## Müjde Yahyaoğlu

Ph.D. Student, Koç University, Istanbul

Education	<b>Koç University</b> , College of Science, Istanbul, Turkey Ph.D. of Materials Science & Engineering <b>Full Merit Scholarship</b> ,	2017 - present	
	<b>Koç University</b> , College of Science, Istanbul, Turkey M.Sc. of Materials Science & Engineering <b>Full Merit Scholarship</b> ,	2014 - 2017	
	<b>Koç University</b> , College of Science, Istanbul, Turkey Bachelor of Science in Chemistry <b>Full Merit Scholarship</b> ,	2008 - 2013	
	Şişli Anatolian High School, Istanbul, Turkey	2004 - 2008	
Publications	<b>M. Yahyaoglu</b> , C. Zor, M. Somer, F. Rohrer, R. Nesper, L. Akselrud, Yu. Prots, P. Höhn (2019). Crystal Structure and Vibrational Spectra of $Ba_2BN_2Br$ and $Ba_2BN_2I$ . Submitted to Zeitschrift für anorganische und allgemeine Chemie in August 2019.		
	Li, M., Islam, S. M. K. N., <b>Yahyaoglu</b> , M., Pan, D., Shi, X., Chen, L., & Wang, X. (2019). Ultrahigh figure-of-merit of $Cu_2Se$ incorporated with carbon coated boron nanoparticles. Info- Mat, 1(1), 108-115. https://doi.org/10.1002/inf2.12006		
	Ezgi Toros, T., Yahyaoglu, M., Aydemir, U., Drathen, C., Akselrud, L., Prots, Y.,Somer, M. (2015). $Ca_3[BN_2]I_3$ : The First Halide-Rich Alkaline Earth Nitridoborate with Isolated $[BN_2]^{3-}$ Units. Zeitschrift für anorganische und allgemeine Chemie, 641(11), 2014-2019. http://dx.doi.org/10.1002/zaac.201500285		
	Kokal, I., Aydemir, U., Prots, Y., Förster, T., Sichelschmidt, J., <b>Yahyaoglu</b> , 2 (2014). Synthesis, crystal structure and magnetic properties of $Li_{0.44}Eu_3[B_3N_6]$ . Journal of Solid State Chemistry, 210(1), 96-101. http://dx.doi.org/10.1016/j.jssc.2013.11.001	<b>M.</b> , Somer, M.	
Poster Presentations	Electronic and Thermal Transport Properties of $Cu_7Te_5$ ICT/ACT2019 - The 38th International Conference on Thermoelectrics, Gyeongju, South Korea	July 2019	
	Tuning the Thermoelectric Properties of $Cu_2Se$ by B-doping International Symposium on Boron, Nevşehir, Turkey	April 2019	
	Ba <sub>2</sub> [BN <sub>2</sub> ]I: Synthesis, Crystal Structure and Vibrational Spectra 19th International Symposium on Boron, Borides & Related Materials, Albert-Ludwigs-Universität Freiburg, Germany	September 2017	

