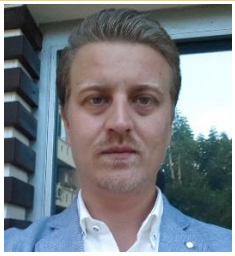

Ismail Anil

Associate Professor

PERSONAL DATA

Nationality | Turkish

Date of Birth | January 8, 1982

Department | Environmental Engineering

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LANGUAGE PROFICIENCY

Language	Read	Write	Speak
English	Fluent	Fluent	Fluent
Turkish	Native	Native	Native

ACADEMIC QUALIFICATIONS

Date	Academic Degree	Place of Issue	Address
2014	Ph.D. (Environmental Eng.)	Gebze Technical University	Kocaeli, Turkey
2007	M.Sc. (Environmental Eng.)	Istanbul University-Cerrahpasa (Formerly: Fatih University)	Istanbul, Turkey
2005	B.Sc. (Environmental Eng.)	Istanbul University-Cerrahpasa (Formerly: Fatih University)	Istanbul, Turkey

PHD, MASTER OR FELLOWSHIP RESEARCH TITLE: (ACADEMIC HONORS OR DISTINCTIONS)

PhD	Thesis Title: Air Quality Assessment of Buyukcekmece by Sampling and Analysis of Wet and Dry Deposition Scholarship: PhD scholarship by Scientific and Technological Research Council of Turkey
MSc	Thesis Title: Investigation of Traffic Related Inhalable Particulate Matter in Istanbul Scholarship: MSc scholarship by Scientific and Technological Research Council of Turkey

PROFESSIONAL RECORD: (BEGINNING WITH THE MOST RECENT)

Job Rank	Place and Address of Work		Date
Assoc. Prof	Imam Abdulrahman Bin Faisal University	Dammam/KSA	2021 - Now
Assist. Prof.	Imam Abdulrahman Bin Faisal University	Dammam/KSA	2015 - 2021
Assist. Prof.	Istanbul University-Cerrahpasa (Formerly: Fatih University)	Istanbul/Turkey	2014 - 2015
Res. Assist.	Istanbul University-Cerrahpasa (Formerly: Fatih University)	Istanbul/Turkey	2005 - 2014

SCIENTIFIC ACHIEVEMENTS

Published Refereed Scientific Research
(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Seyda T. Gunday, Emre Cevik, Sarah Asiri, Arfa Iqbal, Atheel Almofleh, Ameerah N. Alqarni, Ismail Anil, Omar Alagha, and Ayhan Bozkurt	Synthesis of Boron-Doped Non-Flammable Anhydrous Electrolytes for Flexible Quasi-Solid-State Supercapacitor Applications	Energy Fuels 2022, 36, 13229−13237
2	Huseyin Tombuloglu, Cevat Yaman, Imane Boudellioua, Emre Cevik, Ismail Anil, Omer Aga, Ayse B. Yaman, Aleem Qureshi, Seyda Tugba Gunday	Metagenome analyses of microbial population in geotextile fabrics used in permeable reactor barriers for toluene biodegradation	3 Biotech (2023), https://doi.org/10.1007/s13205-023-03460-y
3	Najah Al-Garawi and Ismail Anil	Geographical Distribution and Modeling of the Impact of Women Driving Cars on the Sustainable Development of Saudi Arabia	Sustainability 13 (17), 9941, 2021
4	Seyda Tugba Gunday, Huseyin Tombuloglu, Ismail Anil, Omar Alagha, Ayhan Bozkurt	Natural pozzolan super-absorbent polymer: synthesis, characterization, and its application on plant growing under drought condition	International Journal of Energy and Environmental Engineering, 1-10, 2021
5	Cevat Yaman, Ismail Anil, Omar Alagha, Nawaf Isam Blaisi, Ayse	Toluene Bioremediation by Using Geotextile-	Processes 2021, 9(6), 906, 2021

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
	Burcu Yaman, Aleem Qureshi, Emre Cevik, Suriya Rehman, Seyda Tugba Gunday, Mohammad Barhouthi	Layered Permeable Reactive Barriers (PRBs)	
6	Seyda Tugba Gunday Anil, Talal Qahtan, Emre Cevik, Ismail Anil, Omar Alagha, Ayhan Bozkurt	Highly flexible and tailorable cobalt doped cross-linked polyacrylamide based electrolytes for use in high potential supercapacitors	Chemistry: An Asian Journal 101 (101), 2021
7	Anil, Ismail; Alagha, Omar	Source Apportionment of Ambient Black Carbon During the COVID-19 Lockdown	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH Volume: 17 Issue: 23 Published: DEC 2020
8	Mu'azu, Nuhu Dalhat; Alagha, Omar; Anil, Ismail	Systematic Modeling of Municipal Wastewater Activated Sludge Process and Treatment Plant Capacity Analysis Using GPS-X	SUSTAINABILITY Volume: 12 Issue: 19 Article Number: 8182 Published: OCT 2020
9	Gunday, Seyda T.; Cevik, Emre; Anil, Ismail; Alagha, Omar; Sabit, Hussein; Bozkurt, Ayhan	Symmetric Supercapacitor Application of Anhydrous Gel Electrolytes Comprising Doped Tetrazole Terminated Flexible Spacers	MACROMOLECULAR RESEARCH Volume: 28 Published: SEP 2020
10	Anil, Ismail; Alagha, Omar	The impact of COVID-19 lockdown on the air quality of Eastern Province, Saudi Arabia	AIR QUALITY ATMOSPHERE AND HEALTH DOI: 10.1007/s11869-020-00918-3 Published: AUG 2020
11	Yaman, Cevat; Anil, Ismail; Alagha, Omar	Potential for greenhouse gas reduction and energy recovery from MSW through different waste management technologies	JOURNAL OF CLEANER PRODUCTION Volume: 264 Article Number: 121432 Published: AUG 2020
12	Alagha, Omar; Manzar, Mohammad Saood;	Magnetic Mg-Fe/LDH Intercalated Activated	NANOMATERIALS Volume: 10 Issue: 7

