

Mohamed Ateia Ibrahim, Ph.D.

Environmental Engineer/Group Leader, US Environmental Protection Agency (US EPA)

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APPOINTMENTS

- Environmental Engineer and Group Leader** [08/2021 – Current] – **US Environmental Protection Agency**
Office of Research and Development
Center for Environmental Solutions & Emergency Response (CESER), OH, **USA**.
- Adj. Assistant Professor** [01/2023 – Current] – **Rice University**
Chemical and Biomolecular Engineering Department, TX, **USA**.
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PROFESSIONAL PREPARATION

- Research Associate** [11/2019 – 07/2021] – Department of Chemistry.
Northwestern University, IL, **USA**.
PI: Prof. William Dichtel
- Post-doc.** [11/2017 – 10/2019] – Environmental Engineering and Earth Sciences.
Clemson University, SC, **USA**. [*Distinguished Postdoctoral Award* ★]
PI: Prof. Tanju Karanfil
- Ph.D.** [10/2014 – 09/2017] – Environmental Engineering (Minor in Material Science Engineering).
Tokyo Institute of Technology, Tokyo, **Japan**. [*Best Ph.D. Dissertation Award* ★]
Advisor: Prof. Chihiro Yoshimura
- [06/2015 – 10/2015 - 07/2016 – 10/2016] – Environmental Chemistry (Visiting Researcher)
Department of Chemistry, University of Copenhagen, **Denmark**.
Host: Prof. Matthew S. Johnson
- M.S.** [10/2012 – 09/2014] – Environmental Engineering (Minor in Material Science Engineering).
Tokyo Institute of Technology, Tokyo, **Japan**.
Advisor: Prof. Chihiro Yoshimura
- [08/2013 – 09/2013] – Science Communication for Global Scientists (Intern)
The Royal Society and Parliamentary Office of Science and Technology (POST), London, **UK**.
Host: Prof. Michael Norton
- B.S.** [09/2005 – 06/2009] – Environmental and Agricultural Engineering.
Alexandria University, Alexandria, **Egypt**.

