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PERSONAL

Date of Birth	26/06/1977
Place of Birth	Ankara

EDUCATION

2008	Middle East Technical University, Polymer Science and Technology, Ph.D.
2001	Middle East Technical University, Chemistry, M.S.
1999	Middle East Technical University, Chemistry, B.S.

ACADEMIC POSITIONS

2021-	Prof. Dr., Department of Chemical Engineering and Applied Chemistry, Atılım University, Ankara,TURKEY
2016-2021	Assoc. Prof., Department of Chemical Engineering and Applied Chemistry, Atılım University, Ankara,TURKEY
2010-2016	Asst. Prof., Department of Chemical Engineering and Applied Chemistry, Atılım University, Ankara,TURKEY
2003-2010	Instructor, Department of Chemical Engineering and Applied Chemistry, Atılım University, Ankara,TURKEY
2001-2003	Res. Ass., Department of Chemical Engineering and Applied Chemistry, Atılım University, Ankara,TURKEY

RESEARCH INTERESTS

1.	Polymer composites
2.	Thermoplastics
3.	Polymer processing
4.	Nanocomposites
5.	Conducting polymers

PUBLICATIONS

1.	Salma Ali Madkour, Seha Tirkeş, Umit Tayfun, Development of barite-filled acrylonitrile butadiene styrene composites: Mechanical, thermal, melt-flow and morphological characterizations, Volume 3, 1 March 2021, 100042.
2.	Alinda Oyku Akar, Salma Taher Mohamed, Seha Tirkeş, Umit Tayfun, Hybrid Nanocomposites of Elastomeric Polyurethane Containing Halloysite Nanotubes and POSS Nanoparticles: Tensile, Hardness, Damping and Abrasion Performance, 2020, Clay Minerals 55(4):1-39
3.	Salem, TF; Tirkes, S; Akar, AO; Tayfun, U, Enhancement of mechanical, thermal and water uptake performance of TPU/jute fiber green composites via chemical treatments on fiber surface, *e-Polymers*, vol. 20, no. 1, 2020, 133-143.
4.	Alhallak, LM; Tirkes, S; Tayfun, U, Mechanical, thermal, melt-flow and morphological characterizations of bentonite-filled ABS copolymer, 2020, Vol. 26

	No. 7, 1305-1312.
5.	Alghadi, AM; Tirkes, S; Tayfun, U, Mechanical, thermo-mechanical and morphological characterization of ABS based composites loaded with perlite mineral, Materials Research Express, 2020, Volume 7, Number 1.
6.	Elkawash, H; Tirkes, S; Hacioglu, F; Tayfun, U, Physical and mechanical performance of bentonite and barite loaded low density polyethylene composites: Influence of surface silanization of minerals, 2020, Volume: 54 issue: 28, 4359-4368.
7.	Eselini, N; Tirkes, S; Akar, AO; Tayfun, U, Production and characterization of poly (lactic acid)-based biocomposites filled with basalt fiber and flax fiber hybrid, 2020, Volume: 52 issue: 8, page(s): 701-716.
8.	Shan Abdulalaziz Ahmed, Seha Tirkeş, Umit Tayfun, Reinforcing effect of polyurethane sizing on properties of acrylonitrile-butadiene-styrene composites involving short carbon fiber, 2020, SN Applied Sciences, Volume2, Issue12
9.	Seha Tirkeş, Firat Hacioglu, Ibrahim Alhaj, Umit Tayfun, Investigation of Mechanical, Thermal and Melt Flow Performance of Polycarbonate Hybrid Composites Containing Mica Flakes and Glass Fiber, Advanced Materials Letters, 2020, 11, 4, 1-7.
10.	Oktay Acar, Serhat Varis, Tugba Işık, Seha Tirkeş, Mustafa M. Demir, "Synthesis and characterization of novel high temperature structural adhesives based on nadic end capped MDA-BTDA-ODA copolyimide" Materials Research Express, 5, 10, 2018.
11.	Melek Pamuk Algi, Zahide Oztas, Seha Tirkeş, Atilla Cihaner, Fatih Algi, Atomistic Engineering of Chemiluminogens: Synthesis, Properties and Polymerization of 2,3-Dihydro-Pyrrolo[3,4-d] Pyridazine-1,4-Dione Scaffolds, Journal of Fluorescence, 27(2):509-519, 2016
12.	Esra Oğuztürk, Seha Tirkeş, Ahmet M. Önal, Electrochemical synthesis of new conjugated polymers based on carbazole and furan units, Journal of Electroanalytical Chemistry, Volume 750, 1 August 2015, Pages 1-8
13.	Melek Pamuk Algi, Seha Tirkes, Salih Ertan, Emine Gul Cansu Ergun, Atilla Cihaner, Fatih Algi T., "Design and synthesis of new 4,4′-difluoro-4-bora-3a,4a-diaza-s-indacene based electrochromic polymers ", Electrochimica Acta, Volume 109, 30 October 2013,Pages 766-774
14.	Melek Pamuk Algi, Zahide Öztaş, Seha Tirkes, Atilla Cihaner, Fatih Algi, "A new electrochromic copolymer based on dithienylpyrrole and EDOT ", Organic Electronics, Volume 14, Issue 4, April 2013, Pages 1094-1102
15.	Seha Tirkeş, Jetmire Mersini, Zahide Öztaş, Melek Pamuk Algi, Fatih Algi, Atilla Cihaner, "A new processable and fluorescent polydithienylpyrrole electrochrome with pyrene appendages", Electrochimica Acta, Volume 90, 15 February 2013, Pages 295-301
16.	Melek Pamuk, Seha Tirkeş, Atilla Cihaner, Fatih Algı, "A new low-voltage-driven polymeric electrochromic ", Polymer, Volume 51, Issue 1, 6 January 2010, Pages 62-68.
17.	Seha Tirkeş, M. Ahmet Önal, "Electrochemical copolymerization and characterization of dianilines linked by polyether bridge with aniline", Journal of Applied Electrochemistry, April 2010, Volume 40, Issue 4, pp 865-873.
18.	Seha Tirkeş, M. Ahmet Önal, " Electrosynthesis of polyfuran in acetonitrile–boron trifluoride–ethyl ether mixture and ıts device application, ", Journal of Applied Polymer Science, Volume 103, Issue 2, 15 January 2007, Pages: 871-876
19.	Seha Tirkeş, Atilla Cihaner, Ahmet M Önal, "Electrochemical polymerization and characterization of polyether-substituted aniline derivatives", Polymer International Volume 56, Issue 8, pages 1040–1044, August 2007
20	Seha Tirkeş, Atilla Cihaner, Ahmet M Önal, "Synthesis and polymerization of 2- and 3-substituted thiophene derivatives linked by polyether bridges, Journal of Electroanalytical Chemistry, Volume 573, Issue 1, 15 November 2004, Pages 189-196
21.	Atilla Cihaner, Seha Tirkeş, Ahmet M. Önal, "Electrochemical polymerization of 9-fluorenone", Journal of Electroanalytical Chemistry, Volume 568, 1 July 2004, Pages 151-156.

