ARSEV UMUR AYDINOĞLU

Associate Professor Science and Technology Policy Studies Middle East Technical University Ankara, Turkey - 06800 +90 312 210 2387 aaydinog@metu.edu.tr http://sites.google.com/site/arsevumuraydinoglu/

RESEARCH INTERESTS

Research collaboration, interdisciplinary studies, teamwork, virtual teams, research data management, bibliometrics, astrobiology, origin(s) of life, design thinking, science communication, science and technology studies, quantum information technologies, complex adaptive systems theory.

EMPLOYMENT

Associate Professor – Middle East Technical University, Science and Technology Policies (2017 – present)

Instructor – Middle East Technical University, Design Factory (2016-present)

Tübitak-Marie Curie FP7 CoFund Fellow – Middle East Technical University, Research Center for Science and Technology Policies (2014-2016)

NASA Postdoctoral Program Fellow – NASA Astrobiology Institute (2012-2014)

Visiting Assistant Professor – University of South Carolina, School of Library and Information Science (2011)

Graduate Assistant – University of Tennessee, College of Communication and Information (2008 - 2011)

Public Information Assistant – World Bank Turkey Office (2003-2007)

EDUCATION

PhD, Communication and Information Science (2011), University of Tennessee, USA

 Dissertation: "Complex Adaptive Systems Theory Applied to 'Big Science': The Case of DataONE"
 Dissertation Committee: Suzie Allard (Information Science), Carol Tenopir (Information Science), Virginia Kupritz (Communication Studies), and Heather Douglas (Philosophy).

MSc, Public Relations and Information (2006), Gazi University, Turkey Thesis: "Grunig's Public Information Model: An Application by Turkish Armed Forces"

BSc, Economics (2001), Hacettepe University, Turkey

REFEREED JOURNAL ARTICLES

- Sahinol, M., Aydinoglu, A.U., Aydin Son, Y. & Ozkan, O. (2022). Reflections of Turkish Personal Data Protection Law and genetic data in focus group discussions. *Nanoethics*, doi: 10.1007/s11569-022-00431-0
- 2. Seskir, Z.C., Korkmaz, R. & **Aydinoglu, A.U.** (2022). The Landscape of the Quantum Start-up Ecosystem. *EPJ Quantum Technology, 9*, doi: 10.1140/epjqt/s40507-022-00146-x
- 3. Seskir, Z.C. & **Aydinoglu, A.U.** (2021). The landscape of academic literature in quantum technologies. *International Journal of Quantum Information*. doi:10.1142/S0219749921500012X
- 4. Sik, A.S., **Aydinoglu, A.U.**, Aydin Son, Y. (2021). Assessing the readiness of Turkish health information systems for integrating genetic/genomic patient data: System architecture and available terminologies, legislative, and protection of personal data. *Health Policy*, *125(2)*, p.203-212 doi:https://doi.org/10.1016/j.healthpol.2020.12.004
- 5. Dogan, G., Taskin, Z. & **Aydinoglu, A.U.** (2021). Research data management in Turkey: A survey to build an effective national repository. *IFLA Journal, 47(1),* 51-64.
- Mariscal, C., Barahona, A., Aubert-Kato, N., Aydinoglu, A.U., Bartlett, S., Cárdenas, M.L., Chandru, K., Cleland, C., Cocanougher, B.T., Comfort, N., Cornish-Bowden, A., Deacon, T., Froese, T., Giovannelli, D., Hernlund, J., Hut, P., Kimura, J., Maurel, M.C., Merino, N., Moreno, A., Nakagawa, M., Peretó, J., Virgo, N., Witkowski, O., & Cleaves II, H.J. (2019). Hidden concepts in the history and philosophy of origins-of-life studies: A workshop report. *Origins of Life and Evolution of Biospheres, 49(3),* 111-145, doi: 10.1007/s11084-019-09580-x
- 7. Aydinoglu, A.U. & Taskin, Z. (2018). Origins of life research: A bibliometric approach. *Origins of Life and Evolution of Biospheres*, doi: 10.1007/s11084-017-9543-4
- Kaygan, P. & Aydinoglu, A.U. (2018). The role of space in interdisciplinary collaboration in design education. *International Journal of Technology and Design Education*, doi:10.1007/s10798-017-9407-2
- 9. Sahinol, M., Aydinoglu, A.U., Kaygan, H. (2018). STS (in) Turkey as extutition. *EASTT Review* 37(1), 43-49.
- 10. Aydinoglu, A.U., Dogan, G. & Taskin, Z. (2017). Research data management in Turkey: Practices and attitudes. *Library Hi Tech*, *35(2)*, doi: 10.1108/LHT-11-2016-0134
- Aydinoglu, A.U., Allard, S., Mitchell, C. (2016). Measuring diversity in disciplinary collaboration in research teams: An ecological perspective. *Research Evaluation*, 25(1), 18-36, doi: 10.1093/reseval/rvv02
- Scharf, C., Virgo, N., Cleaves, H.J. II, Aono, M., Aubert-Kato, N., Aydinoglu, A., Barahona, A., Barge, L.M., Benner, S.A., Biehl, M., Brasser, R., Butch, C.J., Chandru, K., Cronin, L., Danielache, S., Fischer, J., Hernlund, J., Hut, P., Ikegami, T., Kimura, J., Kobayashi, K., Mariscal, C., McGlynn, S., Menard, B., Packard, N., Pascal, R., Pereto, J., Rajamani, S., Sinapayen, L., Smith, E., Switzer, C., Takai, K., Tian, F., Ueno, Y., Voytek, M., Witkowski, O., & Yabuta, H. (2015). A strategy for origins of life research. *Astrobiology*, *15*(*12*): 1031-1042, doi:10.1089/ast.2015.1113

