

**Sertan YEŞİL, Ph.D.**

**Assistant Professor of Chemical Engineering**

Atılım University

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PERSONAL

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| **Date of Birth** | 1980 |
| **Place of Birth** | İzmir/Türkiye |

EDUCATION

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| --- | --- |
| 2003-2010 | Middle East Technical University, Chemical Engineering, PhD  Thesis: Processing and Characterization Carbon Nanotube Based Conductive Polymer Composites (2010)  Advisor: Prof. Dr. Göknur BAYRAM |
| 1998-2003 | Middle East Technical University, Chemical Engineering, BS |

ACADEMIC POSITIONS

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| --- | --- |
| **January/2023-** | Assistant Professor, Department of Chemical Engineering and Applied Chemistry, Atilim University, Türkiye |
| **September/2010-March 2013** | Research Assistant Dr., Department of Chemical Engineering, Kocaeli University, Türkiye |
| **February/2009-August 2009** | Researcher, University of California Davis, Department of Mechanical & Aeronautical Engineering, Davis, CA, U.S.A. |
| **January/2004-September 2010** | Research Assistant, Department of Chemical Engineering, Middle East Technical University, Türkiye |

HONORS&AWARDS

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| --- | --- |
| **1** | Kemal Kurdaş Academic Success Award, ODTÜ İstanbul Mezunlar Derneği, May 2002, Ankara, Türkiye |
| **2** | Prof. Dr. Hasan Orbey PhD Award, Department of Chemical Engineering, Middle East Technical University, September 2008, Ankara, Türkiye |
| **3** | 2009-2010 Academic Year Thesis of the Year Award, ODTÜ Prof. Dr. Mustafa N. Parlar Eğitim ve Araştırma Vakfı, December 2010, Ankara, Türkiye |
| **4** | Kocaeli University Faculty of Engineering Academic Success Award, 2010, Kocaeli, Türkiye |
| **5** | Third International Polymeric Composites Symposium and Workshops, Poster Competition Third Place, 2012, İzmir Türkiye |
| **6** | TÜBİTAK PhD Scholar, September 2006-September 2009, Ankara, Türkiye |
| **7** | TÜBİTAK Overseas Graduate Scholarship Program, February 2009-August 2009 |

RESEARCH INTERESTS

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| --- | --- |
| **1** | Polymers, polymer composites, nanocomposites |
| **2** | Semiconductors, flame retardancy, characterization of electrical, mechanical, thermal and morphological properties |
| **3** | Nuclear power plant emergencies and radiation protection in nuclear facilities |

PROFESSIONAL SERVICE

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| --- | --- |
| **April/2019-January/2023** | Nuclear Regulatory Expert, Nuclear Regulatory Authority, Ankara, Türkiye |
| **March/2014-April/2019** | Atomic Energy Expert, Turkish Atomic Energy Authority, Ankara, Türkiye |
| **March/2013-March/2014** | Process Engineer, Roketsan A.Ş., Ankara, Türkiye |
| **2019** | International CBRN Congress Organization Committee Member, Ankara, Türkiye |
| **2017-2023** | International Atomic Energy Agency Emergency Preparedness and Response Standards Committee (EPReSC) Member |
| **2018-2023** | International Atomic Energy Agency Emergency Preparedness and Response Information Management System (EPRIMS) Country Coordinator |
|  | Reviewer in journals:   * Polymer Engineering and Science * Applied Surface Science * Advances in Polymer Technology * Polymer Testing * Journal of Composite Materials * Separation Science and Technology * Journal of Cleaner Production * Polymer-Plastics Technology and Engineering * Polymer Composites * Progress in Nuclear Energy |