Science & Engineering Day, Koç University

May 2017

Research	Materials Design and Innovation Lab	
Experience	Koç University, College of Science, Istanbul, Turkey	2017 - present
	Advisor: Assoc. Prof. Umut Aydemir, Co-advisor: Prof. Mehmet Somer	
	Synthesis and Characterization of Novel Thermoelectric Materials	
	Inorganic Chemistry Lab	
	Koç University, College of Science, Istanbul, Turkey	2014 - 2017
	Advisor : Prof. Mehmet Somer, collaborating with Evonik Industries AG.	
	Investigation of the Stability of Fumed $SiO_2$ / Metal Oxides (MO = $Al_2O_3$ , 7 Hydrothermal Conditions (BET & DLS analysis for surface area, pore volume and pXRD, SAXS, XRF analysis for chemical alteration)	$iO_2$ ) under Harsh particle size, SEM,
	Max Planck Institute for Chemical Physics of Solid (Visiting Research	rcher)
	Max Planck Institute, Dresden, Germany	Fall 2016
	Advisor : Dr. Peter Hohn Synthesis and Characterization of single phase $Li_3Sr_2MnN_4$ , $LiSr_2MnN_3$ , and $SrBaMnN_3$ for magnetic measurements	
	Max Planck Institute for Chemical Physics of Solid (Internship III)	
	Max Planck Institute, Dresden, Germany	Summer 2014
	Advisor : Dr. Peter Höhn Synthesis and reaction of Sodium metal cyanides and carbonyls (NaCuCN, Na <sub>3</sub> ) liquid ammonia	$(Co(CO)_3)$ etc.) in
	Inorganic Chemistry Lab (Independent Project)	
	Koç University, College of Science, Istanbul, Turkey	Fall 2013
	Advisor : Prof. Mehmet Somer	
	Synthesis and Characterization of newly synthesized $Ba_3[BN_2]I$ (X-Ray Powder ential Thermal Analysis (DTA))	Diffraction, Differ-
	Max Planck Institute for Chemical Physics of Solid (Internship II)	
	Max Planck Institute, Dresden, Germany	Summer 2013
	Advisor : Dr. Peter Höhn	
	Synthesis crystal structure of $(Ba_6N)_2[XN_4](CN_2)_6$ (X: Cr,Hf,Re) and $(Sr_6N)$ Cr,Mo,W) by conventional heating under $N_2$ flowing medium (X-Ray Powder Diff	$_{2}[XN_{4}](CN_{2})_{6}$ (X: fraction)
	Inorganic Chemistry Lab (Independent Project)	
	Koç University, College of Science, Istanbul, Turkey	Fall 2012
	Advisor : Prof. Mehmet Somer	
	Novel Nitridoborates Synthesis, Crystal Structure, and Physical Properties; Synthesis and Character- ization of $Li_x Eu_3[B_3N_6]$ and $Ca_3[BN_2]I_3$ (X-Ray Powder Diffraction, Differential Thermal Analysis (DTA), Energy Dispersive X-Ray Analysis (EDX), Scanning Electron Microscope (SEM), Arc Melt- ing)	

	Unilever San. & Tic. Türk A.Ş., Unilever HPC Factory (Internship I)Kocaeli, TurkeySummer 2011Advisor : R&D Process Development Engineer: Kerem AydınPrepared prescriptions before production processes, Observed production steps of powder & liquid detergents, Make Microbiological and Quality Control Analysis of both powder products and liquid cosmetics with various apparatus (ATP Celsis Advance Luminometer, Mettler Toledo HG63, Hunter Lab color det. Apparatus, High Performance Liquid Chromatography (HPLC))
	Inorganic Chemistry Lab (Project Assistant)Fall 2009 - 2012Koç University, College of Science, Istanbul, TurkeyFall 2009 - 2012Advisor : Prof. Mehmet SomerSynthesis of $Zn(BH_4)_2$ and producing amorphous boron (98% purity) (X-Ray Powder Diffraction, Ball Milling, Glove Box)Hydrogen Storage Materials (Glove Box, Ball Milling, DTA)Block Copolymer Templating, Preparation of Mesoporous ZrO2, (pXRD, DTA)
Additional Experiences	<ul> <li>July 2019 Summer School, Thermoelectric School in Varenna, Italy: Advances in Thermoelectricity: Foundational Issues, Materials, and Nanotechnology</li> <li>July 2018 Summer Research Project, Institut Jean Lamour, Nancy, France: Advances in Thermoelectricity: Measurements on transport properties of Cu2Se</li> <li>Fall 2014 - Spring 2019 Teaching Assistant for CHEM101/102/103: General Chemistry</li> </ul>
Skills	Computer Skills: Microsoft Office Programs, MatLAB, Origin, STOE WinXPOW, X'Pert HighScore Plus Languages: English (Advanced), German (Beginner)