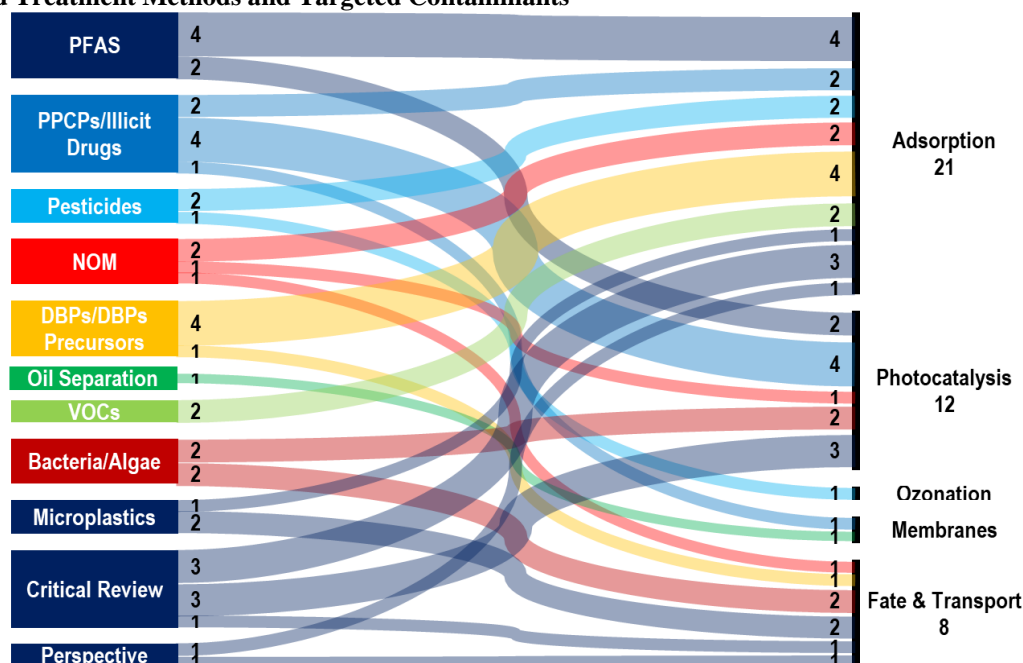
AWARDS AND HONORS

11. **11/2022: 2022 40 under 40 Recognition Program**, The American Academy of Environmental Engineers and Scientists.
10. **08/2019: 2019 Clemson University Distinguished Postdoctoral Award**, Clemson University, USA.
9. **06/2019: Certificate of Merit**, Division of Environmental Chemistry, American Chemical Society.
8. **04/2019: Outstanding Presentation Award**, American Chemical Society (ACS) 257th National Meeting and Exhibition, April 2019, Orlando, FL, USA.
7. **12/2017: The Best Ph.D. Dissertation Award. First Place Prize**. Kikkawa-Yamaguchi Award 2017, Tokyo Institute of Technology, Japan.
6. **11/2015: The First Place Prize**. Honda Young-Engineers-Scientists (Y-E-S) Forum, Tokyo, Japan.
5. **12/2014: Best Presentation Award**, ACEEES Third International Educational Forum on Environment and Energy Sciences, Perth, Australia.
4. **11/2014: Best Presentation Award for Young Researchers**, 9th IWA International Symposium on Waste Management Problems in Agro-Industries, International Water Association (IWA), Kochi, Japan.
3. **10/2014 – 09/2017**: Japanese Government Scholarship (MEXT).
2. **10/2013: Certificate of Excellence - Best Presentation Award**, Tokyo Tech-KU joint seminar, Tokyo, Japan.
1. **10/2012 – 09/2014**: Japanese Government Scholarship (MEXT).

PUBLICATIONS

Summary: Total Published Peer Reviewed Articles: **62**
 First Author (Co-First Author) Articles: **25**
 Corresponding Author Articles: **34**
 Times cited: Over **2300** with H-index = **26**
 Google Scholar: <https://scholar.google.com/citations?user=Ss5MnZUAAAAJ&hl=en>

Peer Reviewed Treatment Methods and Targeted Contaminants



Peer Reviewed Publications (*: Corresponding author, ^o: Equal contribution with first author)**2023**

62. **Ateia M.***, Van Buren J., Barrett W., Martin T., and Back J. (2023) Sunrise of PFAS Replacements – A Perspective on Fluorine-free Foams (F3). *ACS Sustainable Chemistry & Engineering*.
61. **Ateia M.***, Chiang D., Cashman M., and Acheson C. (2023) Total Oxidizable Precursor (TOP) Assay—Best Practices, Capabilities and Limitations for PFAS Site Investigation and Remediation. *Environmental Science & Technology Letters*.
- 60.** Yusuf K., Natraj A., Li K., **Ateia M.**, AlOthman Z., and Dichtel W. (2023) Inverse Gas Chromatography Demonstrates the Crystallinity-Dependent Physicochemical Properties of Two-Dimensional Covalent Organic Framework Stationary Phases. *Chemistry of Materials*.
59. Collins A., **Ateia M.**, Bhagat K., Ohno T., Perreault F., and Apul O. (2023) Microplastic-Based Leachate Formation: The Extent, Characteristics and Formation Mechanisms under UV Irradiation. *RSC Environmental Science: Water Research & Technology*.
58. Hue R., Wai M., Siev S., Ann V., **Ateia M.***, and Yoshimura C. (2022) Dissolved silicon in a lake-floodplain system: Dynamics and its role in primary production. *Science of The Total Environment*.

