

DUYGU GÜLDİREN



PERSONAL INFORMATION

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E-mail: yardimcid@gmail.com
Place of birth: Istanbul
Date of birth: 01 January 1985

EDUCATION

- 2010- **Ph.D.**
Istanbul Technical University, Material Science and Engineering Department
Thesis: Development and Characterization of Glasses Showing Antibacterial Properties
- 2008-2010 **M.Sc.**
Istanbul Technical University, Material Science and Engineering Department
Thesis: Thermal and Microstructural Characterization of TeO₂-B₂O₃ System
- 2003-2008 **B.Sc.**
Istanbul Technical University, Department of Metallurgical and Materials Engineering
- 1999-2003 **High School**
Kabataş Erkek High School

LANGUAGE SKILLS

English Fluent

PUBLICATIONS

International Journal Papers (SCI)

1. **Guldiren D.**, Aydin S., “Characterization and Antimicrobial Properties of Soda Lime Glass Prepared by Silver/Sodium Ion Exchange” *Materials Science and Engineering C*, 67 (2016) 144-150.
2. **Guldiren D.**, Erdem İ., Aydin S., “Influence of Silver and Potassium Ion Exchange on Physical and Mechanical Properties of Soda Lime Glass” *Journal of Non-Crystalline Solids*, 441 (2016) 1-9.
3. **Yardımcı D.**, Çelikkilek M., Ersundu A. E., Aydın S., “Thermal and microstructural characterization and crystallization kinetic studies in the TeO₂-B₂O₃ system” *Materials Chemistry and Physics*, 137 (2013) 999-1006.

International Conference Papers

1. Erdem İ., **Güldiren D.**, Aydın S., “Surface Modification of Soda-Lime Glass by Ionic Exchange” 24th International Congress on Glass (ICG), Shanghai, China, 2016.
2. **Güldiren D.**, Erdem İ., Aydın S., “Characterization of Glass Powders Prepared by Ag^+/Na^+ Ion Exchange”, 24th International Congress on Glass (ICG), Shanghai, China, 2016.
3. Özçivi A.O., Özkan A., Enginsoy A., Ulaştı E., Dursun Ö.S., Erserin S., **Güldiren D.**, Aydın S., “Preparation and Properties of Silver, Zinc and Copper Doped Borosilicate Glass”, 24th International Congress on Glass (ICG), Shanghai, China, 2016.
4. **Güldiren D.**, Erdem İ., Aydın S., “Characterization Studies on Silver/Potassium Ion-exchanged Soda-lime Glasses” 9th International Ceramic Conference, Afyon, Turkey, 2015.
5. Erdem İ., **Güldiren D.**, Aydın S., “Investigating the Effects of Bath Concentration on Ion Exchange Process” 9th International Ceramic Conference, Afyon, Turkey, 2015.
6. **Güldiren D.**, Aydın S., Ahata B., Akarsubaşı A.T., “Antimicrobial Susceptibility Test Optimization on Silver Doped Glasses” Uluslararası Katılımlı 2. Biyosidal Kongresi, İzmir, Türkiye, 2015.
7. **Güldiren D.**, Erdem İ., Aydın S., “Experimental Studies on Investigating Silver Containing Soda-Lime Glasses Prepared by Ion Exchange Process” 144th TMS Annual Meeting and Exhibition, Orlando, Florida, USA, 2015.
8. Erdem İ., **Güldiren D.**, Aydın S., “Effect Of K^+/Na^+ Ion Exchange On Soda-Lime Glasses” 144th TMS Annual Meeting and Exhibition, Orlando, Florida, USA, 2015.
9. **Güldiren D.**, Erdem İ., Aydın S., “Effects of Bath Concentration and Temperature on Silver Content of Soda-lime Glasses Prepared by Ion Exchange Process”, 12th Conference of the European Society of Glass Science and Technology / ESG, Parma, Italy, 2014.
10. Erdem İ., **Güldiren D.**, Aydın S., “Improvement of Mechanical Properties of Alkali Containing Silicate-Based Glass via Ion Exchange”, 12th Conference of the European Society of Glass Science and Technology / ESG, Parma, Italy, 2014.
11. **Güldiren D.**, Çelikbilek M., Ersundu A.E., Aydın S., “Preparation and Properties of Silver Containing Soda-lime Glasses”, 17th International Metallurgy & Materials Congress / IMMC, Istanbul, Turkey, 2014.
12. Erdem İ., **Güldiren D.**, Çelikbilek M., Ersundu A.E., Aydın S., “Chemically Strengthened Silicate-Based Glass via Ion Exchange”, 17th International Metallurgy & Materials Congress / IMMC, Istanbul, Turkey, 2014.
13. **Yardımcı D.**, Çelikbilek M., Ersundu A. E., Aydın S., “Thermal and structural properties of the $\text{TeO}_2\text{-WO}_3\text{-Li}_2\text{O}$ glasses” Materials Science and Technology Conference and Exhibition / MS&T, Pittsburgh, Pennsylvania, USA, 2012.