22.	S Tirkeş, L Toppare, S Alkan, U Bakir, A Önen, Y Yağcı, “Immobilization of glucose oxidase in polypyrrole/polytetrahydrofuran graft copolymers, International Journal of Biological Macromolecules”, Volume 30, Issue 2, 8 April 2002, Pages 81-87

PROJECTS

1.	Synthesis of Conducting Polymers Functionalized by Crown Ethers and Polyethers Groups and Investigation of Their Ion Selectivity Properties, TÜBİTAK 1001, 104T423
2.	Synthesis and Polymerization of Monomers possessing Chemiluminescence Properties and Their Application Areas, TÜBİTAK 1001, 106T355
3.	Design and Synthesis of Novel Compounds Based on Donor-Acceptor Systems and the Applications of Their Conducting Polymers, TÜBİTAK COST Uluslararası, 108T959
4.	Terpiridin Ünitesi İçeren Yeni Bir Polimer Elektrokromun Sentezi ve Özelliklerinini Tanımlanması, TÜBİTAK 1002, 110T488
5.	Metal İyonlarına Duyarlı Fonksiyonel Birim İçeren Yeni Bir Elektroaktif Konjüge Polimer Sentezi ve Karakterizasyonu, ATÜ-BAP-1011-06
6.	Atılım Optoelectronic Materials and Solar Energy Laboratory (ATOMSEL), ATÜ-ALP-1011-0
7.	Luminesans Ve Elektroaktif Yeni Bir Molekülün Sentezi, Karakterizasyonu ve Uygulamaları, ATÜ-BAP-A-1314-03

