



# 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	<u>Thesis Title:</u> Air Quality Assessment of Buyukcekmece by Sampling and Analysis of Wet and Dry Deposition <u>Scholarship:</u> PhD scholarship by Scientific and Technological Research Council of Turkey
MSc	<u>Thesis Title:</u> Investigation of Traffic Related Inhalable Particulate Matter in Istanbul <u>Scholarship:</u> 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	Lamya Saad Algarni, Shahed Abdelbagi Assad, <u>Ismail Anil</u> , Tanvir Sayeed, and Omer Aga	Application of Hydrocyclone Combined with Electrocoagulation as Pretreatment to Improve the Quality of Seawater Intake in Desalination	Submitted
2	<u>Ismail Anil</u> and Omer Aga	Dispersion Modeling And Assessment Of Volatile Organic Compound Emissions From A Municipal Wastewater Treatment Plant	Water Air Soil Pollut 236, 262 (2025). <a href="https://doi.org/10.1007/s11270-025-07936-w">https://doi.org/10.1007/s11270-025-07936-w</a>
3	Abulrahman Alzaid, <u>Ismail Anil</u> , Omer Aga	Simulation and Assessment of Episodic Dust Storms Using HYSPLIT Trajectory Model and Satellite Observations	Atmosphere 2024, 15(12), 1515; Doi: 10.3390/atmos15121515
4	Huseyin Tombuloglu, Cevat Yaman, Imane Boudelloua, Emre Cevik, <u>Ismail Anil</u> , 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), Doi: 10.1007/s13205-023-03460-y
5	Seyda T. Gunday, Emre Cevik, Sarah Asiri, Arfa Iqbal, Atheel Almofleh, Ameerah N. Alqarni, <u>Ismail Anil</u> , 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
6	Najah Al-Garawi and <u>Ismail Anil</u>	Geographical Distribution and Modeling of the Impact of Women Driving Cars on the Sustainable Development of Saudi Arabia	Sustainability 13 (17), 9941, 2021



#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
7	Seyda Tugba Gunday, Huseyin Tombuloglu, <u>Ismail Anil</u> , 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
8	Cevat Yaman, <u>Ismail Anil</u> , Omar Alagha, Nawaf Isam Blaisi, Ayse Burcu Yaman, Aleem Qureshi, Emre Cevik, Suriya Rehman, Seyda Tugba Gunday, Mohammad Barhouthi	Toluene Bioremediation by Using Geotextile-Layered Permeable Reactive Barriers (PRBs)	Processes 2021, 9(6), 906, 2021
9	Seyda Tugba Gunday Anil, Talal Qahtan, Emre Cevik, <u>Ismail Anil</u> , 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
10	<u>Anil, Ismail</u> ; 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
11	Mu'azu, Nuhu Dalhat; Alagha, Omar; <u>Anil, Ismail</u>	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
12	Gunday, Seyda T.; Cevik, Emre; <u>Anil, Ismail</u> ; 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
13	<u>Anil, Ismail</u> ; 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
14	Yaman, Cevat; <u>Anil, Ismail</u> ; 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
15	Alagha, Omar; Manzar, Mohammad Saood; Zubair, Mukarram; <u>Anil, Ismail</u> ; Mu'azu, Nuhu Dalhat; Qureshi, Aleem	Magnetic Mg-Fe/LDH Intercalated Activated Carbon Composites for Nitrate and Phosphate Removal from Wastewater: Insight into Behavior and Mechanisms	NANOMATERIALS Volume: 10 Issue: 7 Article Number: 1361 Published: JUL 2020
16	Zubair, Mukarram; Manzar, Mohammad Saood; Mu'azu, Nuhu Dalhat; <u>Anil, Ismail</u> ; Blaisi, Nawaf I.; Al-Harathi, 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