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
	Zubair, Mukarram; Anil, Ismail; Mu'azu, Nuhu Dalhat; Qureshi, Aleem	Carbon Composites for Nitrate and Phosphate Removal from Wastewater: Insight into Behavior and Mechanisms	Article Number: 1361 Published: JUL 2020
13	Zubair, Mukarram; Manzar, Mohammad Saood; Mu'azu, Nuhu Dalhat; Anil, Ismail; Blaisi, Nawaf I.; Al-Harthi, Mamdouh A.	Functionalized MgAl-layered hydroxide intercalated date-palm biochar for Enhanced Uptake of Cationic dye: Kinetics, isotherm and thermodynamic studies	APPLIED CLAY SCIENCE Volume: 190 Article Number: 105587 Published: JUN 2020
14	Tombuloglu, Huseyin; Anil, Ismail; Akhtar, Sultan; Turumtay, Halbay; Sabit, Hussain; Slimani, Yassine; Almessiere, Munirah; Baykal, Abdulhadi	Iron oxide nanoparticles translocate in pumpkin and alter the phloem sap metabolites related to oil metabolism	SCIENTIA HORTICULTURAE Volume: 265 Article Number: 109223 Published: APR 2020
15	Cevik, Emre; Tombuloglu, Huseyin; Anil, Ismail; Senel, Mehmet; Sabit, Hussein; AbdulAzeez, Sayed; Borgio, J. Francis; Barghouthi, Mohammad	Direct electricity production from Microalgae Choricystis sp. and investigation of the boron to enhance the electrogenic activity	INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: 45 Issue: 19 Pages: 11330-11340 Published: APR 2020
16	Alagha, Omar; Allazem, Ahmed; Bukhari, Alaadin A.; Anil, Ismail; Mu'azu, Nuhu Dalhat	Suitability of SBR for Wastewater Treatment and Reuse: Pilot-Scale Reactor Operated in Different Anoxic Conditions	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH Volume: 17 Issue: 5 Article Number: 1617 Published: MAR 2020
17	Gunday, Seyda Tugba; Cevik, Emre; Anil, Ismail; Alagha, Omar; Bozkurt, Ayhan	High-temperature symmetric supercapacitor applications of anhydrous gel electrolytes including doped triazole terminated flexible spacers	JOURNAL OF MOLECULAR LIQUIDS Volume: 301 Article Number: 112400 Published: MAR 2020
18	Alagha, Omar; Manzar, Mohammad Saood; Zubair, Mukarram; Anil,	Comparative Adsorptive Removal of Phosphate and Nitrate from Wastewater	NANOMATERIALS Volume: 10 Issue: 2

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
	Ismail; Mu'azu, Nuhu Dalhat; Qureshi, Aleem	Using Biochar-MgAl LDH Nanocomposites: Coexisting Anions Effect and Mechanistic Studies	Article Number: 336 Published: FEB 2020
19	Anil, Ismail; Gunday, Seyda Tugba; Bozkurt, Ayhan; Alagha, Omar	Design of Crosslinked Hydrogels Comprising Poly(Vinylphosphonic Acid) and Bis[2-(Methacryloyloxy)Ethyl] Phosphate as an Efficient Adsorbent for Wastewater Dye Removal	NANOMATERIALS Volume: 10 Issue: 1 Article Number: 131 Published: JAN 2020
20	Anil, Ismail; Alagha, Omar; Blaisi, Nawaf, I; Mohamed, Iehab Abdelilah; Barghouthi, Mohammad Hisham; Manzar, Mohammad Saood	Source Identification of Episodic Rain Pollutants by a New Approach: Combining Satellite Observations and Backward Air Mass Trajectories	AEROSOL AND AIR QUALITY RESEARCH Volume: 19 Issue: 12 Pages: 2827-2843 Published: DEC 2019
21	Yaman, Cevat; Anil, Ismail; Jaunich, Megan K.; Blaisi, Nawaf I.; Alagha, Omar; Yaman, Ayse B.; Gunday, Seyda T.	Investigation and modelling of greenhouse gas emissions resulting from waste collection and transport activities	WASTE MANAGEMENT & RESEARCH Volume: 37 Issue: 12 Pages: 1282-1290 Article Number: 0734242X19882482 Published: DEC 2019
22	Cevik, Emre; Gunday, Seyda Tugba; Anil, Ismail; Alagha, Omar; Bozkurt, Ayhan	Construction of symmetric supercapacitors using anhydrous electrolytes containing heterocyclic oligomeric structures	INTERNATIONAL JOURNAL OF ENERGY RESEARCH Volume: 44 Issue: 4 Pages: 3203-3214 Published: DEC 2019
23	Karaca, Ferhat; Anil, Ismail; Yildiz, Abdulkadir	Physicochemical and morphological characterization of atmospheric coarse particles by SEM/EDS in new urban central districts of a megacity	ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH Volume: 26 Issue: 23 Pages: 24020-24033 Published: AUG 2019
24	Anil, Ismail; Gunday, Seyda Tugba; Alagha, Omar; Bozkurt, Ayhan	Synthesis, Characterization, and Swelling Behaviors of Poly(acrylic	JOURNAL OF POLYMERS AND THE ENVIRONMENT Volume: 27 Issue: 5 Pages:

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
		acid-co-acrylamide)/Pozzolan Superabsorbent Polymers	1086-1095 Published: MAY 2019
25	Anil, Ismail; Alagha, Omar; Karaca, Ferhat	Effects of transport patterns on chemical composition of sequential rain samples: trajectory clustering and principal component analysis approach	AIR QUALITY ATMOSPHERE AND HEALTH Volume: 10 Issue: 10 Pages: 1193-1206 Published: DEC 2017
26	Anil, Ismail; Golcuk, Kurtulus; Karaca, Ferhat	ATR-FTIR spectroscopic study of functional groups in aerosols: The contribution of a Saharan dust transport to urban atmosphere in Istanbul, Turkey	WATER AIR AND SOIL POLLUTION Volume: 225 Issue: 3 Article Number: 1898 Published: MAR 2014
27	Ozoner, Seyda Korkut; Erhan, Elif; Yilmaz, Faruk; Ergenekon, Pinar; Anil, Ismail	Electrochemical biosensor for detection of formaldehyde in rainwater	JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY Volume: 88 Issue: 4 Pages: 727-732 Published: APR 2013
28	Anil, Ismail; Ozturk, Naciye; Alagha, Omar; Ergenekon, Pinar	Optimization of solid-phase microextraction using Taguchi design to quantify trace level polycyclic aromatic hydrocarbons in water	JOURNAL OF SEPARATION SCIENCE Volume: 35 Issue: 24 Pages: 3561-3568 Published: DEC 2012
29	Goren, Sami; Anil, Ismail; Camci, Fatih; Sengul, Ayse B.; Mehan, Hatice N. Aras	Modeling the quantity of municipal solid waste in Istanbul by using artificial intelligence and statistical techniques	SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES Volume 3 Issue 1 Page 165-175 Published: 2011
30	Anil, Ismail; Karaca, Ferhat; Alagha, Omar	Investigation of long-range atmospheric transport effects on Istanbul: "Inhalable particulate matter episodes"	EKOLOJI Volume: 19 Issue: 73 Pages: 86-97 Published: 2009

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
31	Karaca, Ferhat; Anil, Ismail; Alagha, Omar	Long-range potential source contributions of episodic aerosol events to PM_{10} profile of a megacity	ATMOSPHERIC ENVIRONMENT Volume: 43 Issue: 36 Pages: 5713-5722 Published: NOV 2009

Patents

No	Patent Title	Inventors	Assignee	Patenting Institution	Patent No	Date
1	Apparatus for Wind Energy Production and Air Purification	Alagha, O. and Anil, I.	Imam Abdulrahman Bin Faisal University	United States Patent and Trademark Office (USPTO)	US10253754B2	April 9, 2019
2	Pozzolan Polymer Composite for Soil Amendment	Bozkurt, A.; Alagha, O.; Tombuloglu, H.; Anil, I.; Gunday, S.T.	Imam Abdulrahman Bin Faisal University	United States Patent and Trademark Office (USPTO)	US2020102498A1	April 2, 2020
3	Crosslinked polyvinyl matrix for water treatment	Ayhan Bozkurt, Seyda T Gunday Anil, Ismail Anil	Imam Abdulrahman Bin Faisal University	United States Patent and Trademark Office (USPTO)	US 16503957	January 7, 2021

Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	İsmail Anıl, Omar Alagha, Ferhat Karaca, and Ferruh Ertürk	Investigation of Traffic Related $PM_{2,5}$: The Effects of Traffic and Meteorology	IV. Atmospheric Sciences Symposium, 2008
2	Nihan Uygur, İsmail Anıl, Omar Alagha, and Ferhat Karaca	Neutralization of Acid Rain Samples Collected nearby Buyukcekmece Watershed Area	National Air Quality Symposium, 2008