2022

57. Verma S., Lee T., Sahle-Demessie E., **Ateia M.**, and Nadagouda M. (2022) Recent Advances on PFAS Degradation via Thermal and Nonthermal Methods. *Chemical Engineering Journal Advances*.
56. Nighojkar A., Zimmermann K., **Ateia M.**, Barbeau B., Mohseni M., Dixit F., and Kandasubramanian B. (2022) Application of neural network in metal adsorption using biomaterials (BMs): A review. *Environmental Science: Advances*.
- 55.** Natraj A., Ji W., Xin J., Castano I., Burke D., Evans A., **Ateia M.**, Hamachi L., Yusuf K., and Dichtel W. (2022) Single-Crystalline Imine-Linked Two-Dimensional Covalent Organic Frameworks Separate Benzene and Cyclohexane Efficiently. *Journal of the American Chemical Society*.
54. Trang B., Li Y., Xue X., **Ateia M.**, Houk K., Dichtel W. (2022) Low-temperature mineralization of perfluorocarboxylic acids. *Science*.
53. Arabkhani P., Asfaram A., Aghaei-Jazeh M., **Ateia M.*** (2022) Plant-mediated green synthesis of nanocomposite-based multifunctional adsorbent with antibacterial activity and high removal efficiency of micropollutants from contaminated waters. *Journal of Water Process Engineering*.
52. Wang M., **Ateia M.***, Hatano Y., and Yoshimura C. (2022) Regrowth of Escherichia coli in environmental waters after chlorine disinfection: Shifts in viability and culturability. *RSC Environmental Science: Water Research & Technology*.
51. Mousa H.M., Fahmy H., Ali G.A., Abdelhamid H.N., and **Ateia M.** (2022) Membranes for Oil/Water Separation: A Review. *Advanced Materials Interfaces*.
- 50.** Wang R., Lin Z.W., Klemes M.J., **Ateia M.**, Trang B., Wang J., Ching C., Helbling D.E., Dichtel W. R. (2022) A Tunable Porous β -Cyclodextrin Polymer Platform to Understand and Improve Anionic PFAS Removal. *ACS Central Science*.
49. Roy I., Evans A., Das P. J., **Ateia M.**, Ryder M. R., Jones L. O., Kazem-Rostami M., Goswami S., Beldjoudi Y., Shen D., Schatz G. C., Hupp J. T., Dichte W. R., and Stoddart J. F. (2022) Cyclophane-based two-dimensional polymer formed by an interfacial click reaction. *Cell Reports Physical Science*.

48. **Ateia M.***, Ersan G., Gar M., Boffito DC. and Karanfil T. (2022) Microplastics Sources, Fate, Toxicity, Detection, and Interactions with Micropollutants in Aquatic Ecosystems – A Review of Reviews. *Environmental Science: Processes & Impacts*.
47. Gudda F. O., **Ateia M.**, Waigi M. G., Wang J., Gao Y. (2022) Ecological and human health risks of manure-borne steroid estrogens: A 20-year global synthesis study. *Journal Environmental Management*.
46. Wang M., **Ateia M.***, Hatano Y., Miyanaga K., and Yoshimura C. (2022) Novel Fluorescence-Based Method for Rapid Quantification of Live Bacteria in River Water and Treated Wastewater. *Environmental Science: Advances*.

2021

45. **Ateia M.***, Skala L., Yang A., Dichtel W. R. (2021) Product Analysis and Insight into the Mechanochemical Destruction of Anionic PFAS with Potassium Hydroxide. *Journal of Hazardous Materials Advances*.
44. **Ateia M.*** (2021) Living with Eight Decades of PFAS Contamination — What is known and what is unknown. [Scientific Opinion, Non-Peer Reviewed]. *IDA Global Connections - Summer 2021 Issue - Pages 34-37*.
43. Yu W., Veld M., Bossi R., **Ateia M.***, Tobler D., Feilberg A., Bovet N., and Johnson M. (2021) Formation of Formaldehyde and Other Byproducts by TiO₂ Photocatalyst Materials. *Sustainability*.
42. Yu W., Chen J., **Ateia M.***, Cates E., and Johnson M. (2021) Do Gas Nanobubbles Enhance Aqueous Photocatalysis? Experiment and Analysis of Mechanis. *Catalysts*.
41. Arabkhani P., Javadian H., Asfaram A., and **Ateia M.*** (2021) Decorating graphene oxide with zeolitic imidazolate framework (ZIF-8) and pseudo-boehmite offers ultra-high adsorption capacity of diclofenac in hospital effluents. *Chemosphere*.
40. Awfa D., **Ateia M.*^o**, Mendoza D., Yoshimura C. (2021) Application of QSPR Predictive Models in Water Treatment: A Critical Review. *Environmental Science & Technology Water*.