- Taskin, Z. & Aydinoglu, A.U. (2015) Collaborative interdisciplinary astrobiology research: A bibliometric study of the NASA Astrobiology Institute. *Scientometrics*, 103(3), 1003-1022, doi: 10.1007/s11192-015-1576-8
- 14. **Aydinoglu, A.U.**, Suomela, T., Malone, J. (2014). Data management practices among astrobiology researchers. *Astrobiology*, *14(6)*, 451-461, doi: 10.1089/ast.2013.1127.
- 15. Aydinoglu, A.U. (2013). Towards a new understanding of virtual research collaborations: Complex adaptive systems framework. *Sage Open, 3 (4),* doi: 10.1177/2158244013507269.
- Allard, S. & Aydinoglu, A.U. (2012). Environmental researchers' data practices: An exploratory study in Turkey. In *E-Science and Information Management* (pp. 13-24). Springer Berlin Heidelberg, doi: 10.1007/978-3-642-33299-9_5
- 17. Tenopir, C., Allard S., Douglass K., **Aydinoglu A.U.**, Wu L., Read E., Manoff, M., Wilson, B. (2011). Data sharing by scientists: Practices and perceptions. *PLoS ONE*, *6* (*6*), doi: 10.1371/journal.pone.0021101.
- 18. Aydinoglu, A.U. (2010). Scientific collaborations as complex adaptive systems. *Emergence: Complexity and Organizations (E:CO), 12 (4),* 15-29.

REFEREED BOOK CHAPTERS

- 1. Sik, A.S., **Aydinoglu, A.U.** & Aydin Son, Y. (2024). Genetic and genomic testing and reimbursement: Parameters, current practices and policy recommendations with global perspectives. In. Sulku, N.S. (Ed.) *The future of universal health insurance*. Nova Science Publishers: New York, USA.
- Ilhan, A.O. & Aydinoglu, A.U. (2023). Data Wars During COVID-19 Pandemic in Turkey: Regulatory Science, Trust, Risk, and Citizen Science Chapter. In: Gocoglu, V. & Karkin, N. (eds) *Citizen-centred public policymaking* (pp. 289-309). Springer: Cham.
- 3. Kilic, O.O., Akyol, M.A., Isik, O., Gunel Kilic, B., **Aydinoglu, A.U.**, Surer, E., Duzgun, H.S., Kalaycioglu, S., Taskaya Temizel, T. (2019). The use of big mobile data to gain multilayered insights for Syrian refugee crisis. In: Salah A., Pentland A., Lepri B., Letouzé E. (eds) *Guide to mobile analytics in refugee scenarios* (pp. 347-379). Springer: Cham.