PUBLICATIONS

|  |  |
| --- | --- |
| **1** | O. Koysuren, **S. Yesil**, G. Bayram, “Effect of Composite Preparation Techniques on Electrical and Mechanical Properties and Morphology of Nylon 6 Based Conductive Polymer Composites”, Journal of Applied Polymer Science, 102, pg. 2520, 2006. |
| **2** | O. Koysuren, **S. Yesil**, G. Bayram, “Effect of Surface Treatment on Electrical Conductivity of Carbon Black Filled Conductive Polymer Composites”, Journal of Applied Polymer Science, 104, pg. 3427, 2007. |
| **3** | O. Koysuren, **S. Yesil**, G. Bayram, M. Secmen, O.A. Civi, “Effect of Carbon Black Surface Treatment on Microwave Properties of PET/Carbon Black Composites”, Journal of Applied Polymer Science, 109, pg. 152, 2008. |
| **4** | O. Koysuren, **S. Yesil**, G. Bayram, “Effect of Solid State Grinding on Properties of PP/PET Blends and Their Composites with Carbon Nanotubes”, Journal of Applied Polymer Science, 118, pg. 3041, 2010. |
| **5** | **S. Yesil**, C. Winkelmann, G. Bayram, V. La Saponara, “Surfactant-Modified Multiscale Composites for Improved Tensile Fatigue and Impact Damage Sensing”, Materials Science and Engineering: A, 527, pg. 7340, 2010. |
| **6** | **S. Yesil**, O. Koysuren, G. Bayram, “Effect of Microfiber Reinforcement on the Morphology, Electrical, and Mechanical Properties of the Polyethylene/Poly(ethylene terephthalate)/Carbon Nanotube Composites”, Polymer Engineering and Science, 50, pg. 2093, 2010. |
| **7** | M. Kilinc, G.O. Cakal, **S. Yesil**, G. Bayram, İ. Eroglu, S. Ozkar, “Scale-up Synthesis of Zinc Borate from the Reaction of Zinc Oxide and Boric Acid in Aqueous Medium”, Journal of Crystal Growth, 312, pg. 3361, 2010. |
| **8** | **S. Yesil**, G. Bayram, “Effect of Carbon Nanotube Purification on the Electrical and Mechanical Properties of Poly(ethylene terephthalate) Composites with Carbon Nanotubes in Low Concentration”, Journal of Applied Polymer Science, 119, pg. 3360, 2011. |