2020

39. Wang M., **Ateia M.***, Awfa D., and Yoshimura C. (2020) Regrowth of Bacteria after Light-based Disinfection – What do we know and where do we go from here. *Chemosphere*.
38. **Ateia M.***, Helbling D., and Dichtel W. (2020) Best Practices for Evaluating New Materials as Adsorbents for Water Treatment. *ACS Materials Letters*.
37. Dees J., **Ateia M***, and Sanchez D. (2020) Microplastics and their Degradation Products in Surface Waters – A Missing Piece of the Global Carbon Cycle Puzzle. *Environmental Science & Technology Water*. (Scientific Opinion, Non-Peer Reviewed).
36. Qanbarzadeh M., Wang D., **Ateia M.**, Sahu S., Cates E. L. (2020) Impacts of Reactor Configuration, Degradation Mechanisms, and Water Matrices on PFCA Treatment Efficiency by the UV/Bi₃O(OH)(PO₄)₂ Photocatalytic Process. *Environmental Science & Technology Engineering*.
35. Thengane T., Kung K., Gupta A., **Ateia M.**, Sanchez D., et al. (2020) Oxidative torrefaction for cleaner utilization of biomass for soil amendment. *Cleaner Engineering and Technology*.
34. Arabkhani P., Asfaram A., and **Ateia M.*** (2020) Facile Preparation of graphene oxide/sodium montmorillonite nanocomposite adsorbent for water treatment application. *Journal of Water Process Engineering*.
33. Klemes M., Sakala L., **Ateia M.**, Trang B., Helbling D., and Dichtel W. (2020) Polymerized Molecular Receptors as Adsorbents to Remove Micropollutants from Water. *Accounts of Chemical Research*.

32. Erdem C. U., **Ateia M.**, Liu C., Karanfil T. (2020) Activated carbon and organic matter characteristics impact the adsorption of DBPs precursors when chlorine is added prior to GAC contactors. *Water Research*.
31. Heu R., **Ateia M.***, and Yoshimura C. (2020). Photocatalytic Nanofiltration Membrane using Zr-MOF/GO Nanocomposite with High-Flux and Anti-Fouling Properties. *Catalysts Journal*.
- 30.** Heu R., **Ateia M.***, Awfa D., Punyapalakul P., and Yoshimura C. (2020). Photocatalytic Degradation of Organic Micropollutants in Water by Zr-MOF/GO Composites. *Journal of Composites Science*.
29. **Ateia M.***, Kanan A., Karanfil T. (2020) Microplastics Release Precursors of Chlorinated and Brominated Disinfection Byproducts in Water. *Chemosphere*.
28. **Ateia M.***, Zheng T., Calace S., Tharayil N., Srikanth P., and Karanfil T. (2020) Sorption Behavior of Real Microplastics (MPs): Insights for Organic Micropollutants Adsorption on a Large Set of Well-characterized MPs. *Science of the Total Environment*.
27. Mousa H., Alfadhel H., **Ateia M.**, Gomaa A., Abdel-Jaber G. (2020). Polysulfone-Iron Acetate/Polyamide Nanocomposite Membrane for Oil-Water Separation. *Environmental Nanotechnology, Monitoring & Management*.
26. Awfa D., **Ateia M.***, Fujii M., and Yoshimura C. (2020). Photocatalytic degradation of organic micropollutants: Inhibition mechanisms by different fractions of natural organic matter. *Water Research*.
- 25.** Bravo I., Figueroa F., Swasy M., **Ateia M.**, Attia M. F., et al., (2020). Cellulose particles capture aldehyde VOC pollutants. *RSC Advances*.
24. Khalid A., Rowles L., **Ateia M.**, Minhao X., Moses I., Bello D., Karanfil T., Saleh N., and Apul O. (2020). Mesoporous Activated Carbon Shows Superior Adsorption Affinity for 11-Nor-9-Carboxy- Δ 9-Tetrahydrocannabinol in Water. *NPJ Clean Water*.
23. Attia M., Swasy S., **Ateia M.**, Whithead D., and Alexis F. (2020). Periodic mesoporous organosilica nanomaterials for rapid capture of VOCs. *RSC ChemComm*.
22. Soyluoglu M., Ersan M., **Ateia M.**, and Karanfil T (2020) Removal of Bromide from Natural Waters using a Bromide-Selective Ion Exchange Resin. *Chemosphere*.
- 2019**
21. **Ateia M.***, Alsaiee A., Karanfil T., and Dichtel W. (2019). Efficient PFAS Removal by Amine-functionalized Sorbents: Critical Review of the Current Literature. *Environmental Science & Technology Letters*.
- 20.** **Ateia M.***, Gar Alalm M., Awfa D., Johnson M., Yoshimura C. (2019) Modeling the Degradation and Disinfection of Water Pollutants by Photocatalysts and Composites: A Critical Review. *Science of the Total Environment*.
19. **Ateia M.**, Arifuzzaman MD., Pellizzeri S., Attia M. F., Tharayil N., Anker J. N., and Karanfil T. (2019). Cationic Polymer for Selective Removal of GenX and Short-chain PFAS from Surface Waters and Wastewaters at ng/L Levels. *Water Research*.
18. Shimizu Y., **Ateia M.***, Wang M., Awfa D., Yoshimura C. (2019) Disinfection Mechanism of E. Coli by CNT-TiO₂ Composites: Photocatalytic Inactivation vs. Physical Separation. *Chemosphere*.
17. Awfa D., **Ateia M.***, Fujii M., and Yoshimura C. (2019) A Novel Magnetic Carbon Nanotube-TiO₂ Composites for Solar Light Photocatalytic Degradation of Pharmaceuticals in the Presence of Natural Organic Matter. *Journal of Water Process Engineering*.