BOOKS

1. İlhan, A.O. & **Aydınoğlu, A.U.** (2023). Herkes için bilim, teknoloji ve toplum: Nedir bu bilim ve teknoloji çalışmaları? FOL Yayıncılık: Ankara.

REFEREED PRESENTATIONS

- Aydinoglu, A.U. (2024). Hands dirty, soul clean: Can repair teach us to live more sustainably?. [Paper presented at the 2024 Conference of the European Association for the Study of Science and Technology / the Annual Conference of the Society for the Social Studies of Science in Amsterdam, Netherlands]
- 2. **Aydinoglu, A.U.** (2024). Diversity and inclusion in astrobiology education and research. [Paper presented at the Astrobiology Science Conference 2024, Providence, RI, USA.]

- Gurtas, K., Aydinoglu, A.U. & Pakdil, F. (2023). The critical success factors and barriers of lean in small and medium-sized enterprises: A systematic literature review. [Paper presented at the Decision Sciences Institute 54th Annual Conference in Atlanta, GA, USA.]
- 4. **Aydinoglu, A.U.**, Karahan Balya, G., Turan, H., Akcomak, S., Parkan, B., Senel, S. (2023). The ethics training needs of science and technology students. [Paper presented at the Annual Conference of the Society for the Social Studies of Science in Honolulu, Hawai'i, USA.]
- 5. Erden Topal, Y., Gercek, A.A., **Aydinoglu, A.U.** (2023). Technology Assessment of Solar Heat for Industrial Processes (SHIP) Technologies: The Case of Turkey in Comparison to Germany and Spain. [Paper presented at the Annual Conference of the Society for the Social Studies of Science in Honolulu, Hawai'i, USA.]
- 6. Gercek, A.A., **Aydinoglu, A.U.**, Erden Topal, Y. (2023). Social Acceptance in the Nuclear Power Stations: The Case of Turkey. [Paper presented at the Annual Conference of the Society for the Social Studies of Science in Honolulu, Hawai'i, USA.]
- Gruber, M.C., Kumner, D., Sallinger, K., Cleaves, J., Aydinoglu, A.U., Kanaan, S.B., Kroneis, T. (2023). Microchimerism Literature Atlas. [Poster presented at the 33rd Annual Conference of the German Society for Cytometry in Berlin, Germany.]
- Köksal, M.S. & Aydınoğlu, A.U. (2022). Teknolojik ürünlerle ilgili bilgi ve deneyim sahibi olmak, üniversite öğrencilerinin tamir hakkına yönelik tutum farklılıklarını açıklamada bir etken midir? [Paper presented at the 2022 STS TURKEY Toplum için Bilim ve Teknoloji Çalışmaları Konferansı in Istanbul, Turkey.]
- 9. **Aydınoğlu, A.U.** & Gökalp, İ. (2022). Akademide değişen araştırma konuları: Fırsatçılık veya kehanet [Paper presented at the 2022 STS TURKEY Toplum için Bilim ve Teknoloji Çalışmaları Konferansı in Istanbul, Turkey.]
- Aydınoğlu, A.U. (2022). Kuhn'dan Bilim ve Teknoloji Çalışmalarına. [Paper presented at the Thomas Kuhn'un Doğumunun 100. Yılı ve Bilimsel Devrimler'in Yapısının Yayımlanmasının 60. Yılı Sempozyumu in Ankara, Turkey.]
- 11. Özer, Ö.K., Erdil, E. & **Aydınoğlu, A.U.** (2022). The Relationship Between Participating EU Framework Programmes and International Co-publication, STI2022, Granada, September 2022
- 12. Aydinoglu, A.U., Denning, K. & Berea, A. (2022). Exoplanets: Where are We after 20 Years of Interdisciplinary Research?. [Paper presented at the Astrobiology Science Conference 2022, Atlanta, GA, USA.]
- 13. **Aydinoglu, A.U.**, Erden Topal, Y. & Gokalp, I. (2021). Sosyal Bilimlerde Hidrojen Araştırmalarının Yeri: Bibliometrik bir Değerlendirme. [Paper presented at the STS-TURKEY 2021 Konferansı, Istanbul, Turkey.]
- Coskun, B., Aydinoglu, A.U., Ozman, M. & Gossart, C. (2021). Does sustainability matter for makerspaces? The perceptions and paths for transformative innovation policies. [Paper presented at the 17th Globelics Conference in Heredia, Costa Rica.]