#	Name of Investigator(s)	Research Title	Conference and Publication Date
3	İsmail Anıl, Nihan Uygur, Ferhat Karaca, Omar Alagha, Levent Kuzu, and Ferruh Ertürk,	Investigation of Traffic Related $PM_{2,5}$ and $PM_{2,5-10}$ in Istanbul during the Spring Season	National Air Quality Symposium, 2008
4	Ferhat Karaca, Ayşe Betül Oktay, Atakan Kurt, Omar Alagha, İsmail Anıl, Nihan Uygur, and Zeynep Öztürk	A Modelling Approach to the Management of Urban Air Quality	National Air Quality Symposium, 2008
5	Hacı Hüseyin Öner, Ferhat Karaca, and İsmail Anıl	Assessing springtime TPM mass concentrations in Büyükçekmece Atmosphere	III. Environmental Problems Congress, 2008
6	İsmail Anıl, Ferhat Karaca, Omar Alagha, Gülcan Zindan, and Feyza Özdemir	Investigation of Water Content of Atmospheric Particles: A Summer Time Assessment of Suburban Area of Istanbul	National Air Quality & Control Symposium, 2008
7	İsmail Anıl, Ferhat Karaca, Omar Alagha, Levent Kuzu, and Ferruh Ertürk	PM_Predictor: A Prediction Model of Hourly Traffic Related $PM_{2,5}$ and $PM_{2,5-10}$ Mass Concentrations	Urban Management, Human and Environmental Problems Symposium'08, 2008
8	İsmail Anıl, Ferhat Karaca, Omar Aga	The Assessment of Inhalable Particulate Matter over Istanbul Atmosphere for 2008	I. Chemical, Biological, Radiological, and Nuclear Congress, 2008.
9	Burak Ekinci, Ferhat Karaca, and İsmail Anıl	Investigation of Particle Size Distribution of Saharan Dust Episode that Transported from Remote Regions to Istanbul	IV. Environmental Problems Congress, 2009
10	Sami Gören, Ayşe B. Şengül, İsmail Anıl, and Hatice N. Aras Mehan	European Union Environmental Regulations in the Istanbul's Integrated Solid Waste Management and Compliance Process Applications	The Solid Waste Management Symposium 09, 2009
11	Sami Gören, Fatih Camcı, İsmail Anıl, Ayşe B. Şengül, and Hatice N. Aras Mehan	Modeling the Quantity of Municipal Solid Waste in Istanbul by Using Artificial Intelligence and Statistical Techniques	The Solid Waste Management Symposium 09, 2009

#	Name of Investigator(s)	Research Title	Conference and Publication Date
12	Zeynep Kılıç, Safiye Uzunallı, İsmail Anıl, and Ferhat Karaca	Investigating the Water Soluble Ionic Composition of Traffic Related Inhalable Particulate Matter	V. Environmental Problems Congress, 2010
13	Ömer Ağa, Ferhat Karaca, Ferruh Ertürk, and İsmail Anıl	A neutralization Model of Sequential Wet Deposition Samples over Istanbul Atmosphere	IV. National Air Quality & Control Symposium, 2010
14	İsmail Anıl, Ferhat Karaca, and Omar Alagha	The Solubilities of Atmospheric Metals Deposited in Urban and Suburban Regions of Turkey by Wet Deposition Process	IV. National Air Quality & Control Symposium, 2010
15	Ferhat Karaca, Ömer Ağa, Ferruh Ertürk, and İsmail Anıl	The Effects of Saharan Dust to the Chemical Composition of Precipitation Events Monitored at Istanbul	IV. National Air Quality & Control Symposium, 2010
16	İsmail Anıl and Ferhat Karaca	The Importance of Local Meteorology Data in Urban Air Quality Management	I. Meteorology Symposium, 2010
17	Ferhat Karaca and İsmail Anıl	The Significance of Mixing Height Parameter on Air Quality Management and Modelling Studies and Its Calculations	I. Meteorology Symposium, 2010
18	İsmail Anıl, Naciye Öztürk, Ömer Ağa, Gaye Özdemir, and Pınar Ergenekon	Optimization of Solid Phase Micro-Extraction Method for The Analysis of PAHs in Rainwater	2nd International Conference on Air Pollution and Control, 2011
19	Abdüssamet Şahin, Emine Yüksel, İsmail Anıl, Ferhat Karaca, and Omar Alagha	A Neutralization Model of Sequential Wet Deposition Samples collected in Winter Period over Istanbul Atmosphere	VI. Environmental Problems Congress, 2011
20	Ayşegül Erbay, Fulya Sarıhan, İsmail Anıl, Sevil Aktan, and Ömer Ağa	A Neutralization Model of Sequential Wet Deposition Samples collected during 2011 in Istanbul	VII. Environmental Problems Congress, 2011
21	Uğur Ilkı, Alaaddin Okur, İsmail Anıl, Pınar Ergenekon, and Ömer Ağa	The Chemical Composition of Rainwater Samples Collected Near Buyukcekmece Watershed Area	VIII. Environmental Problems Congress, 2011

