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Atılım University
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PERSONAL

Date of Birth	1984
Place of Birth	Bulgaria

EDUCATION

2009-2014	University of Twente, Membrane Science and Technology, Ph.D. Thesis: Anion exchange membrane design for reverse electrodialysis (2014) Advisor: Kitty Nijmeijer
2007-2009	Ege University, Chemical Engineering, M.S. Thesis: Desalination by reverse osmosis (RO) and boron removal from seawater reverse osmosis (SWRO) permeate (2009) Advisor: Nalan Kabay
2003-2007	Ege University, Chemical Engineering, B.S.

ACADEMIC POSITIONS

December/2016-	Assistant professor, Department of Chemical Engineering and Applied Chemistry, Atılım University, Turkey
December/2016- January/2015	Postdoc researcher, Nanotechnology Research and Application Center (SUNUM) Sabancı University, Turkey
October/2013- October/2014	Postdoc researcher, Wetsus, The Netherlands
January/2013- December/2013	Visiting researcher, FujiFilm Manufacturing Europe BV., The Netherlands

HONORS&AWARDS

1	Best PhD paper 2014 Award, Twente Water Centre, University of Twente, The Netherlands
2	Best poster prize, IEX 2018, Cambridge, UK.
3	Oral presentation award, KOMPEGE 2018, İzmir, TR
4	Recognition, American Chemical Society 2020
5	Certificate of outstanding contribution in reviewing, 2016 Journ. Memb. Sci, Elsevier
6	Certificate of outstanding contribution in reviewing, 2017 Desalination, Elsevier

RESEARCH INTERESTS

1	Membrane science and technology, membrane design and characterization
2	Water treatment, renewable energy, fuel cells, salinity gradient energy

PROFESSIONAL SERVICE

1	Editorial board member in journals: Journal of Chemistry and Allied Research, Engineering and Technology Journal, Research Journal of Biomedical and Biotechnology (Advisory board, Dergipark.org.tr), Frontiers in Membrane Science and Technology (Associate editor)
2	Reviewer in journals: Journal of Membrane Science, Environmental Science & Technology Letters, Environmental Science: Water Research and Technology, Desalination and Water Treatment, Environmental Science and Technology, Separation and Purification Technology, International Journal of Energy Research, International Journal of Hydrogen Energy, Science of the Total Environment, Sustainable Energy and Fuels, Current Opinion in Chemical Engineering, Membranes, Recent Innovations in Chemical Engineering, Journal of Natural Fibers, Journal of Molecular Liquids, Journal of Chemical Technology and Biotechnology, Journal of the Faculty of Engineering and Architecture of Gazi University, Desalination, Journal of Membrane Science and Research, Turkish Journal of Chemistry, Academic Platform – Journal of Engineering and Science, Journal of Boron

PUBLICATIONS

1	Guler, E., Effect of geothermal water composition and pretreatment on the product water for boron-sensitive crops (2021) Journal of Boron, 6(3), pp. 316-325
2	Othman, N.H., Kabay, N., Guler, E. Principles of reverse electrodialysis and development of integrated-based system for power generation and water treatment: A review (2021) Reviews in Chemical Engineering, in press in Degruyter
3	Altrok, E., Kaya, T.Z., Güler, E., Kabay, N., Bryjak, M. Performance of reverse electrodialysis system for salinity gradient energy generation by using a commercial ion exchange membrane pair with homogeneous bulk structure (2021) Water (Switzerland), 13 (6), pp. 814
4	Kaya, C., Jarma, Y.A., Muhidin, A.M., Güler, E., Kabay, N., Arda, M., Yüksel, M. Seawater desalination by using nanofiltration (NF) and brackish water reverse osmosis (BWRO) membranes in sequential mode of operation (2020) Journal of Membrane Science and Research, 6 (1), pp. 40-46.
5	Rajabalazadeh Mojarrad, N., Sadeghi, S., Yazar Kaplan, B., Güler, E., Alkan Gürsel, S. Metal-Salt Enhanced Grafting of Vinylpyridine and Vinylimidazole Monomer Combinations in Radiation Grafted Membranes for High-Temperature PEM Fuel Cells (2020) ACS Applied Energy Materials, 3 (1), pp. 532-540.
6	Güler, E., Sadeghi, S., Alkan Gürsel, S. Characterization and fuel cell performance of divinylbenzene crosslinked phosphoric acid doped membranes based on 4-vinylpyridine grafting onto poly(ethylene-co-tetrafluoroethylene) films (2018) International Journal of Hydrogen Energy, 43 (16), pp. 8088-8099.
7	Sadeghi, S., Işikel Şanlı, L., Güler, E., Alkan Gürsel, S. Enhancing proton conductivity via sub-micron structures in proton conducting membranes originating from sulfonated PVDF powder by radiation-induced grafting (2018) Solid State Ionics, 314, pp. 66-73.
8	Parmentier, D., Lavenas, M., Güler, E., Metz, S.J., Kroon, M.C. Selective removal of sodium from alkali-metal solutions with tetraoctylammonium monensin (2016) Desalination, 399, pp. 124-127.