- 15. Işılak, A. & **Aydınoğlu, A.U.** (2021) Türkiye'nin araştırma ağlarına entegrasyonu ve bu ağların bilimsel çalışmalara etkisi: ODTÜ örneği [Paper presented at the 5th International Higher Education Studies Conference, 14-16 October 2021, Online.]
- 16. Nuhoglu, G. & **Aydinoglu, A.U.** (2021). The impact of mobility on researchers' collaborations in a developing country: The case of Turkey. [Paper presented at the Annual Conference of the Society for the Social Studies of Science in Toronto, Canada.]
- 17. Nuhoglu, G. & **Aydinoglu, A.U.** (2021). Eliminating the cut down from science for equality: Policies for fair HPC resource utilization. [Paper presented at the Annual Conference of the Society for the Social Studies of Science in Toronto, Canada.]
- 18. **Aydinoglu, A.U.** & Isilak, A. (2021). Turkey's integration to research networks and research networks' effects on scientific studies. [Paper presented at the Annual Conference of the Society for the Social Studies of Science in Toronto, Canada.]
- 19. Coskun, B., **Aydinoglu, A.U.**, Gossart, C. & Ozman, M. (2021). Does sustainability matter for makerspaces? The perceptions and practices of the French fablabs. [Paper presented at the Annual Conference of the Society for the Social Studies of Science in Toronto, Canada.]
- 20. Erden Topal, Y., Erdil, E., Aydinoglu, A.U. (2020). Development of Concentrated Solar Power / Solar Thermal Energy Technologies Sector in Turkey: Local Integration to Global Value Chains Through International Channels. [Paper presented at the Annual European Association for Evolutionary Political Economy Conference.]
- 21. Aydinoglu, A.U. (2019). NASA Astrobiology Institute: Supporting interdisciplinary research and education. [Poster & paper presented at the Astrobiology Science Conference 2019, Seattle, WA, USA.]
- 22. **Aydinoglu, A.U.** (2019). Emergence of Research Networks: WPI Case. [Paper presented at the 7th ELSI Symposium, Tokyo Institute of Technology, Tokyo, Japan.]
- Kilic, O.O., Akyol, M.A., Isik, O., Gunel, B., Aydinoglu, A.U., Surer, E., Duzgun, S., Kalaycioglu, S., Taskaya Temizel, T. (2019). Data Analytics without Borders: Multi-Layered Insights for Syrian Refugee Crisis. [Paper presented at the Data for Refugees (D4R) Challenge Workshop, Istanbul, Turkey.]
- 24. Şık, S.A., Aydın Son, Y., Soysal, E. and Aydınoğlu, A.U. (2018). Türkiye'de Genetik ve Genomik Test Raporlamadaki Güncel Durum. [Paper presented at the 1th STS TURKEY 2018 Toplum için Bilim ve Teknoloji Çalışmaları Konferansı in Ankara, Turkey.]
- 25. Özkan, Ö., **Aydınoğlu, A.U.**, Aydın Son, Y. (2018). How should genetic data be added to the health records? (in Turkish). [Paper presented at the 1th STS TURKEY 2018 Toplum için Bilim ve Teknoloji Çalışmaları Konferansı in Ankara, Turkey.]
- 26. Özkan, Ö., Aydın Son, Y., Aydınoğlu, A.U., Yalçın, A., Döm, A., Yaldız, B., Narcı, K. and Baloğlu, O. (2017). Participatory design meetings: Genetic information included personal health record application. [Poster presented at the 10th International Symposium on Health Informatics and Bioinformatics (HIBIT) in Guzelyurt, Northern Cyprus.]