CONFERENCE PRESENTATIONS

1.	Tirkeş S., Önal. A.M, “Furan’ın asetonitril-borontriflorür-etil eter çözücü karışımında elektrokimyasal yöntemle polimerleştirilmesi”,. "6. Elektrokimya Günleri, Eskişehir", (2005)
2.	S. Tirkeş, A. Cihaner, A. M. Önal, Eter Köprülü Anilinlerin Elektrokimyasal Metodla Polimerleştirilmesi ve Karakterizasyonu. "7. Elektrokimya Günleri", (2006)
3.	Tirkes S., Cihaner A., Pamuk M. ve Algı F., “Ambipolar Donor-Acceptor Materials Based on EDOT and Naphthalene Fused Thienopyrazine and Benzopyrazine Units”, 8 th International Electrochemistry Meeting, Antalya/Turkey, 31, 2009.
4.	Pamuk M., Algı F., Tirkes S. ve Cihaner A., “A Novel Donor-Acceptor Type Ambipolar Material Based On Acenaphtho[1,2-b] quinoxaline” 8 th International Electrochemistry Meeting, Antalya/Turkey, 152, 2009
5.	Pamuk, M., Tirkeş, S., Cihaner, A., Algı, F., “Düşük Voltaj Sürümlü Yeni Bir Polimerik Elektrokrom”, 24. Ulusal Kimya Kongresi, Zonguldak, 2010
6.	Seha Tirkeş; Atilla Cihaner; Jetmire Mersini; Zahide Öztaş; Melek Pamuk Algi; Fatih Algi, İşlenebilir Yeni Bir Elektrokromik ve Floresan Poliditiyenilpirol Türevinin Sentezi ve Karakterizasyonu, IV. Ulusal Polimer Bilim ve Teknoloji Kongresi, 2012, Çanakkale.
7.	Salih Ertan; Emine Gül Cansu Ergün; Seha Tirkeş; Atilla Cihaner; Melek Pamuk Algı; Fatih Algı, BODIPY Çekirdekli Yeni Elektrokromik Polimerler, IV. Ulusal Polimer Bilim ve Teknoloji Kongresi, 2012, Çanakkale.
8.	H. Esra Oğuztürk, Seha Tirkeş, Ahmet M. Önal, Karbazol ve Furan Bazlı Konjuge Monomer Sentezleri ve Elektrokimyasal Polimerleşmeleri. "V. Ulusal Polimer Bilim ve Teknoloji Kongresi, 1-4 Eylül 2014, Tokat", (2014), s.23.
9.	Melek Pamuk Algıa, Zahide Öztaş, Seha Tirkeş, Atilla Cihaner, Fatih Algı, Bazı Reaktif Oksijen Türlerini Tespit Edebilen Kemilüminojenik Belirteç, V. Fiziksel Kimya Kongresi, 2015, Konya
10.	Melek Pamuk Algı, Zahide Öztaş, Seha Tirkeş, Atilla Cihaner, Fatih Algı, Yeni Kemilüminojenik Malzemelerin Tasarımı Sentezi ve Polimerizasyonu, V. Fiziksel Kimya Kongresi, 2015, Konya
11.	Ümit Tayfun, Alinda Öykü Akar, Seha Tirkeş Nanokil ve POSS İçeren Termoplastik Poliüretan Hibrit Nano-kompozitlerin Mekanik, Termomekanik ve Morfolojik Özellikleri, VI. Ulusal Polimer Bilim ve Teknolojisi Kongresi, 2016.

12.	Ümit Tayfun, Tirkeş Seha Polikarbonat/Cam Elyaf-Mika Hibrit Kompozitlerin Mekanik, Isısal ve Morfolojik Özellikleri, VI. Ulusal Polimer Bilim ve Teknolojisi Kongresi, 2016.
13.	Gözde Şahin, Seha Tirkeş, Erhan Bat Kontrollü İlaç Salımı için Poli(trimetilen karbonat) Esaslı Nano-Taşıyıcıların Geliştirilmes, VI. Ulusal Polimer Bilim ve Teknolojisi Kongresi, 2016.

THESES SUPERVISED

1.	PhD Thesis, Synthesis and Characterization of Polyimide Derivative Adhesives
2.	MS Thesis, Synthesis of Heterocyclic Unit Substituted Carbazole Derivatives and Their Electrochemical Polymerization
3.	MS Thesis, Preparation and Characterization of Thermoplastic Polyurethane Nanocomposites and Their Hybrid Composites. 2017
4.	MS Thesis, Mechanical, Thermal and Flammability Properties of Carbonaceous Filler Reinforced ABS Composites. 2017
5.	MS Thesis, Preparation and Characterization of Polycarbonate/Glass Fiber-Mica Hybrid Composites. 2017
6.	MS Thesis, Investigations of flax fiber and basalt fiber containing poly(lactic acid) hybrid eco-composites 2017
7.	MS Thesis, , Improvement of mechanical and physical properties of polyurethane elastomer/jute fiber eco-composites, 2017
8.	MS Thesis, Mechanical and Thermal Properties of Acrylonitrile-Butadiene-Styrene/Barite Composites. 2017
9.	MS Thesis, The Mechanical and Thermal Properties of Bentonite Filled Acrylonitrile-Butadiene-Styrene Composites. 2017
10.	MS Thesis, The Effect of Addition of Perlite on Mechanical and Thermal Properties of Acrylonitrile-Butadiene-Styrene Composites, 2017
11.	MS Thesis, Investigation of Mechanical and Thermal Properties of Acrylonitrile-Butadiene-Styrene/Zeolite Composites, 2017
12.	MS Thesis, Preparation and Characterization of Pumice Powder Reinforced Acrylonitrile-Butadiene-Styrene Composites. 2017
13.	MS Thesis, Development of Poly(trimethylene carbonate) Based Biodegradable Microparticles. 2018
14.	MS Thesis, Mechanical and Physical Characterization of Bentonite and Barite Filled Low Density Polyethylene Composites. 2018