#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
17	Tombuloglu, Huseyin; <u>Anil, Ismail</u> ; 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
18	Cevik, Emre; Tombuloglu, Huseyin; <u>Anil, Ismail</u> ; 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
19	Alagha, Omar; Allazem, Ahmed; Bukhari, Alaadin A.; <u>Anil, Ismail</u> ; 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
20	Gunday, Seyda Tugba; Cevik, Emre; <u>Anil, Ismail</u> ; 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
21	Alagha, Omar; Manzar, Mohammad Saood; Zubair, Mukarram; <u>Anil, Ismail</u> ; Mu'azu, Nuhu Dalhat; Qureshi, Aleem	Comparative Adsorptive Removal of Phosphate and Nitrate from Wastewater Using Biochar-MgAl LDH Nanocomposites: Coexisting Anions Effect and Mechanistic Studies	NANOMATERIALS Volume: 10 Issue: 2 Article Number: 336 Published: FEB 2020
22	<u>Anil, Ismail</u> ; 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
23	<u>Anil, Ismail</u> ; 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
24	Yaman, Cevat; <u>Anil, Ismail</u> ; 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



#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
25	Cevik, Emre; Gunday, Seyda Tugba; <u>Anil, Ismail</u> ; 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
26	Karaca, Ferhat; <u>Anil, Ismail</u> ; 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
27	<u>Anil, Ismail</u> ; Gunday, Seyda Tugba; Alagha, Omar; Bozkurt, Ayhan	Synthesis, Characterization, and Swelling Behaviors of Poly(acrylic acid-co-acrylamide)/Pozzolan Superabsorbent Polymers	JOURNAL OF POLYMERS AND THE ENVIRONMENT Volume: 27 Issue: 5 Pages: 1086-1095 Published: MAY 2019
28	<u>Anil, Ismail</u> ; 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
29	<u>Anil, Ismail</u> ; 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
30	Ozoner, Seyda Korkut; Erhan, Elif; Yilmaz, Faruk; Ergenekon, Pinar; <u>Anil, Ismail</u>	Electrochemical biosensor for detection of formaldehyde in rainwater	JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY Volume: 88 Issue: 4 Pages: 727-732 Published: APR 2013
31	<u>Anil, Ismail</u> ; 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
32	Goren, Sami; <u>Anil, Ismail</u> ; 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
33	<u>Anil, Ismail</u> ; 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
34	Karaca, Ferhat; <u>Anil, Ismail</u> ; Alagha, Omar	Long-range potential source contributions of episodic aerosol events to PM <sub>10</sub> 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	Phosphonic hydrogel synthesis method	A. Bozkurt, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-12157788-B1	03/12/2024
2	Cross linked polymer hydrogel	A. Bozkurt, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-12116446-B1	15/10/2024
3	Method for making an aqueous hydrogel composition	A. Bozkurt, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-12091487-B2	17/09/2024
4	Water-based polymer hydrogel system	A. Bozkurt, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-12037439-B2	16/07/2024
5	BIO-ELECTROCHEMICAL FUEL CELL	Emre Cevik, ISMAIL ANIL, O. Aga, M. Senel	IAU	USPTO	US-20240079624-A1	07/03/2024
6	Polymer hydrogel composition	A. Bozkurt, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-11795246-B2	24/10/2023
7	AQUEOUS SOLUTION METHOD FOR FORMING A HYDROGEL COMPOSITION	A. Bozkurt, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-20230279163-A1	07/09/2023
8	Method for making polyvinyl hydrogel	A. Bozkurt, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-11708435-B2	25/07/2023
9	Crosslinked polyvinyl polymer hydrogel	A. Bozkurt, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-11649304-B2	16/05/2023
10	Aqueous polymerization process for forming crosslinked polyvinyl polymer hydrogel	A. Bozkurt, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-11618792-B2	04/04/2023
11	Crosslinked polyvinyl matrix for water treatment	A. Bozkurt, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-11479623-B2	25/10/2022
12	SUPER ABSORBING RESIN COMPOSITE WITH BASE MATERIAL FOR IMPROVING SOIL WATER RETENTION	A. Bozkurt, O. Aga, H. Tombuloglu, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-20220267674-A1	25/08/2022



No	Patent Title	Inventors	Assignee	Patenting Institution	Patent No	Date
13	Method for improving water retention in a soil	A. Bozkurt, O. Aga, H. Tombuloglu, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-11352559-B2	07/06/2022
14	POZZOLAN POLYMER COMPOSITE FOR SOIL AMENDMENT	A. Bozkurt, O. Aga, H. Tombuloglu, S. T. G. Anil, ISMAIL ANIL	IAU	USPTO	US-20200102498-A1	02/04/2020
15	Apparatus for wind energy production and air purification	O. Aga and ISMAIL ANIL	IAU	USPTO	US-10253754-B2	09/04/2019

#### 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 <sub>2,5</sub> : 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
3	İsmail Anıl, Nihan Uygur, Ferhat Karaca, Omar Alagha, Levent Kuzu, and Ferruh Ertürk,	Investigation of Traffic Related PM <sub>2,5</sub> and PM <sub>2,5-10</sub> 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 <sub>1</sub> Predictor: A Prediction Model of Hourly Traffic Related PM <sub>2,5</sub> and PM <sub>2,5-10</sub> 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.