#	Name of Investigator(s)	Research Title	Conference and Publication Date
22	Ismail Anıl, Ferhat Karaca, and Kurtuluş Gölcük	ATR-FTIR Spectroscopic Study of Functional Groups in Aerosols: The Contribution of a Saharan Dust Transport to Urban Atmosphere in Istanbul, Turkey	The Second International Conference on Water, Energy and the Environment, 2013
23	Ismail Anıl and Omar Alagha	Sources, Fate, and Behavior of Polycyclic Aromatic Hydrocarbons (PAHs) in the Atmosphere: A case study in Istanbul, Turkey	The 8th Symposium & Exhibition on Environmental Progress in the Petroleum & Petrochemical Industry, 2016
24	Alagha, O. and Anil, I.	Long-range transport contribution to episodic PM10 events over Dammam, Saudi Arabia: Potential Source Contribution & GIS Mapping Approach	The 12th GIS Symposium in Saudi Arabia, 2018
25	Ismail Anıl and Omar Alagha	Assessment of Air Pollution over Dammam: Air Quality Index, Source Apportionment, and a Novel Mitigation Approach (EcoTree)	The 9th Symposium & Exhibition on Environmental Progress in the Petroleum & Petrochemical Industry, 2019
26	Seyda Tugba Gunday, Ismail Anil, Omer Aga, Ayhan Bozkurt	EcoSoil: A Novel Superabsorbent Polymer For Hold And Conserve Water.	Conference of Sustainable Development of Desert Regions, 2019
27	Cevat Yaman, Anil Ismail, Omer Aga, Ayse B Yaman, Aleem Qureshi	Bioremediation of toluene by bioaugmentation, biostimulation and natural attenuation	E3S Web of Conferences, Vol 280, EDP Sciences, 2021
28	Anil Ismail and Omer Aga	Effect of COVID-19 Lockdown on Ambient Black Carbon Levels	PetroEnvironment 2022, 17 - 18 MAY 2022 DAMMAM, SAUDI ARABIA

Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	Omar Alagha and İsmail Anıl (Fatih University)	Investigation of Traffic Related Inhalable Particulate Matter in İstanbul	2008
2	Sami Gören and İsmail Anıl (Fatih University)	Monitoring The Soil Displacements in The Fatih University Campus Area	2008
3	Omar Alagha, Ferhat Karaca, and İsmail Anıl (Fatih University)	The Development of a Fully Automated Sequential Wet Deposition Sampler	2009
4	İsmail Anıl and Omar Alagha (İstanbul Metropolitan Municipality)	Investigation of Traffic Related $PM_{2,5}$ and $PM_{2.5\text{-}10}$ in İstanbul	2009
5	Ferhat Karaca and İsmail Anıl (Fatih University)	Mapping the Ground Level Ozone Distribution in Istanbul for Summer Period by Using Passive Sampling Method and Investigation of Health Effects	2009
6	Omar Alagha, Ferhat Karaca, and İsmail Anıl (Scientific and Technological Research Council of Turkey)	Investigation of Local and Long-Range Transportation Effects on Chemical Composition of Rain Samples Collected by Sequential Rain Sampler and The Adverse Effects on The Environment	2010
7	Ferhat Karaca and İsmail Anıl (Fatih University)	Developing a Passive Ozone Monitoring Sampler Complying with 8-Hour Standards of European Union	2010
8	Sami Gören and İsmail Anıl (Fatih University)	The Characterization of Medical Waste Incineration Ash	2010
9	Omar Alagha and İsmail Anıl (Fatih University)	Investigation of Airborne Biological Pollutants in Indoor Environment	2010
10	Omar Alagha and İsmail Anıl (Fatih University)	Sampling of PAHs by Using Fully Automated Sequential Wet Deposition Sampler and	2011

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
		Analysis of PAHs with Optimized Solid-Phase Microextraction Method	
11	Ferhat Karaca and İsmail Anıl (Fatih University)	Developing an Adsorption Treatment Method for Siloxanes in Biogas Spreading from Waste Storage Area	2011
12	Pinar Ergenekon, Naciye Öztürk, and İsmail Anıl (Gebze Institute of Technology)	Optimization of Solid-Phase Microextraction Using Taguchi Design to Quantify Trace Level Polycyclic Aromatic Hydrocarbons in Water	2011
13	Sami Gören, Ferhat Karaca, Gokce Guyer, and İsmail Anıl (STRCT)	Determination of the Discharge Color Standard for Treated Wastewaters Containing Dyes and Investigation of Treatment Technologies	2013