14. **Yardımcı D.**, Çelikbilek M., Ersundu A. E., Aydın S., “Investigation of phase separation region in the $\text{TeO}_2\text{-B}_2\text{O}_3$ system” 16th International Metallurgy & Materials Congress / IMMC, Istanbul, Turkey, 2012.
15. Çelikbilek M., **Yardımcı D.**, Ersundu A. E., Aydın S., Solak N., “Thermal behavior and kinetics of glass transition in B_2O_3 containing tungsten-tellurite glasses” Materials Science and Technology Conference and Exhibition / MS&T, Columbus, Ohio, USA, 2011, 55-61.
16. **Yardımcı D.**, Çelikbilek M., Ersundu A. E., Solak N., Aydın S., “Thermal and microstructural characterization of $\text{TeO}_2\text{-B}_2\text{O}_3$ system” 17th International Symposium on Boron, Borides and Related Materials / ISBB, Istanbul, Turkey, 2011.
17. Çelikbilek M., **Yardımcı D.**, Ersundu A. E., Solak N., Aydın S., “Characterization studies on the B_2O_3 containing tungsten-tellurite glasses” 17th International Symposium on Boron, Borides and Related Materials / ISBB, Istanbul, Turkey, 2011.
18. **Yardımcı D.**, Çelikbilek M., Ersundu A.E., Solak N., Aydın S., “Crystallization kinetics of $\text{TeO}_2\text{-B}_2\text{O}_3$ glasses” 3rd International Congress on Ceramics / ICC, Osaka, Japan, 2010.
19. **Yardımcı D.**, Ersundu A. E., Solak N., Aydın S., “Thermal and microstructural characterization of B_2O_3 containing tellurite glasses” 15th International Metallurgy & Materials Congress / IMMC, Istanbul, Turkey, 2010, 2224-2231.
20. **Yardımcı D.**, Çelikbilek M., Ersundu A. E., Solak N., Aydın S., “Characterization studies in the glassy region of the $\text{TeO}_2\text{-B}_2\text{O}_3$ system” Materials Science and Technology Conference and Exhibition /MS&T, Houston, Texas, USA, 2010, 179-184.

ATTENDED CONFERENCES & SEMINARS

1. 9th International Ceramic Conference, Afyon, Turkey, 2015.
2. Advanced School on Glasses and Glass Ceramics, Center for Research Technology and Education in Vitreous Materials, CeRTEV- UFSCar, Sao Carlos, Brazil, 1-9 August 2015.
3. 144th TMS Annual Meeting and Exhibition, Orlando, Florida USA, 2015.
4. 12th ESG Conference and Annual Meeting, Parma, Italy, 2014.
5. 17th International Metallurgy & Materials Congress / IMMC, Istanbul, Turkey, 2014.
6. Materials Science and Technology Conference and Exhibition / MS&T, Pittsburgh, Pennsylvania, USA, 2012.
7. 16th International Metallurgy & Materials Congress / IMMC, Istanbul, Turkey, 2012.
8. 17th International Symposium on Boron, Borides and Related Materials / ISBB, Istanbul, Turkey, 2011.
9. 2nd International Ceramic, Glass, Porcelain, Enamel, Glaze and Pigment Congress / SERES, Eskişehir, Turkey, 2011.
10. 15th International Metallurgy & Materials Congress / IMMC, Istanbul, Turkey, 2010.

11. Materials Science and Technology Conference and Exhibition / MS&T, Houston, Texas, USA, 2010.
12. 1st International Ceramic, Glass, Porcelain, Enamel, Glaze and Pigment Congress / SERES, Eskişehir, Turkey, 2009.
13. 14th International Metallurgy & Materials Congress / IMMC, Istanbul, Turkey, 2008.

PROJECT INVOLVED

1. The Scientific and Technological Research Council of Turkey (TUBITAK) - Research Project 113M145 “Imparting Antibacterial Property to the Silica-Based Glasses by Ion Exchange Process and Investigation of Antibacterial Activity and Surface Properties of the Glasses”, (2013-2015).
2. ITU Scientific Research Project (BAP) “Imparting Antibacterial Property to the Soda-Lime Glasses by Ion Exchange Process”, (2013-2015).
3. The Scientific and Technological Research Council of Turkey (TUBITAK) - Research Project 111M236 “Thermal, Structural and Spectroscopic Investigation and Development of Alkaline Oxide Doped Tungsten-Tellurite Glass Systems for Thermochromic Applications”, (2011-2013).
4. ITU Scientific Research Project (BAP) “Development of sodium-tellurite glasses for thermochromic applications and thermal, structural and spectroscopic investigation of the system” (2011-2013).
5. ITU Scientific Research Project (BAP), “Investigation of Phase Equilibria and Thermodynamic, Microstructural and Kinetic Properties of TeO₂-B₂O₃ System”, (2009).
6. The Scientific and Technological Research Council of Turkey (TUBITAK) - Research Project 108M077 “Phase Studies and Thermodynamic - Optical Characterization of the TeO₂-WO₃-CdO System used in Fiberoptic Amplifying and Laser Applications”, (2008-2011).

PROFESSIONAL ASSOCIATION MEMBERSHIPS

- Chamber of Metallurgical Engineers
- ITU Alumni Association
- Kabataş Alumni Association