#	Name of Investigator(s)	Research Title	Conference and Publication Date
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
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	Abdüsamet 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 İlki, 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
22	İsmail Anıl, Ferhat Karaca, and Kurtuluş Gölcük	ATR-FTIR Spectroscopic Study of Functional Groups in Aerosols: The	The Second International Conference on Water, Energy and the Environment, 2013



#	Name of Investigator(s)	Research Title	Conference and Publication Date
		Contribution of a Saharan Dust Transport to Urban Atmosphere in Istanbul, Turkey	
23	<u>Ismail Anil</u> and Omar Alagha	Sources, Fate, and Behavior of Polycyclic Aromatic Hydrocarbons (PAHs) in the Atmosphere: A case study in Istanbul, Turkey	The 8 <sup>th</sup> Symposium & Exhibition on Environmental Progress in the Petroleum & Petrochemical Industry, 2016
24	Alagha, O. and <u>Anil, I.</u>	Long-range transport contribution to episodic PM10 events over Dammam, Saudi Arabia: Potential Source Contribution & GIS Mapping Approach	The 12 <sup>th</sup> GIS Symposium in Saudi Arabia, 2018
25	<u>Ismail Anil</u> and Omar Alagha	Assessment of Air Pollution over Dammam: Air Quality Index, Source Apportionment, and a Novel Mitigation Approach (EcoTree)	The 9 <sup>th</sup> Symposium & Exhibition on Environmental Progress in the Petroleum & Petrochemical Industry, 2019
26	Seyda Tugba Gunday, <u>Ismail Anil</u> , 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, <u>Anil Ismail</u> , 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	<u>Anil Ismail</u> and Omer Aga	Effect of COVID-19 Lockdown on Ambient Black Carbon Levels	PetroEnvironment 2022, 17 - 18 MAY 2022 DAMMAM, SAUDI ARABIA
29	N AlDossary, F AlKhowildi, J Mayoof, K AlHajji, M Zubair, <u>I Anil</u>	Design of Biochar Based Adsorber (Bio-Sorb) for Direct Carbon Capture	International Petroleum Technology Conference, IPTC-24550-EA, 2024

#### COMPLETED RESEARCH PROJECTS

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	Omar Alagha and <u>Ismail Anil</u> (Fatih University)	Investigation of Traffic Related Inhalable Particulate Matter in Istanbul	2008
2	Sami Gören and <u>Ismail Anil</u> (Fatih University)	Monitoring The Soil Displacements in The Fatih University Campus Area	2008
3	Omar Alagha, Ferhat Karaca, and <u>Ismail Anil</u> (Fatih University)	The Development of a Fully Automated Sequential Wet Deposition Sampler	2009
4	<u>Ismail Anil</u> and Omar Alagha (Istanbul Metropolitan Municipality)	Investigation of Traffic Related PM <sub>2,5</sub> and PM <sub>2,5-10</sub> in Istanbul	2009