- 27. Şık, S.A., Aydın Son, Y., Soysal, E. and Aydınoğlu, A.U. (2017). A conceptual design for genetic information exchange coding standards in Turkey. [Poster presented at the 10th International Symposium on Health Informatics and Bioinformatics (HIBIT) in Guzelyurt, Northern Cyprus.]
- 28. Aydinoglu, A.U. & Kaygan, P. (2016). *Do-it-yourself but do it together: Interdisciplinary Design Studio*. [Paper presented at the Annual Conference of the Society for the Social Studies of Science in Barcelona, Spain.]
- 29. **Aydinoglu, A.U.** (2016). *Methodological and interdisciplinary problems: Interdisciplinarity of the origin(s) of life research* presented at the EON Workshop on History and Philosophy of Origins Research in Tokyo, Japan.
- Aydinoglu, A.U. & Kaygan, P. (2016). Interdisciplinary collaborative design process in an educational setting: The Interdisciplinary Design Studio. [Paper presented at the Science of Team Science Conference (SciTS) 2016, Phoenix, AZ, USA.]
- 31. Kaygan, P.; Gurdere, S.; Aydinoglu, A.U.; Kaygan, H. & Demir, O. (2016). Do you know what a sensor is?: Peer learning in interdisciplinary design teams. [Paper presented at the Interdisciplinary Learning and Teaching: Frameworks and Practice Conference in Sheffield, UK.]
- 32. Aydinoglu, A.U. & Dodson, K.E. (2015). *An assessment of virtual events organized and supported by the NASA Astrobiology Institute*. [Poster presented at the Astrobiology Science Conference 2015 in Chicago, IL, USA.]
- 33. Aydinoglu, A.U. (2015). *Interdisciplinary education in astrobiology*. [Poster presented at the Astrobiology Science Conference 2015 in Chicago, IL, USA.]
- 34. **Aydinoglu, A.U.** (2015). *Astrobiology & interdisciplinary Research: Filling the Gap*. [Paper presented at the Annual Meeting of the Association for the Advancement of American Science (AAAS) in San Jose, CA, USA.]
- 35. **Aydinoglu, A.U**. (2014). *The social, technical, and policy landscape of research data management in environmental sciences in Turkey*. [Paper presented at the 5th International Symposium on Information Management in a Changing World at Antalya, Turkey]
- 36. Aydinoglu, A.U. (2014). The challenges and responses in interdisciplinary research collaborations: Researchers' perspective in astrobiology research. [Paper presented at the 5th Annual International Science of Team Science Conference in Austin, TX, USA.]
- 37. Aydinoglu, A.U. (2013). *The barriers to and facilitators of interdisciplinary research: The case of astrobiology*. [Paper presented at the Annual Conference of the Society for the Social Studies of Science in San Diego, CA, USA.]
- Aydinoglu, A.U., Mitchell, C., & Allard, S. (2013). Evolution of Virtual Research Collaborations. [Paper presented at the 27th Annual Conference of the American Evaluation Association in Washington, D.C., USA.]
- Aydinoglu, A.U., Mitchell, C., & Allard, S. (2013). Measuring interdisciplinary interaction in distributed networks: The case of NASA Astrobiology Institute. [Paper presented at the 4th Annual International Science of Team Science Conference in Evanston, IL, USA.]

- 40. **Aydinoglu, A.U.** & Dodson, K.E. (2013). *Leadership in virtual research collaborations: A NASA case study*. [Paper presented at the 28th Annual Conference of the Society for Industrial and Organizational Psychology in Houston, TX, USA.]
- 41. **Aydinoglu, A.U.** & Wu, L. (2013). *The comparison of natural scientists' and social scientists' research data practices*. [Paper presented at the 21st BOBCATSSS Conference in Ankara, Turkey.]
- 42. Aydinoglu, A.U. (2012). Complex Adaptive Systems Framework to evaluate virtual research collaborations. [Paper presented at the 26th Annual Conference of the American Evaluation Association in Minneapolis, MN, USA].
- 43. Allard, S. & **Aydinoglu, A.U.** (2012). Environmental researchers' data practices: An exploratory study in Turkey. [Paper presented at the 3rd International Symposium on Information Management in a Changing World at Hacettepe University, Ankara, Turkey]
- Page, S., Aydinoglu, A.U., Boutin, Jr., P., Colon-Aguirre, M., Freberg, K., Hughes, J., and Spasovska, K. (2012). *The hybrid model of mediated public diplomacy: A comprehensive model for policy makers.* [Paper presented at the 10th International Symposium Communication in the Millennium (CIM) in Istanbul, Turkey].
- 45. **Aydinoglu, A.U.** & Allard, S. (2012). *Understanding virtual scientific organizations Using Transdisciplinary Index*. [Poster presented at the Annual Meeting of the Association for the Advancement of American Science (AAAS) in Vancouver, BC, Canada].
- 46. Allard, S. & **Aydinoglu, A.U.** (2011). *Knowledge and attitudes towards scientific data practices & preservation among Turkish environmental scientists and information scientists*. [Poster presented at the 33rd Annual College of Communication and Information Research Symposium at the University of Tennessee in Knoxville, TN, USA].
- 47. **Aydinoglu, A.U.** (2010). *Emergence of a scientific collaboration: DataONE*. [Paper presented at the 35th Society for Social Studies of Science (4S) Annual Meeting in Tokyo, Japan].
- 48. **Aydinoglu, A.U.** (2010). *Information-seeking behaviors of international students*. [Paper presented at the 32nd Annual College of Communication and Information Research Symposium at the University of Tennessee in Knoxville, TN, USA and won *Best Research Award*].
- 49. Aydinoglu, A.U. & Allard, S. (2010). *Connecting the public with science: Comic books and libraries*. [Paper presented at the 18th BOBCATSSS Conference in Parma, Italy, which is under the auspices of European Association for Library and Information Education and Research].
- 50. Allard, S. & **Aydinoglu, A.U.** (2010). *Collaborations between Library and Information Sciences* (*LIS*) and Science: The DataONE case study. [Paper presented at the Association for Library and Information Science Education (ALISE) Conference in Boston, MA, USA].