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| **9** | **S. Yesil**, G. Bayram, "Poly(ethylene terephthalate)/Carbon Nanotube Composites with Chemically Treated Carbon Nanotubes", Polymer Engineering and Science, 51, pg. 1286, 2011. |
| **10** | L. Arronche, V. La Saponara, **S. Yesil**, G. Bayram, “Impact Damage Sensing of Multiscale Composites Through Epoxy Matrix Containing Carbon Nanotubes”, Journal of Applied Polymer Science, 128, pg. 2797, 2013. |
| **11** | **S. Yesil**, G. Bayram, “Effect of Carbon Nanotube Surface Treatment on the Morphology, Electrical, and Mechanical Properties of the Microfiber-Reinforced Polyethylene/Poly(ethylene terephthalate)/Carbon Nanotube Composites”, Journal of Applied Polymer Science, 127, pg. 982, 2013. |
| **12** | N.G. Karsli, **S. Yesil**, A. Aytac, “Effect of Short Fiber Reinforcement on the Properties of Recycled Poly(ethylene terephthalate)/Poly(ethylene napthalate) Blends”, Materials and Design, 46, pg. 867, 2013. |
| **13** | **S. Yesil**, "Effect of Carbon Nanotube Reinforcement on the Properties of the Recycled Poly(ethylene terephthalate)/Poly(ethylene naphthalate) (r-PET/PEN) Blends Containing Functional Elastomers", Materials and Design, 52, pg. 693, 2013. |
| **14** | N.G. Karsli, **S. Yesil**, A. Aytac, “Effect of hybrid carbon nanotube/short glass fiber reinforcement on the properties of polypropylene composites”, Composites Part B, 63, pg. 154, 2014. |
| **15** | S. Can, N.G. Karsli, **S. Yesil**, A. Aytac, “Improving the Properties of Recycled PET/PEN Blends by Using Different Chain Extenders”, Journal of Polymer Engineering, 36, pg. 615, 2016. |
| **16** | F. Yemisci, **S. Yesil**, A. Aytac, “Improvement of the Flame Retardancy of Plastized Poly(lactic acid) by Means of Phosphorus Based Flame Retardant Fillers”, Fire and Materials, 41, pg. 964, 2017. |
| **17** | **S. Yesil**, G. Gökeri, “On-Site Emergency Planning and Response Approach for Nuclear Power Plants”, Turkish Journal of Nuclear Sciences, 30, pg. 32, 2018. |
| **18** | **S. Yesil**, “Evacuation Planning for Nuclear Power Plant Emergencies and Analysis Approaches Followed in Estimating the Evacuation Time”, Turkish Journal of Nuclear Sciences, 31, pg. 80, 2019. |
| **19** | B. Tuna, **S. Yeşil**, G. Özkoç, “Poli(Etilen-Co-Vinil Asetat)-Karbon Nanotüp Nanokompozitlerinin Hazırlanması Ve Özelliklerinin İncelenmesi”, PAGEV Plastik Araştırma, Geliştirme ve İnceleme Dergisi, 118, pg. 82, 2012. |
| **20** | N.G. Karslı, M. Özocak, B.C. Topal, A. Aytaç, **S. Yeşil**, “Farklı Termoplastik Elastomerler (TPE) Kullanılarak Geri Kazanılmış Poli(etilen tereftalat)/Poli(etilen naftalat) (PET/PEN) Karışımlarının Uyumluluklarının Arttırılması”, PAGEV Plastik Araştırma, Geliştirme ve İnceleme Dergisi, 122, pg.152, 2012. |
| **21** | **S. Yeşil**, “Termoplastik Polimerlerin Alev Dayanımının Katkı Maddeleri Yardımıyla Geliştirilmesi”, PAGEV Plastik Araştırma, Geliştirme ve İnceleme Dergisi, 136, pg. 256, 2015. |
| **22** | S. Can, **S. Yeşil**, A. Aytac, “Farklı Zincir Uzatıcıların Geri Kazanılmış PET/PEN Karışımlarının Özelliklerine Etkileri”, PAGEV Plastik Araştırma, Geliştirme ve İnceleme Dergisi, 137, pg. 228, 2016. |

PROJECTS

|  |  |
| --- | --- |
| **1** | Göknur Bayram, **Sertan Yeşil (Researcher)**, Özcan Köysüren, Dolgu Maddesi Eklenmesiyle İletken Polimer Kompozitlerinin Hazırlanması, TÜBİTAK MAG 104M010, 2004-2006 |
| **2** | Göknur Bayram, **Sertan Yeşil (Researcher),** İletken Polimer Kompozitleri: Üretimi ve Karakterizasyonu, ODTÜ BAP-08-11-DPT2002K120510, 2003-2007 |
| **3** | Göknur Bayram, İnci Eroğlu, Saim Özkar, Gaye Yücel Çakal, Mert Kılınç, **Sertan Yeşil (Researcher),** Çinko Borat Üretim Teknolojisinin Geliştirilmesi ve Alev Geciktirici Olarak Kullanım Alanlarının Araştırılması, BOREN (Ulusal Bor Araştırma Enstitüsü) BOREN-2005-07-G10-10, 2005-2007 |
| **4** | **Sertan Yeşil (PI),** Mehveş Özocak, Büşra Can Topal, Farklı Termoplastik Elastomerler (TPE) Kullanılarak Geri Kazanılmış Poli(etilen tereftalat)/Poli(etilen naftalat) (PET/PEN) Karışımlarının Uyumluluklarının Arttırılması, KOÜ BAP 2012-37, 2012 |
| **5** | Hatice Demirtaş, Melek Saçar, **Sertan Yeşil (Advisor),** Yanma Geciktirici Katkı Maddeleri Araştırma Projesi, PR-40.19, AKSA Akrilik Sanayi ARGE Merkezi Projesi, 2012-2013 |
| **6** | Ayşe Aytaç, **Sertan Yeşil (Researcher),** Simge Can, Nevin Gamze Karslı Yılmaz, Geri Kazanılmış PET/PEN Karışımlarının Özelliklerinin Farklı Zincir Uzatıcılar Kullanımı ile İyileştirilmesi, TÜBİTAK 112M254, 2012-2013 |
| **7** | Ayşe Aytaç, **Sertan Yeşil (Researcher),** Fatma Yemişçi, Plastikleştirilmiş Poli(Laktik Asit)’in alev dayanımının fosfor bazlı katkı maddeleri ile geliştirilmesi, TÜBİTAK 213M396, 2014-2016 |