#	Name of Investigator(s) (Supported by)	Research Title	Report Date
5	Ferhat Karaca and <u>Ismail Anil</u> (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 <u>Ismail Anil</u> (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 <u>Ismail Anil</u> (Fatih University)	Developing a Passive Ozone Monitoring Sampler Complying with 8-Hour Standards of European Union	2010
8	Sami Gören and <u>Ismail Anil</u> (Fatih University)	The Characterization of Medical Waste Incineration Ash	2010
9	Omar Alagha and <u>Ismail Anil</u> (Fatih University)	Investigation of Airborne Biological Pollutants in Indoor Environment	2010
10	Omar Alagha and <u>Ismail Anil</u> (Fatih University)	Sampling of PAHs by Using Fully Automated Sequential Wet Deposition Sampler and Analysis of PAHs with Optimized Solid-Phase Microextraction Method	2011
11	Ferhat Karaca and <u>Ismail Anil</u> (Fatih University)	Developing an Adsorption Treatment Method for Siloxanes in Biogas Spreading from Waste Storage Area	2011
12	Pinar Ergenekon, Naciye Öztürk, and <u>Ismail Anil</u> (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 <u>Ismail Anil</u> (STRCT)	Determination of the Discharge Color Standard for Treated Wastewaters Containing Dyes and Investigation of Treatment Technologies	2013
14	<u>Ismail Anil</u> , Omar Alagha, Mukarram Zubeir, Mohammad Saood Manzar	Air Quality and Polycyclic Aromatic Hydrocarbons over Dammam Atmosphere: Quantification, Source Apportionment, Transport Modeling, and Health Risk Assessment	2016
15	Omar Alagha, <u>Ismail Anil</u> , Nawaf Blaisi, Cevat Yaman	Pilot Scale Bio-filter: Control Odor and Green House Gases from Landfill Gas Emissions	2018
16	Cevat Yaman, <u>Ismail Anil</u> , Omar Alagha, Nawaf Blaisi, Emre Cevik	Laboratory Scale In-Situ Petroleum Hydrocarbon Bioremediation by using Geotextile filter, Bacteria and Nutrients	2019
17	<u>Ismail Anil</u> , Omar Alagha, Emre Cevik, Hussein Sabit	Construction of Novel Photo-Bioelectrochemical fuel Cells for Electricity Production by Harvesting Light Energy	2019
18	Ayhan Bozkurt, Omar Alagha, <u>Ismail Anil</u> , Emre Cevik	The production of novel Hydrophobic/hydrophilic redox-active sulfonated solid/gel polymers as cost-effective electrolytes for flexible supercapacitor and lithium-sulfur battery	2020
19	Emre Cevik, Omar Alagha, <u>Ismail Anil</u> , Ayhan Bozkurt, Hussein Sabit	Direct electricity production by harvesting solar energy; Fabrication of novel high efficiency photo-anodes assembled photo-bioelectrochemical fuel cells.	2020



## PROJECTS WITH INDUSTRY

#	Client	Project Title	Report Date
1	Khobar Municipality	Dispersion Modeling and Assessment of Volatile Organic Compound Emissions from a Dhahran Municipal Wastewater Treatment Plant	2025
2	Dammam Municipality	Investigation and Modelling of Greenhouse Gas Emissions and Dispersions from Waste Collection and Transport Activities	2023
3	Dammam Municipality	Dispersion Modeling and Health Impact Assessment from Dammam Sanitary Landfill	2020
4	Atatürk/Istanbul International Airport	Estimation and dispersion modeling of landing and take-off (LTO) cycle emissions from Atatürk/Istanbul International Airport	2017

## CURRENT RESEARCH

#	Research Title	Name of Investigator(s)
1	Source apportionment of ambient black carbon in the Eastern Region of Saudi Arabia	<u>Ismail Anil</u> and Omer Aga
2	Dispersion of traffic emissions over Dammam highways and its health risk assessment	<u>Ismail Anil</u> and Omer Aga
3	Development of a superabsorbent for treating textile dye pollution	<u>Ismail Anil</u> and Seyda Tugba Gunday
4	Degradation of plastic packaging materials under arid conditions and potential health impacts	<u>Ismail Anil</u> , Omer Aga, and Seyda Tugba Gunday

## 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 28 <sup>th</sup> , 2016	Organizing and Scientific Committee Member
2	17 <sup>th</sup> International Water Technology Conference	Turkey, 2013, Organized by International Water Technology Association (Egypt) & Fatih University	Organizing and Scientific Committee Member
3	16 <sup>th</sup> 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	6 Lectures
2	Special Topics	ENVEN 594	2 Lectures
3	Environmental Eng. Fundamentals	ENVEN 311	3 Lectures
4	Sanitary Engineering	ENVEN 471	4 Lectures
5	Noise Pollution & Control	ENVEN 563	9 Lectures
6	Air Pollution Control	ENVEN 442	9 Lectures / with Lab
7	Environmental Chemistry	CHEM 311	5 Lectures / with Lab
8	Air Pollution	ENVEN 421	6 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	<p><i>Design of Environmental Projects - ENVEN 501:</i></p> <p>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.</p>
2	<p><i>Special Topics - ENVEN 594:</i></p> <p>The latest developments in environmental engineering, locally, regionally and internationally are presented in this course.</p>
3	<p><i>Environmental Eng. Fundamentals - ENVEN 311:</i></p> <p>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.</p>
4	<p><i>Sanitary Engineering - ENVEN 471:</i></p> <p>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.</p>
5	<p><i>Noise Pollution &amp; Control - ENVEN 563:</i></p> <p>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</p>