16. **Ateia M.**, Cagri U., Ersan M., Ceccato M., and Karanfil T. (2019) Selective Removal of Bromide and Iodide from Natural Waters using a Novel AgCl-SPAC Composite at Environmentally Relevant Conditions. *Water Research*.
15. **Ateia M.**, Maroli A., Thiraly N., and Karanfil T. (2019) The Overlooked Short- and Ultrashort-Chain Poly- and Perfluorinated Substances: A Review. *Chemosphere*.

2018

14. **Ateia M.***, Attia M., Maroli A., Thiraly N., Whithead D., Alexis F., and Karanfil T. (2018) Rapid Removal of Poly- and Perfluorinated Alkyl Substances by Polyethylenimine-functionalized Cellulose Microcrystals at Environmentally Relevant Conditions. *Environmental Science & Technology Letters*.
13. Sahu, S.P., Qanbarzadeh, M., **Ateia, M.**, Torkzadeh, H., Maroli, A.S. and Cates, E.L. (2018). Rapid Degradation and Mineralization of Perfluorooctanoic Acid by a New Petitjeanite Bi₃O (OH)(PO₄)₂ Microparticle Ultraviolet Photocatalyst. *Environmental Science & Technology Letters*, 5(8), pp.533-538.
12. Awfa, D., **Ateia, M.*^o**, Fujii, M., Johnson, M. S., Yoshimura, C. (2018). Photodegradation of Pharmaceuticals and Personal Care Products in Water Treatment Using Carbonaceous-TiO₂ Composites: A Critical Review of Recent Literature. *Water Research*.
11. Shimizu, Y., **Ateia, M.*^o**, & Yoshimura, C. (2018). Natural organic matter undergoes different molecular sieving by adsorption on activated carbon and carbon nanotubes. *Chemosphere*, 203, pp.345-352.
10. **Ateia M.***, Ceccato M., Ataman E., Akin B., Yoshimura C., Johnson M. S. (2018) Ozone-assisted Regeneration of Magnetic Carbon Nanotubes to Remove Organic Pollutants from Aqueous Solutions. *Chemical Engineering Journal*, 335, 384-391.

2017

9. **Ateia M.***, Koch C., Jelavic S., Quinson J., Hirt A., Yoshimura C., Johnson M. S. (2017) Magnetic Carbon Nanotubes: Facile, Green and Scalable Preparation for Use in Water Treatment. *PLOS ONE*.
8. **Ateia M.***, Apul O., Shimizu Y., Muflihah A., Yoshimura C., and Karanfil T. (2017) Elucidating Adsorptive Fractions of Natural Organic Matter on Carbon Nanotubes. *Environmental Science & Technology*.
7. **Ateia M.**, Ran J., Fujii M., & Yoshimura C. (2017) The Relationship between Molecular Composition and Fluorescence Properties of Humic Substances. *Int. J. Environ. Sci. Technol.* doi:10.3390/w8100461
6. Nasr M., **Ateia M.**, & Hassan K. (2017). Modeling the Effects of Operational Parameters on Algae Growth. In *Algal Biofuels* (pp. 127-139). Springer International Publishing. DOI: 10.1007/978-3-319-51010-1_7

2016

5. **Ateia M.***, Nasr, M.; Ikeda, A.; Okada, H.; Fujii, M.; Natsuike, M.; Yoshimura, C. (2016) Nonlinear Relationship of Near-bed Velocity and Growth of Riverbed Periphyton. *Water*, 8: 461.
4. **Ateia M.***, Yoshimura C., and Nasr M. (2016) In-situ Biological Water Treatment Technologies for Environmental Remediation: A Review. *J Bioremediation & Biodegradation* 7: 348.