CONFERENCE PRESENTATIONS

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| **1** | O. Koysuren, **S. Yesil**, G. Bayram, “Preparation and Characterization of Nylon 6 Based Conductive Composites”, Annual Technical Conference (ANTEC), Boston, U.S.A., 2005 |
| **2** | **S. Yesil**, O. Koysuren, G. Bayram, “Conductive Polymer Composites with  Surface Modified Carbon Black”, 22nd Annual Meeting of Polymer Processing Society (PPS 22), Yamagata, Japan, 2006 |
| **3** | M. Kilinc, **S. Yesil**, G. Bayram, “Effect of Elastomer Type on Mechanical and Morphological Properties of PEN/PET Blend Based Composites”, 22nd Annual Meeting of Polymer Processing Society (PPS 22), Yamagata, Japan, 2006 |
| **4** | O. Koysuren, **S. Yesil**, G. Bayram, “Effect of Solid State Grinding Technique on Microstructured Blends of Incompatible Polymers”, Somer Symposium Series I, Ankara, 2007 |
| **5** | **S. Yesil**, O. Koysuren, G. Bayram, “In-Situ Microfiber Reinforcement of Conductive Polymer Composites”, Somer Symposium Series I, Ankara, 2007 |
| **6** | M. Kilinc, **S. Yesil**, G. Cakal, G. Bayram, S. Ozkar, I. Eroglu “Production and Characterization of Hydrated Zinc Borate”, Somer Symposium Series I, Ankara, 2007 |
| **7** | **S. Yesil**, O. Koysuren, G. Bayram, “Processing and Characterization of Electrically Conductive In-sıtu Microfıber Polymer Composites”, 24th Annual Meeting of Polymer Processing Society (PPS 24), Salerno, Italy, 2008 |
| **8** | O. Koysuren, **S. Yesil**, G. Bayram, M. Seçmen, O.A. Çivi, “Effect of Surface Treatment on Electrical and Microwave Properties of Carbon Black Filled PET Based Composites”, 24th Annual Meeting of Polymer Processing Society (PPS 24), Salerno, Italy, 2008 |
| **9** | **S. Yesil**, G. Bayram, “Surface Treatment of Carbon Nanotubes and Their Composites with Poly(ethylene terephthalate)”, 6th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries (EMCC-6), Antalya, 2010 |