	in noise pollution measurement and control; indoor and outdoor sound; noise reduction and isolation and design noise control devices.
6	<p><i>Air Pollution Control - ENVEN 442:</i></p> <p>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.</p>
7	<p><i>Environmental Chemistry - CHEM 311:</i></p> <p>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.</p>
8	<p><i>Air Pollution - ENVEN 421:</i></p> <p>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.</p>
9	<p><i>Materials Science in Environmental Engineering - ENVE 210:</i></p> <p>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.</p>
10	<p><i>Introduction to Environmental Engineering - ENVE 101:</i></p> <p>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.</p>
11	<p><i>Industrial Pollution Control - ISG 516:</i></p> <p>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.</p>
12	<p><i>Environmental Sampling &amp; Analysis - ENVE 450:</i></p> <p>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.</p>
13	<p><i>Engineering Thermodynamics - ENVE 205:</i></p> <p>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.</p>
14	<p><i>Basic Computer Software for Environmental Engineers - ENVE 111:</i></p>



	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	<p><i>Industrial Training I &amp; II - ENVE 299/399:</i></p> <p>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.</p> <p>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.</p>
16	<p><i>Engineering Drawing - ENGR 104:</i></p> <p>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.</p>

#### 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	3 Lectures with Computer Lab
2	Advanced Air Pollution Control	ENVEN 608	3 Lecture
3	Advanced Biostatistics	BTEC 648	1 Lecture

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

1	<p><i>Application of Prediction Models in Environmental Engineering – ENVEN 611:</i></p> <p>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&amp;3D Modeling, computational fluid dynamic modeling, and Environmental Protection Agency (EPA) LanGEM, IWarm, and AERMOD models are applied to real environmental datasets.</p>
2	<p><i>Advanced Air Pollution Control - ENVEN 608</i></p> <p>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.</p>
2	<p><i>Advanced Biostatistics - BTEC 648:</i></p> <p>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</p>



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

### MSc Thesis

#	Supervision	Student Name	Thesis Title	Institution	Year
1	Advisor	Abdulrahman Suhail Alzaid	Validation of Dust Storm Prediction Model and Estimation of Dust Storms' Impact on the Solar Energy Utilization Efficiency in The Eastern Province	IAU	2023-24
2	Co-Advisor	Waleed Talal Alafif	Human Health Risk Assessment of Industrial Air Pollutant Emissions Under Different Mitigation Scenarios Using Dispersion Modeling	KFUPM	2023-24

### Senior Design/Capstone Projects

#	Level	# of Students	Research Topic	From	To
1	Graduate	1	Development of a Predictive Emission Monitoring System for a Petrochemical Industry Using Machine Learning Models	2023	2024
2	Graduate	1	Investigating environmental impacts of long-term dust storms over the Southwestern region of Saudi Arabia	2021	2022
2	Undergraduate	5	Design of Closed-Loop Dust Mitigation in Aggregate Mining: Enhancing Air Quality and Sustainability at the Second Stage Crusher	2024	2025
3	Undergraduate	5	Managing plastics waste related to the recycling process involving copper wire cables	2024	2025
4	Undergraduate	5	Designing a control system for Bauxite dust emission from the stockpile during the unloading activity	2024	2025
5	Undergraduate	4	Design of a Flare Gas Recovery Unit: Emission Reduction and Comparative Health Impact Assessment Using AERMOD	2024	2025
6	Undergraduate	4	Design of User-Friendly, Low-cost, Lightweight, and Smart Personal Air Sampler for Indoor Air Quality	2023	2024
7	Undergraduate	5	Design of an indoor air purification system using activated carbon and sustainable materials	2023	2024
	Undergraduate	5	Design a Hydrocyclone Separator as a Pre-treatment Process for Desalination Plant Seawater Intake	2023	2024