2015

3. **Ateia M.***, Nasr, M., Yoshimura, C., & Fujii, M. (2015). Organic matter removal from saline agricultural drainage wastewater using a moving bed biofilm reactor. *Water Science & Technology*.
2. Nasr, M., **Ateia M.**, & Hassan, K. (2015). Artificial intelligence for greywater treatment using electrocoagulation process. *Separation Science and Technology*.

2014

1. Al-Amoud, A., Mattar, M., & **Ateia M.** (2014). Impact of water temperature and structural parameters on the hydraulic labyrinth-channel emitter performance. Spanish Journal of Agricultural Research.

RESEARCH INTERESTS AND EXPERIENCES

- **Research Interests:**

- Advanced Materials for Environmental Remediation:

- Development of next-generation adsorbents (metal-impregnated carbonaceous materials, graphene-based nanomaterials, covalent-organic frameworks (COFs), metal-organic frameworks (MOFs), new polymeric hybrids) for physicochemical water treatment applications.
 - Development of new catalysts for the efficient degradation of legacy and emerging water contaminants.
 - Implications of new 2-D nanomaterials (graphene and MXenes) for the disinfection of microbes in water.
 - Development of new sensors for emerging water contaminants.

- Detection and Removal of Emerging Water Contaminants

- Assessment of conventional treatment technologies and the development of practical treatment approaches for the removal/degradation of:
 - *Per- and Polyfluoroalkyl Substances (PFAS).*
 - *Pharmaceuticals and Illicit drugs.*
 - *Nano- and Microplastics.*

- **Research Experiences:**

Research Associate. Department of Chemistry, Northwestern University, IL (11/2019 – 07/2021).

CycloPure Company, IL (11/2019 – 10/2020).

- Development of **reactive electrochemical membranes** using metal carbides and metal oxides for the degradation of micropollutants.
 - Development of **new covalent organic frameworks (COFs) composites** for the selective adsorption of U(VI) from seawater.
 - Development **tandem treatment trains** for the degradation of PFAS in regeneration solutions.
 - Elucidating the interactions between **real microplastics and toxic chemicals** in water environments.

Post-Doctoral Fellow. Environmental Engineering and Earth Sciences, Clemson University, SC (11/2017 – 10/2019).

- Development of **novel polymeric materials** for the efficient removal of PFAS.
 - Development of **new catalysts** for the degradation of micropollutants (i.e., PFAS and PPCPs).
 - Development **silver-based carbonaceous composites** for the selective removal of bromide and iodide.
 - Elucidating the interactions between **real microplastics and toxic chemicals** in water environments.
 - Applications of **ion exchange resins for wastewater treatment** and disinfection byproducts control.
 - Removal of **illicit drugs** from water using carbonaceous adsorbents.
 - Leading a **two-year project to monitor the water quality** for a local water utility in SC (monthly sampling from five lakes and one river).

- Writing **grant proposals for national and international funding agencies**; including Water Research Foundation, US EPA, National Science Foundation (NSF), Environmental Research & Education Foundation (EREF), JSPS International Collaboration Grant, Saudi Arabia International Collaboration Grant, US-AID PEER (Egypt), US-AID PEER (Iraq), NPRP (Qatar).
- Initiating, leading and coordinating several research collaborations **within the department** (with Dr. Ezra Cates, Dr. Sudeep Popat, and Dr. Brian Powell), **with other departments** (Dr. Nishanth Tharail, Plant and Environmental Sciences Department and Dr. Daniel Whitehead, Department of Chemistry), and **with other national and international universities** (Dr. Onur Apul, UMass Lowell; Dr. Chihiro Yoshimura, Tokyo Institute of Technology; Dr. Matthew Johnson, University of Copenhagen; and Dr. Michael Naguib, Tulane University; Dr. Marcel Ceccato, Aarhus University).

Graduate Research Assistant. Environmental Engineering, Tokyo Institute of Technology, Tokyo (10/2012 – 09/2017).

- Development of a novel and facile method to prepare magnetic carbon nanotubes (MCNT).
- Adsorption of micropollutants (i.e., pesticides) and natural organic matter on CNT and activated carbon.
- Development of an efficient regeneration method for recycling spent carbonaceous adsorbents.
- Design and test moving bed biofilm reactor (MBBR) for reuse of agricultural wastewater.