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| **10** | **S. Yesil**, G. Bayram, “Preparation and Characterization of Poly (ethylene terephthalate)/Carbon Nanotube Composites with Surface Modified Carbon Nanotubes”, Annual Technical Conference (ANTEC), Orlando, U.S.A., 2010 |
| **11** | **S. Yesil**, G Bayram, “Microfiber Reinforced Polymer Composites Containing Carbon Nanotubes: Processing, Modification and Characterization”, 7th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries (EMCC-7), Corfu, Greece, 2012, **(Invited speech was performed by Prof. Dr. Göknur BAYRAM).** |
| **12** | N.G. Karslı, V. Çabuk, **S. Yeşil**, A. Aytaç, “Kısa Elyaf Takviyeli Geri Kazanılmış Poli(etilen tereftalat)/Poli(etilen naftalat) (Gk-PET/PEN) Polimer Karışımlarının Özelliklerinin İncelenmesi”, III. Uluslararası Polimerik Kompozitler Sempozyumu ve Sergisi, İzmir, 2012 |
| **13** | S. Can, N.G. Karslı, **S. Yeşil**, A. Aytaç, "Farklı Zincir Uzatıcıların Geri Kazanılmış PET/PEN Karışımlarının Özelliklerine Etkisinin İncelenmesi", 1. Uluslararası Plastik ve Kauçuk Teknolojileri Sempozyum ve Ürün Sergisi, Ankara, 2013 |
| **14** | N.G. Karsli, **S. Yesil**, A. Aytac, “Effect of Surface Modified Carbon Nanotube Reinforcement on the Properties of Polypropylene Composites”, 4th The International Advances In Applied Physics and Materials Science Congress and Exhibition (APMAS 2014), Fethiye, 2014 |
| **15** | S. Can, N.G. Karsli, **S. Yesil**, A. Aytaç, “Studying the Effects of Different Chain Extenders on Recycled PET/PEN Blends”, 4th The International Advances In Applied Physics and Materials Science Congress and Exhibition (APMAS 2014), Fethiye, 2014 |
| **16** | F. Yemişci, **S. Yeşil**, A. Aytaç, “Poli(Laktik Asit)’in Alev Dayanımına Fosfat Bazlı Katkı Maddelerinin Etkisi”, IV.Uluslararası Polimerik Kompozitler Sempozyumu, Sergi ve Proje Pazarı, İzmir, 2015 |
| **17** | F. Yemişci, **S. Yeşil**, A. Aytaç, “Improvement of the Flame Retardancy of Plastized Poly(lactic acid) by Means of Phosphorus Based Flame Retardant Fillers”, International Conference on Advances in Composite Materials and Structures, İstanbul, 2015 |
| **18** | G. Gökeri, **S. Yeşil**, “Use of the Real Time Decision Support System JRODOS in Turkey for Emergencies Which Might Take Place in Nuclear Reactors”, International CBRN Congress, Ankara, 2017 |
| **19** | **S. Yeşil**, G. Gökeri, “On-Site Emergency Planning Approach for Nuclear Power Plants”, International CBRN Congress, Ankara, 2017 |
| **20** | G. Gökeri, **S. Yeşil**, “Use of the Decision Support System JRODOS In Preparation of the Scenario of the Full-Scale Igdır Exercise”, International CBRN Congress, Ankara, 2019 |
| **21** | **S. Yeşil**, “Protection Strategy, Environmental Radiological Monitorıng and Use of Operational Intervention Levels During Emergencies in Nuclear Power Plants” 8th International Symposium on “IN SItuNUclearMEtrology as a tool for radioecology – INSINUME 2019, Aydın, 2019 **(Invited speech)** |

