in Cinema 4D, SketchUp Multimedia software integration for Visual Arts, Photoshop CS6 Mac OS / Windows, Office software's
Language		Turkish (native), English (fluent), German (intermediate) and Dutch (novice)
Other Skills		Driving licenses: B – Turkey 2003 and B – The Netherlands 2011, A2 – Turkey 2015
Marital Status		Married
Military Service		Fulfilled (2013)
Date and Place of Birth		11.05.1983 – Balıkesir Turkey

## EXTRACURRICULAR SOCIAL ACTIVITIES

Oy ve Ötesi	Contributor	İstanbul – TR	2013 – Recent
ASCD Middle East Conference	Head of the Org.	Swiss Hotel – TR	November 2008
World Economic Forum	Student Leader	Swiss Hotel – TR	October 2008
SIVO 08 Folkdance Festival	Team Leader	Odoorn NL – NL	August 2008
Max-Planck Institute Workshop	Organizer	Koç University – TR	May 2008
NATO Summit – YATA	Delegate	Bucharest – RO	April 2008
A <sup>2</sup> International Education Fairs	Translator	İstanbul – TR	2006 – 2008
IAESTE – Internship Exchange	Founder Pres.	Koç University – TR	2004 – 2005
Folklore Club	President	Koç University – TR	2003
KU – Student Council	Delegate	Koç University – TR	2002
Turkish Aeronautical Assoc.	Parachute Jumper	THK Eskişehir – TR	2002

## PUBLICATIONS

- ◆ S. Seidel, M. Somer, K. Kiraz, U. C. Rodewald, R. Pöttgen,  $\text{Li}_4\text{BaBN}_2$  Structure and Vibrational Spectra, *Zeitschrift für Anorganische und Allgemeine Chemie*, 2017/4/1
- ◆ K. Kiraz, T. G. Manivasagam, P. H. L. Notten, Transmission Analysis of Optically Active Binary Magnesium Hydrides during Electrochemical (de)Hydrogenation, (in progress)
- ◆ T. G. Manivasagam, **K. Kiraz**, P. H. L. Notten, Electrochemical and optical properties of Magnesium-alloy hydrides reviewed, *Crystals*, Vol. 2, No. 4, (2012) 1410-1433
- ◆ E. Erdem, **K. Kiraz**, M. Somer, R. A. Eichel, Size effect in  $\text{Fe}^{3+}$ -modified  $\text{PbTiO}_3$  nanocrystals formation and orientation of  $(\text{Fe}'_{\text{Ti}} - \text{V}^{\bullet\bullet}_{\text{O}})^{\bullet}$  defect-dipoles. *Journal of European Ceramic Society*, Vol. 30, No. 2, (2010) 289-293
- ◆ E. Erdem, M. D. Drahos, S. K. S. Parashar, **K. Kiraz**, M. Somer, A. Rüdiger, R. A. Eichel, Defect Structure in Aliovalently-Doped and Isovalently Substituted Ferroelectric  $\text{PbTiO}_3$  Nanopowders, *Functional Materials Letters*, Vol. 11, No. 11, (2009) 1-6
- ◆ **K. Kiraz**, *Synthesis and Characterization of  $\text{Fe}^{3+}$  doped  $\text{PbTiO}_3$  Nanopowders*, MSc. Thesis, Koç University İstanbul, (2009) [Online Link](#)

## REFERENCES

Prof. Dr. Mehmet SOMER <a href="mailto:msomer@ku.edu.tr">msomer@ku.edu.tr</a> 0090-212-338 1352	Koç University	2001 – Recent Academic - Personal
Prof. Dr. Peter Notten <a href="mailto:p.h.l.notten@tue.nl">p.h.l.notten@tue.nl</a> 0031-40-247 3069	Eindhoven Technical University	2009 – 2014 Academic
Dr. Emre Erdem <a href="mailto:emre.erdem@physchem.uni-freiburg.de">emre.erdem@physchem.uni-freiburg.de</a> 0049-761-203 6207	Freiburg University	2004 – Recent Academic – Personal
Dr. Bilgen Bilgin <a href="mailto:bbilgin@ku.edu.tr">bbilgin@ku.edu.tr</a> 0090-212-338 1217	Koç University	2001 – 2009 Personal – Social