Current Research

#	Research Title	Name of Investigator(s)
1	Direct electricity production by harvesting solar energy; Fabrication of novel high efficiency photo-anodes assembled photo-bioelectrochemical fuel cells. (Supported by DSR of IAU - 199,500 SR). Project No: 2020-030-IRMC	Emre Cevik, Omar Alagha, Ismail Anıl, Ayhan Bozkurt, Hussein Sabit
2	The production of novel Hydrophobic/hydrophilic redox-active sulfonated solid/gel polymers as cost-effective electrolytes for flexible supercapacitor and lithium-sulfur battery (Supported by DSR of IAU - 194,000 SR). Project No: 2020-177-IRMC	Ayhan Bozkurt, Omar Alagha, Ismail Anıl, Emre Cevik,
3	Construction of Novel Photo-Bioelectrochemical fuel Cells for Electricity Production by Harvesting Light Energy (Supported by DSR of IAU - 176,000 SR). Project No: 2019-382-Eng	Ismail Anıl, Omar Alagha, Emre Cevik, Hussein Sabit
4	Laboratory Scale In-Situ Petroleum Hydrocarbon Bioremediation by using Geotextile filter, Bacteria and Nutrients (Supported by DSR of IAU - 200,000 SR). Project No: 2019-037-Eng	Cevat Yaman, Ismail Anıl, Omar Alagha, Nawaf Blaisi, Emre Cevik
5	Pilot Scale Bio-filter: Control Odor and Green House Gases from Landfill Gas Emissions (Supported by DSR of IAU - 200,000 SR). Project No: 2018-044-Eng	Omar Alagha, Ismail Anıl, Nawaf Blaisi, Cevat Yaman

6	Air Quality and Polycyclic Aromatic Hydrocarbons over Dammam Atmosphere: Quantification, Source Apportionment, Transport Modeling, and Health Risk Assessment (Supported by DSR of IAU - 200,000 SR). Project No: 2016-557-Eng	Ismail Anıl, Omar Alagha, Mukarram Zubeir, Mohammad Saood Manzar

Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	World Water Day 2016 – "Water & Jobs" Symposium Water and Jobs – Local & International Concern	University of Dammam, March 28th, 2016	Organizing and Scientific Committee Member
2	17th International Water Technology Conference	Turkey, 2013, Organized by International Water Technology Association (Egypt) & Fatih University	Organizing and Scientific Committee Member
3	16th International Water Technology Conference	Turkey, 2012, Organized by International Water Technology Association (Egypt) & Fatih University	Organizing and Scientific Committee Member

Membership of Scientific and Professional Societies and Organizations

- Air & Waste Management Association 2014 - Now

TEACHING ACTIVITIES

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution
1	Design of Environmental Projects	ENVEN 501	4 Lectures
2	Special Topics	ENVEN 594	2 Lectures
3	Environmental Eng. Fundamentals	ENVEN 311	2 Lectures
4	Sanitary Engineering	ENVEN 471	4 Lectures
5	Noise Pollution & Control	ENVEN 563	7 Lectures
6	Air Pollution Control	ENVEN 442	7 Lectures / with Lab
7	Environmental Chemistry	CHEM 311	4 Lectures / with Lab
8	Air Pollution	ENVEN 421	4 Lectures

9	Materials Science in Environmental Engineering	ENVE 210	1 Lecture
10	Introduction to Environmental Engineering	ENVE 101	1 Lecture
11	Industrial Pollution Control	ISG 516	5 Lectures
12	Environmental Sampling & Analysis	ENVE 450	4 Lectures / with Lab
13	Engineering Thermodynamics	ENVE 205	1 Lecture
14	Basic Computer Software for Environmental Engineers	ENVE 111	2 Lectures / with Lab
15	Industrial Training, I & II	ENVE 299/399	4 Lectures
16	Engineering Drawing	ENGR 104	6 Lectures / with Lab

Brief Description of Undergraduate Courses Taught: (Course Title – Code: Description)

1	*Design of Environmental Projects - ENVEN 501:* This course will present the following subjects: the methodological basis for engineering design, engineering solutions for specific needs using graphical, oral and written means, the practice of professional engineering, the progression in engineering design skills with an emphasis on computer usage in design, oral communication of solutions and team skills. This class will use structured programming and database management software and focus on applications in environmental engineering as well as solving open-ended problems and model simulations and sensitivity analysis.
2	*Special Topics - ENVEN 594:* The latest developments in environmental engineering, locally, regionally and internationally are presented in this course.
3	*Environmental Eng. Fundamentals - ENVEN 311:* This course gives an introduction to engineering applications in the environment, including: air pollution control, surface and groundwater protection, water and wastewater treatment and solid and hazardous waste management. Selected concepts of biology, chemistry and physics, which are fundamental to the practice of environmental engineering and science, focusing on the transport, transformation, fate and impact of pollutants will be covered in this class.
4	*Sanitary Engineering - ENVEN 471:* In the Sanitary Engineering course the following topics will be presented: water sources and selection, water demand, water and wastewater characteristics, quality and health impacts, water and wastewater treatment unit operations, water storage and distribution within buildings and municipality wastewater reclamation and reuse as well as solid and hazardous waste engineering and management.
5	*Noise Pollution & Control - ENVEN 563:* In the Noise Pollution and Control course, the students will develop an understanding of the basic principles of noise pollution; be able to identify the significant factors affecting noise pollution; apply analytical techniques to solve problems in noise pollution