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| **22** | O. Koysuren, **S. Yesil**, G. Bayram, “Karbon Bazlı Dolgu Maddesi İçeren Poli(Etilen Terftalat) Kompozitlerinin Mekanik ve Elektriksel Özellikleri”, I. Ulusal Polimer Bilim ve Teknoloji Kongresi ve Sergisi, Ankara, 2006 |
| **23** | **S. Yesil**, M. Kilinc, G. Bayram, “Polietilen Terftalat/Polietilen Naftalat Bazlı Nanokompozitlerin Üretimi ve Karakterizasyonu”, I. Ulusal Polimer Bilim ve Teknoloji Kongresi ve Sergisi, Ankara, 2006 |
| **24** | S. Yesil, O. Koysuren, G. Bayram, “Karbon Bazlı Dolgu Maddeleri Katkılı Polipropilen Kompozitlerinin Mekanik ve Elektriksel Özellikleri”, Ulusal Kimya Mühendisliği Kongresi (UKMK 7), Eskişehir, 2006 |
| **25** | M. Kilinc, **S. Yesil**, G. Cakal, G. Bayram, I. Eroglu, S. Ozkar “3,5 Mol Kristal Sulu Çinko Boratın Pilot Ölçekte Üretimi ve Karakterizasyonu”, 2. Ulusal Bor Sempozyumu, Ankara, 2008 |
| **26** | **S. Yesil**, O. Koysuren, G. Bayram, “Poli(etilen tereftalat) / Karbon nanotüp Kompozitlerinin Elektriksel ve Mekanik Özelliklerinin Geliştirilmesi”, Ulusal Kimya Mühendisliği Kongresi (UKMK 8), Malatya, 2008 |
| **27** | **S. Yesil**, G. Bayram, “Mikrolifsel Güçlendirme Yöntemi Kullanılarak Hazırlanan Yüksek Yoğunluklu Polietilen/Poli(etilen Terftalat)/Karbon Nanotüp Kompozitlerinin Elektriksel ve Mekanik Özelliklerinin Araştırılması”, III. Ulusal Polimer Bilim ve Teknoloji Kongresi ve Sergisi, İzmit, 2010 |
| **28** | **S. Yesil**, C. Winkelmann, G. Bayram, V. La Saponara, “Epoksi/Karbon Nanotüp İletken Polimer Kompozitlerinin Cam Fiber Destekli Kompozit Panellerin Yapısal Hasarlarının Belirlenmesinde Kullanımı”, Ulusal Kimya Mühendisliği Kongresi (UKMK 9), Ankara, 2010 |
| **29** | N.G. Karslı, M. Özocak, B.C. Topal, A. Aytaç, **S. Yeşil**, “Farklı Termoplastik Elastomerler (TPE) Kullanılarak Geri Kazanılmış Poli(etilen tereftalat)/Poli(etilen naftalat) (PET/PEN) Karışımlarının Uyumluluklarının Arttırılması”, IV. Ulusal Polimer Bilim ve Teknoloji Kongresi ve Sergisi, Çanakkale, 2012 |
| **30** | N.G. Karslı, **S. Yeşil**, A. Aytaç, “Karbon Nanotüp/Kısa Cam Elyaf Takviyeli Polipropilen Matrisli Hibrit Kompozitlerin Özelliklerinin İncelenmesi”, V. Ulusal Polimer Bilim ve Teknoloji Kongresi, Tokat, 2014 |
| **31** | F. Yemişci, N.G. Karslı, **S. Yeşil**, A. Aytaç, “Plastikleştirilmiş Poli(laktik asit)’in Alev Dayanımının Fosfat Bazlı Katkı Maddeleri ile İncelenmesi”, V. Ulusal Polimer Bilim ve Teknoloji Kongresi, Tokat, 2014 |
| **32** | S. Can, N.G. Karslı, **S. Yeşil**, A. Aytaç, “PDI (1,4 fenilen diizosiyanat) ve TPP (trifenil fosfat) Zincir Uzatıcılarının Geri Kazanılmış PET/PEN Karışımlarının Özelliklerine Etkilerinin İncelenmesi”, V. Ulusal Polimer Bilim ve Teknoloji Kongresi, Tokat, 2014 |
| **33** | F. Yemişci, **S. Yeşil**, A. Aytaç, “Plastikleştirilmiş Poli(Laktik Asit)’in Alev Dayanımının, Fosfor Bazlı Katkı Malzemelerinin Sinerjik Etkisi ile İyileştirilmesi”, VI. Ulusal Polimer Bilim ve Teknoloji Kongresi, Ankara, 2016 |

CITATIONS

|  |  |
| --- | --- |
| Sum of times cited without self-citations (ISI Web of Science): | 329 |
| H-index (ISI Web of Science): | 13 |
| Sum of times cited without self-citations (Scopus): | 368 |
| H-index (Scopus): | 13 |
| H-index (Google Scholar): | 15 |

COURSES GIVEN

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| --- | --- |
| **1** | CHE 208 Chemical Process Calculations |
| **2** | CHE 406 Chemical Engineering Design II |
| **3** | CHE402 Chemical Engineering Laboratory II |
| **4** | Mathematical Modelling in Chemical Engineering |
| **5** | Physical Chemistry |
| **6** | Polymeric Nanocomposites |