9	Güler, E., Kaya, C., Kabay, N., Arda, M. Boron removal from seawater: State-of-the-art review (2015) <i>Desalination</i> , 356, pp. 85-93.
10	Güler, E., Elizen, R., Saakes, M., Nijmeijer, K. Micro-structured membranes for electricity generation by reverse electro dialysis (2014) <i>Journal of Membrane Science</i> , 458, pp. 136-148.
11	Güler, E., van Baak, W., Saakes, M., Nijmeijer, K. Monovalent-ion-selective membranes for reverse electro dialysis (2014) <i>Journal of Membrane Science</i> , 455, pp. 254-270.
12	Güler, E., Elizen, R., Vermaas, D.A., Saakes, M., Nijmeijer, K. Performance-determining membrane properties in reverse electro dialysis (2013) <i>Journal of Membrane Science</i> , 446, pp. 266-276.
13	Yavuz, E., Güler, E., Sert, G., Arar, T., Yüksel, M., Yüksel, T., Kitiş, M., Kabay, N. Removal of boron from geothermal water by RO system-I-Effect of membrane configuration and applied pressure (2013) <i>Desalination</i> , 310, pp. 130-134.
14	Guler, E., Zhang, Y., Saakes, M., Nijmeijer, K. Tailor-made anion-exchange membranes for salinity gradient power generation using reverse electro dialysis (2012) <i>ChemSusChem</i> , 5 (11), pp. 2262-2270.
15	Vermaas, D.A., Guler, E., Saakes, M., Nijmeijer, K. Theoretical power density from salinity gradients using reverse electro dialysis (2012) <i>Energy Procedia</i> , 20, pp. 170-184.
16	Güler, E., Kabay, N., Yüksel, M., Yiğit, N., Kitiş, M., Bryjak, M. Integrated solution for boron removal from seawater using RO process and sorption-membrane filtration hybrid method (2011) <i>Journal of Membrane Science</i> , 375 (1-2), pp. 249-257.
17	Güler, E., Kabay, N., Yüksel, M., Yavuz, E., Yüksel, Ü. A comparative study for boron removal from seawater by two types of polyamide thin film composite SWRO membranes (2011) <i>Desalination</i> , 273 (1), pp. 81-84.
18	Öner, Ş. G., Kabay, N., Güler, E., Kitiş, M., Yüksel, M. A comparative study for the removal of boron and silica from geothermal water by cross-flow flat sheet reverse osmosis method (2011) <i>Desalination</i> , 283, pp. 10-15.
19	Koseoglu, H., Harman, B.I., Yigit, N.O., Guler, E., Kabay, N., Kitis, M. The effects of operating conditions on boron removal from geothermal waters by membrane processes (2010) <i>Desalination</i> , 258 (1-3), pp. 72-78.
20	Guler, E., Ozakdag, D., Arda, M., Yuksel, M., Kabay, N. Effect of temperature on seawater desalination-water quality analyses for desalinated seawater for its use as drinking and irrigation water (2010) <i>Environmental Geochemistry and Health</i> , 32 (4), pp. 335-339.
21	Kabay, N., Güler, E., Bryjak, M. Boron in seawater and methods for its separation - A review (2010) <i>Desalination</i> , 261 (3), pp. 212-217.
22	Guler, E., Piekacz, J., Ozakdag, D., Kujawski, W., Arda, M., Yuksel, M., Kabay, N. Influence of the chosen process parameters on the efficiency of seawater desalination: SWRO pilot plant results at Urla Bay seashore (2009) <i>Desalination and Water Treatment</i> , 5 (1-3), pp. 167-171.
23	Guler, E., Yavuz, E., Yuksel, M., Yuksel, U., Kabay, N., Time-dependent desalination tests for small scale SWRO pilot plant installed at Urla Bay, Turkey, (2018) <i>Journal of Membrane Science and Research</i> 4, pp.167-173.
24	Guler, E., Nijmeijer, K., Reverse electro dialysis for salinity gradient power generation: Challenges and future perspectives, (2018) <i>Journal of Membrane Science and Research</i> , 4, pp. 108-110.
25 (Book Chapter)	Yilmaz-Ipek, I., Guler, E., Kabay, N., Yuksel, M., Removal of boron from water by ion exchange and hybrid processes, <i>Ion Exchange and Solvent Extraction: A series of advances</i> 22, CRC Press-Taylor&Francis, 2016. pp. 33-63,
26 (Book Chapter)	H. Koseoglu, E. Guler, B.I. Harman, E. Gonulsuz, "Chapter 2: Water Flux and Reverse Salt Flux" in <i>Membrane-Based Salinity Gradient Processes for Water Treatment and Power Generation</i> , 1st Ed. By S. Sarp and N. Hilal, Elsevier, 2018. pp.57-86