TEACHING INTERESTS AND EXPERIENCES

- **Teaching Interests:** Environmental Engineering Processes, Water and Wastewater Quality, Physicochemical Processes in Water and Wastewater Treatment, Environmental Engineering Design, Water Resources Engineering, Environmental Nanotechnology: Applications and Implications of Nano Biomimicry in Environmental Engineering

- **Teaching Experiences:**

Mentor of total **19 graduate students**: Mr. Cagri Utku Erdem, Ms. Meryem Soyluoglu, Mr. Esat Ariturk, Ms. Stefania Calace [Ref.: Dr. Tanju Karanfil], Ms. Paige Taber [Ref.: Dr. Sudeep Popat], Mr. Mojtaba Qanbarzadeh [Ref.: Dr. Ezra Cates], Mr. Dion Awfa, Ms. Rina Heu, Mr. Yuta Shimiza, Ms. Sayako Shoda, Ms. Astri Muflihah, Ms. Dilini Kodikara, and Ms. Manna Wang [Ref.: Dr. Yoshimura Chihiro], Ms. Brittany Trang, Mr. Zhi Lin [Ref.: Dr. Willaim Dichtel].

Mentored Students



Clemson University, Clemson, USA.

- Completed ESED-8210: ‘*Teaching Undergraduate Science*’ [Ref.: Dr. Cindy Lee].
- **Guest Lecturer**-EES 8030: ‘*Physicochemical Water Treatment Systems*’ [Ref.: Dr. Ezra Cates].
- **Guest Lecturer**-EEES Seminar: [Ref.: Dr. Sudeep Popat].

Tokyo Institute of Technology, Tokyo, Japan.

- **Guest Lecturer** ‘*Aquatic Environmental Science*’: [Ref.: Dr. Yoshimura Chihiro].
- **Guest Lecturer** ‘*Water Quality Modelling*’: [Ref.: Dr. Yoshimura Chihiro].
- **Teaching Assistant and Guest Lecturer** ‘*Environmental Statistics*’: [Ref.: Dr. Yoshimura Chihiro].

University of Copenhagen, Copenhagen, Denmark.

- **Guest Lecturer** ‘*Environmental Chemistry*’: [Ref.: Dr. Matthew Johnson].

SERVICES AND PROFESSIONAL ACTIVITIES

Organizer & Host, Innovation in Environmental Science Seminar (11/2021 – Current)

Mentor, The Rural Water Supply Network (RWSN), Supported by *Swiss Agency for Development Cooperation (SDC)* and *The World Bank* (02/2020 – 07/2021).

President, Clemson University Postdoc Association (CUPDA) (02/2019 – 10/2019).

Vice President, Clemson University Postdoc Association (CUPDA) (08/2018 – 02/2019).

Co-Founder, BENAA Association, NGO based in Egypt/Switzerland [bena-global.org] (10/2015 – 07/2021).

Discussion Leader, ‘The Graduate School Experience: What to Expect’ Workshop, Spring ACS National Meeting, Orlando, FL (04/2019).

Trainer, ‘Tips for Effective Communications & Collaborations’ Workshop, GRAD360, Clemson University (02/2019).

Judge, ‘6th Annual Summer Undergraduate Research Symposium’, Clemson University (06/2018).

Trainer, ‘Life After Ph.D.’ Workshop, GRAD360 Program, Clemson University (03/2018).

Speaker: TED^xTitech. Title: (Pause .. Rethink), Tokyo, Japan (01/2017).

Professional Memberships: Holding memberships of:

- American Chemical Society (Environmental Chemistry Division).
- Association of Environmental Engineering and Science Professors (AEESP).
- National Postdoc Association (NPA).

Guest Editor for *Catalysts Journal* [Special Issue "Innovative and Practical Trends in Photocatalytic Degradation of Environmental Pollutants"]

Journal Reviewer for *Water Research*, *Environmental Science & Technology*, *ES&T Letters*, *Advanced Functional Materials*, *ACS Applied NanoMaterials*, *Chemosphere*, *Science of the Total Environment*, *Environmental Chemistry Letters*, *Journal of Hazardous Materials*, *Water Process Engineering*, *Applied Water Science*, and *Journal of Nanostructure in Chemistry*.