	measurement and control; indoor and outdoor sound; noise reduction and isolation and design noise control devices.
6	*Air Pollution Control - ENVEN 442:* This course on Air Pollution Control will present the following topics: types of air pollution control equipment, aerodynamics and fluid resistance to particle motion, particle and gas separation techniques, design principles of air pollution control equipment, industrial applications along with a discussion of air pollution control in the urban environment. Cost and design of control systems and regulations, legal and economic aspects will also be a part of this course.
7	*Environmental Chemistry - CHEM 311:* Understanding the basic components of the environment and their interdependences. Fundamentals of chemical reactions that occurs in the different components of the environment. Mastering different ways of expressing concentration of chemical constituent's unit. Hand-on experience on different ways of preparation of standard solutions. Performing laboratory experiments on analytical instrumentations for water and waste water parameters such as COD, BOD, TOC, alkalinity, acidity, conductivity, chlorides, nitrites and physical parameters such as temperature, turbidity and color.
8	*Air Pollution - ENVEN 421:* The Air Pollution course will cover the following subjects: the atmosphere and its composition, sources and scales of air pollution, effects of air pollution on humans, animals, plants and structures, atmospheric chemistry and photochemical smog, ambient air sampling, measurement and analysis, air pollution monitoring, the role of meteorology on air pollution, air quality criteria, emission and emission standards, stack gas sampling and analysis, dispersion of air pollutants, emission inventory, introduction to air pollution modeling, sound and measurement, noise concepts, sources of noise, noise standards and guidelines as well as techniques for managing noise.
9	*Materials Science in Environmental Engineering - ENVE 210:* This course provides an introduction to the properties of materials, such as: shrinkage, expansion, creep, tension, compression, shear, torsion, bending, fatigue, ductility, hardness, etc. Stresses, strains and deformations associated with torsion, axial, shear, moment, flexural loading of bars, shafts, beams and pressure vessel loadings.
10	*Introduction to Environmental Engineering - ENVE 101:* This course gives an introduction to engineering applications in the environment, including: air pollution control, surface and groundwater protection, water and wastewater treatment and solid and hazardous waste management. Selected concepts of biology, chemistry and physics, which are fundamental to the practice of environmental engineering and science, focusing on the transport, transformation, fate and impact of pollutants will be covered in this class.
11	*Industrial Pollution Control - ISG 516:* The course has been designed to improve the understanding of the students about different pollution control strategies and the skills of application of remediation techniques to combat pollution in three environmental compartments i.e. air, water and soil. The course will also be dealing about the sources of pollution in air, soil, water, solid-waste and noise and the impacts these sources on the environment and health.

12	*Environmental Sampling & Analysis - ENVE 450:* This course aims to provide students with work integrated learning experiences which simulate the types of tasks the students might have to do as a practicing environmental scientist. This includes working in small teams consisting of people from different areas of expertise on projects which will involve sampling, analyses and report writing. The theory and practical work is focused on enhancing field, laboratory and analytical skills using environmental samples taken from air, water, and soil.
13	*Engineering Thermodynamics - ENVE 205:* Basic concepts and definitions, properties of pure substances, system and control volume, working fluid, processes and cycles, work, heat and energy, ideal gases, state equation, pure substance and phase changes and thermal equilibrium will be covered in this course.
14	*Basic Computer Software for Environmental Engineers - ENVE 111:* The course provides the students with the practical skills to utilize an office productivity package for different purposes such as Word-processing, Data Sheets, and Presentations. The delivery of the course contents is based on a hands-on approach. The student will have to take the additional programs mostly used in Environmental Engineering field
15	*Industrial Training I & II - ENVE 299/399:* In the summer after the Sophomore year, every Environmental Engineering student is obliged to work in the summer for at least 30 days in a professional company, laboratory or project design organization doing environmental engineering applications. Observations from the summer practice must be documented and presented in the form of a clear and concise technical report. During the summer after the students' Junior year, every environmental engineering student is obliged to spend at least 30 working days in a professional construction company, in order to gain field experience in the construction of large projects. Every student will be asked to prepare and present a clear and concise technical report addressing the experience he gained during the summer.
16	*Engineering Drawing - ENGR 104:* This course is a fundamental graphics. Introduction to computer aided drafting and modeling of engineering applications. Use of AutoCAD to illustrate and quantify design alternatives. Practice in creating and evaluating typical designs drawn from different specialty areas of the field.

Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Application of Prediction Models in Environmental Engineering	ENVEN 611	2 Lectures with Computer Lab
2	Advanced Air Pollution Control	ENVEN 608	1 Lecture
3	Advanced Biostatistics	BTEC 648	1 Lecture

Brief Description of Postgraduate Courses Taught: (Course Title – Code: Description)

1	*Application of Prediction Models in Environmental Engineering – ENVEN 611:* The environmental problems stem from complex interactions of physical, chemical and biological processes, involving various environmental compartments such as soil, water, and air, effecting environmental health importantly. The complicated and multidisciplinary nature of environmental issues need to be treated in an objective and integrated approach. This course intends to provide advanced statistical and modeling concepts and their applications in describing, optimizing, simulating, and predicting the pollutant fate and transport problems in the environmental systems. The course is also aimed to give advanced knowledge and experience in model construction and evaluation. Within the scope of this course, the following statistical methods is covered: descriptive statistics, cluster, factor, and principal component analyses. In addition to the mathematical models, GPS-X wastewater model, 2D&3D Modeling, computational fluid dynamic modeling, and Environmental Protection Agency (EPA) LanGEM, IWarm, and AERMOD models are applied to real environmental datasets.
2	*Advanced Air Pollution Control - ENVEN 608* This course introduces the types of air pollution control equipment, aerodynamics and fluid resistance to particle motion, particle and gas separation techniques (gravity, momentum, centrifugal separators, filters, scrubbers, electrostatic precipitators absorbers, etc.), design principles of air pollution control equipment, industrial applications along with a discussion of air pollution control in the urban environment. Cost and design of control systems and regulations, legal and economic aspects will also be a part of this course.
2	*Advanced Biostatistics - BTEC 648:* This course covers advanced statistical techniques to investigate real-world experimental data from the biology, molecular, cellular, and environmental sciences. Statistical inference, probabilistic features, sample data, additional techniques, analysis of frequency data, special techniques, health and human groups are included. The course is based on the application of SPSS, Minitab, XLStat statistical software.

Student Academic Supervision and Mentoring (Senior Design/Capstone Project)

#	Level	# of Students	Research Topic	From	To
1	Graduate	1	Investigating environmental impacts of long-term dust storms over the Southwestern region of Saudi Arabia	2021	2022
2	Undergraduate	4	Design of a Low-Cost Indoor Air Quality Monitoring Station	2021	2022
3	Undergraduate	3	Design and Optimization of an Air Pollution Control Technology in Power Plant Generation in Saudi Arabia	2020	2021

4	Undergraduate	4	Air Quality Drone: Design of Smart Indoor and Outdoor Air Pollutants Sampling	2019	2020
5	Undergraduate	3	Ventilation Design by Computational Fluid Dynamics to Improve Indoor Air Quality at KFU Hospital	2018	2019
6	Undergraduate	3	Designing Air Pollution Control Strategies for Industrial Emissions at Dammam	2017	2018
7	Undergraduate	4	Design of a Bioreactor System to Control LFG emissions from Dammam Landfill Area	2016	2017

ADMINISTRATIVE RESPONSIBILITIES, COMMITTEE, AND COMMUNITY SERVICE

Administrative Responsibilities

#	From	To	Position	Organization
1	2015	2019	Head coordinator of all labs in the department	Env Eng Dept / IAU

Committee Membership

#	From	To	Position	Organization
1	2018	-	Practical Teaching Committee, Member	Academic Initiatives Directorate of IAU
2	2018	-	Practical Exams Committee, Member	College of Engineering, IAU
3	2018	-	Scientific Research Committee, Member	College of Engineering, IAU
4	2017	-	Academic Advising Committee, Member	College of Engineering, IAU
5	2017	2019	Laboratory Committee, Head	Environmental Engineering Department, IAU
6	2017	2018	Higher Education Committee, Member	Environmental Engineering Department, IAU
7	2015	2018	Quality and ABET Committee, Member	Environmental Engineering Department, IAU
8	2015	2018	ABET Technical Committee, Member	Vice Deanship for Quality & Strategic Planning, College of Engineering, IAU
9	2015	2016	Community Service Committee, Member	Vice Deanship for Training and Community Service, College of Engineering, IAU

Community Service

#	Service Type	Duration	Date	Service Name
1	Class Activity	1 day	2020	Technical trip to Baker Hughes & Emerson Headquarters and R&D centers
2	Research	6 months	2020	Design and Optimization of Air Pollution Control Technology in Power Plant Generation in Saudi Arabia
3	Social Development Project	12 hours	2019	EcoTree (Sanabel AlHasad Award, Winner Project of 2018) (Prize: 100,000 SR)

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	*Computer & IT* Programming with C+ & Java, MS Project, Primavera, Origin, Chem Office, AutoCAD, Ansys Fluent, SPSS, Minitab, Surfer, QGIS, Aermod, and RegChem
2	*Technical* • Atomic Absorption Spectrometry (AAS, FAAS, GFAAS, and HGAAS modes), Inductively Coupled Plasma (ICP-OES), • Ion Chromatography (IC), • Gas Chromatography Mass Spectrometry (GC-MS), • High Performance Liquid Chromatography (HPLC), • Microwave Digestion Systems, • Solid Phase Micro Extraction (SPME) • Low-cost environmental sensors
publons	https://publons.com/researcher/3333729/ismail-anil/
ORCID	https://orcid.org/0000-0003-1184-5140
Scopus	https://www.scopus.com/authid/detail.uri?authorId=33367506300
	https://scholar.google.com/citations?user=qDK5mO4AAAAJ&hl=en
RG	https://www.researchgate.net/profile/Ismail_Anil2
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