PROJECTS

1	PI - TUBITAK Multilateral project EIG Concert Japan, Üstün fonksiyonellik-Membran bazlı süreçlerde kompozit/karışık matriks yapıda gözenekli malzemeler, 2019-
2	Researcher - TUBITAK 1001, Anyon değişim membranlı (AEM) yakıt pilleri için radyasyon başlatmalı aşılama ile sentez ve elektrodokuma yöntemleriyle özgün membran yapılarının geliştirilmesi, 2019-
3	Researcher - TUBITAK 2549 Bilateral Poland, Integrated management of geothermal water: recovery of energy and water, 2018-
4	PI – TUBITAK 2232, Mixed cation and anion exchange hybrid membrane design for fuel cell applications, 2015-2017
5	PI – Atılım BAP ATÜ-BAD-1819-03, Yakıt hücresi uygulamalarında çapraz bağlı poliepioklorohidrin bazlı membranların sentezi ve karakterizasyonu,2018-2020

CONFERENCE PRESENTATIONS (selected)

1	EMS summer school, Bucharest, Romania, 2010
2	NYM13, Enschede, the Netherlands, 2011
3	ICOM 2011, Amsterdam, the Netherlands, 2011
4	MESA+ meeting, Enschede, the Netherlands, 2011
5	NPS11, Arnhem, the Netherlands, 2011
6	Technoport, Trondheim, Norway, 2012
7	Euromembrane 2012, London, UK, 2012
8	Invited speaker, Brawijaya University, Indonesia, 2021

CITATIONS

Sum of times cited without self-citations (ISI Web of Science):	948
H-index (ISI Web of Science):	14
Google Scholar (total citations)	1515
H-index (Google Scholar)	16

COURSES GIVEN

1	ENE204 Thermodynamics
2	CEAC302 Separation Processes
3	AE307 Fluid Mechanics
4	CEAC571 Membrane Science and Processes
5	CEAC572 Electromembrane Processes
6	CEAC207 Chemical Process Calculations

7	CEAC405-406 Chemical Engineering Design I-II
8	CEAC401 Chemical Engineering Laboratory
9	CEAC311 Fundamentals of Mass Transfer