Undergraduate	4	Design and model Biochar-Adsorber (Bio-sorb) for direct carbon capture (DCC)	2022	2023
Undergraduate	4	Outdoor smart air quality monitoring system design for EcoTree air purification efficiency evaluation	2022	2023
Undergraduate	4	Design & Development of a Low-cost Portable Water Monitoring System	2022	2023
Undergraduate	4	Design of a Low-Cost Indoor Air Quality Monitoring Station	2021	2022
Undergraduate	3	Design and Optimization of an Air Pollution Control Technology in Power Plant Generation in Saudi Arabia	2020	2021
Undergraduate	4	Air Quality Drone: Design of Smart Indoor and Outdoor Air Pollutants Sampling	2019	2020
Undergraduate	3	Ventilation Design by Computational Fluid Dynamics to Improve Indoor Air Quality at KFU Hospital	2018	2019
Undergraduate	3	Designing Air Pollution Control Strategies for Industrial Emissions at Dammam	2017	2018
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	2024	-	ABET/NCAAA Technical Committee, Member	Vice Deanship for Quality & Strategic Planning, College of Engineering, IAU
2	2018	2023	Practical Teaching Committee, Member	Academic Initiatives Directorate of IAU
3	2018	2023	Practical Exams Committee, Member	College of Engineering, IAU
4	2018	2022	Scientific Research Committee, Member	College of Engineering, IAU
5	2017	2024	Academic Advising Committee, Member	College of Engineering, IAU
6	2017	2019	Laboratory Committee, Head	Environmental Engineering Department, IAU



#	From	To	Position	Organization
7	2017	2018	Higher Education Committee, Member	Environmental Engineering Department, IAU
8	2015	2018	Quality and ABET Committee, Member	Environmental Engineering Department, IAU
9	2015	2018	ABET Technical Committee, Member	Vice Deanship for Quality & Strategic Planning, College of Engineering, IAU
10	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	<p style="text-align: center;"><i>Computer &amp; IT</i></p> <ul style="list-style-type: none"> <li>● Programming with C+ &amp; Java</li> <li>● MS Office Project</li> <li>● Primavera Project Management</li> <li>● Origin</li> <li>● AutoCAD 2D/3D</li> <li>● Ansys Fluent Simulation</li> <li>● HYSPLIT</li> <li>● Statistical Analysis and Modeling: SPSS and Minitab</li> <li>● Geographic Information Systems: Surfer and QGIS</li> <li>● Atmospheric Dispersion Modeling: EPA's AERMOD and CALPUFF</li> <li>● Artificial Intelligence Modeling: IBM Modeler and Watson Studio</li> </ul>
2	<p style="text-align: center;"><i>Technical</i></p> <ul style="list-style-type: none"> <li>● Atomic Absorption Spectrometry (AAS, FAAS, GFAAS, and HGAAS modes)</li> <li>● Inductively Coupled Plasma (ICP-OES),</li> <li>● Ion Chromatography (IC),</li> <li>● Gas Chromatography Mass Spectrometry (GC-MS),</li> <li>● High Performance Liquid Chromatography (HPLC),</li> <li>● Microwave Digestion Systems,</li> <li>● Solid Phase Micro Extraction (SPME)</li> <li>● Low-cost environmental sensors</li> </ul>



## RESEARCHER PROFILES

	<a href="https://www.webofscience.com/wos/author/record/AAD-3431-2019">https://www.webofscience.com/wos/author/record/AAD-3431-2019</a>
	<a href="https://orcid.org/0000-0003-1184-5140">https://orcid.org/0000-0003-1184-5140</a>
	<a href="https://www.scopus.com/authid/detail.uri?authorId=33367506300">https://www.scopus.com/authid/detail.uri?authorId=33367506300</a>
	<a href="https://scholar.google.com/citations?user=qDK5mO4AAAAJ&amp;hl=en">https://scholar.google.com/citations?user=qDK5mO4AAAAJ&amp;hl=en</a>
	<a href="https://www.researchgate.net/profile/Ismail_Anil2">https://www.researchgate.net/profile/Ismail_Anil2</a>
	<a href="https://www.linkedin.com/in/ismail-anil-32867824/">https://www.linkedin.com/in/ismail-anil-32867824/</a>

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