THESES SUPERVISED

1	KAYA TUĞÇE ZEYNEP, (2021). EVALUATION OF REVERSE ELECTRODIALYSIS (RED) SYSTEM PERFORMANCE WITH VARIOUS COMPOSITIONS OF SALT SOLUTIONS FOR PRODUCTION OF SALINITY GRADIENT ENERGY (SGE), Ege Üniversitesi->Fen Bilimleri Enstitüsü->Kimya Mühendisliği Ana Bilim Dalı
2	Almurumudhe Osamah, (2021). ANION EXCHANGE MEMBRANE BASED ON SEMIINTERPENETRATING POLYMER NETWORK OF POLYETHER SULFONE / QUATERNIZED STARCH FOR ALKALINE FUEL CELLS, Atılım Üniversitesi->Fen Bilimleri Enstitüsü->Kimya Mühendisliği Ana Bilim Dalı
3	KINALI ORHAN, (2021). APPLICATION OF REVERSE ELECTRODIALYSIS METHOD FOR SALINITY GRADIENT ENERGY GENERATION, Ege Üniversitesi->Fen Bilimleri Enstitüsü->Kimya Mühendisliği Ana Bilim Dalı
4	KARAKOÇ EZGİ, (2021). Polyepichlorohydrin based anion exchange membranes for reverse electrodialysis, Atılım Üniversitesi->Fen Bilimleri Enstitüsü->Kimya Mühendisliği Ana Bilim Dalı
5	ALBAIDI BASIM AHMED SALEH, (2019). Prediction of chemical oxygen demand from the chemical composition of wastewater by artificial neural networks, Atılım Üniversitesi->Fen Bilimleri Enstitüsü- >Kimya Mühendisliği Ana Bilim Dalı
6	ABOGHALIA BASAM ISSA SALEM M, (2018). Modeling acetic anhydride production from acetone with aspen plus, Atılım Üniversitesi->Fen Bilimleri Enstitüsü->Kimya Mühendisliği Ana Bilim Dalı
7	IDRES RUWIDA AB.M., (2018). Optimization of formaldehyde production from methanol, Atılım Üniversitesi->Fen Bilimleri Enstitüsü->Kimya Mühendisliği Ana Bilim Dalı
8	MAIUF ABIR ABDELFTAH ALI, (2018). Modeling production of acetic acid by oxidation of ethylene with aspen plus, Atılım Üniversitesi->Fen Bilimleri Enstitüsü->Kimya Mühendisliği Ana Bilim Dalı

PROCEEDINGS

1	GÜLER ENVER, Shemer Hila, Semiat Rafi, KABAY NALAN, Yüksel Mithat (2019). Effect of Halogenbased Disinfectants on Polyamide Reverse Osmosis (RO) Membranes. MEMTEK 2019, 154-159. (Tam Metin Bildiri/Sözlü Sunum)
2	Kınalı Orhan, Eti Mine, Kitada Soma, GÜLER ENVER, KABAY NALAN, Bryjak Marek (2019). Blue Energy Production By Reverse Electrodialysis (Red) System As A Function Of Salinity Gradient. MEMTEK 2019 (Tam Metin Bildiri/Sözlü Sunum)
3	Diban Nazely, GÜLER ENVER, KABAY NALAN, Kumakiri Izumi, Ortiz Inmaculada, Pacula Alexandra, Rivero MJ, TUNCEL SÜLEYMAN ALİ, Uriaga Ana (2019). Outperforming functionality: composite/mixed matrix porous materials in membrane-based processes. MEMTEK 2019, 259- 263. (Tam Metin Bildiri/Sözlü Sunum)
4	GÜLER ENVER, Öner Görkem, KABAY NALAN, Yüksel Mithat (2019). Effect of operational parameters for boron removal from geothermal water by reverse osmosis (RO) membranes. BORON 2019, 885-890. (Tam Metin Bildiri/Sözlü Sunum)

5	KABAY NALAN,GÜLER ENVER,Tomaszewska Barbara,Bryjak Marek (2019). Separation and Recovery of Boron from Various Water Resources. BORON 2019, 828-835. (Tam Metin Bildiri/Davetli Konuşmacı)
6	Bryjak Marek,KABAY NALAN,GÜLER ENVER,Tomaszewska Barbara (2018). Concept for energy harvesting from the salinity gradient on the basis of geothermal water. 3rd International Conference on Energy, Environment and Economics, ICEEE2018, 4, 88-96. (Tam Metin Bildiri/Sözlü Sunum)
7	Özkök Sıla Ceren,Bunani Samuel,İpekçi Deniz,GÜLER ENVER,KABAY NALAN,ARDA MÜŞERREF,Yüksel Mithat (2017). Application of electrodialysis (ED) for concentrate management of Reverse Osmosis (RO) process. 2nd IWA Regional Symposium on Water, Wastewater and 7. 3 (IWA-PPFW 2017) (Tam Metin Bildiri/Poster)

MEMBERSHIP

1	Society of Chemical Industry (SCI)
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