PUBLICATIONS (NON-REFEREED)

1. Seskir, Z.C., Korkmaz, R. & **Aydinoglu, A.U.** (2022). The landscape of the quantum start-up ecosystem. *arXiv: 2205.01999*

- 2. Ancelle, A., Souza, A., Bial, M., Erden-Topal, Y., **Aydinoglu, A.U.**, Erdil, E. & Baker, D. (2020). *Horizon Solar Thermal Energy: Integrated Country Report* (Deliverable 2.3).
- 3. Seskir, Z.C. & **Aydinoglu, A.U.** (2019). The landscape of academic literature in quantum information technologies. *arXiv: 1910.06969*
- Berea, A., Denning, K., Vidaurri, M., Arcand, K., Oman-Reagan, M.P., Bellovary, J., Aydinoglu, A.U., Lupisella, M. (2019). The social sciences interdisciplinarity for astronomy and astrophysics: Lessons from the history of NASA and related fields. <u>arXiv: 1907.07800</u>
- Ozkan, O., Aydin Son, Y., Aydinoglu, A.U. (2019). Security and Privacy Concerns Regarding Genetic Data in Mobile Health Record Systems: An Empirical Study from Turkey. *bioRxiv* 678912; doi: https://doi.org/10.1101/678912

PUBLICATIONS IN TURKISH

- 1. Aydınoğlu, A. U. (2024). Kuhn'dan bilim ve teknoloji çalışmalarına. In Anlı, Ö. F., Tekin, Ö.F. & Palavan, S. (Eds.) *Thomas S. Kuhn: Bilimsel Devrimlerin Yapısı'ndan Sonra Altmış Yıl*. Ankara: Nika Yayınevi.
- 2. Aydınoğlu, A. U. (2023). Döngüsel ekonominin arkaplanı üzerine. İktisat ve Toplum, 153, 61-65.
- **3.** Aydınoğlu, A. U. (2023). "Bilimsel ve teknolojik gelişmelerin hızla arttığı günümüzde" bilim ve teknoloji iletişimi. *İktisat ve Toplum, 158,* 61-65.
- 4. **Aydınoğlu, A. U.**, Kılıçtepe, Ş., Yayalar Öncüler, E., Saka, E., Şahinyol, M. (Ed.). (2023). *STS: Bir disiplin olarak kimlik inşası*. (Açık Erişim Baskısı). Konya: NEÜ Yayınları.
- 5. **Aydınoğlu, A.U.**, Erden Topal, Y. & Gökalp, İ. (2023). Hidrojen teknolojileri araştırmalarında disiplinlerarasılık: Toplumsal bilimler yaklaşımı. *Politeknik Dergisi, 26(1),* 357-366.
- 6. **Aydınoğlu, A.U.** & Özer, Ö.K. & İlhan, A.O. (2023). Sosyal Bilimler araştırmalarında bibliyometri: Akademik girişimcilik örneği. *Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü Dergisib 55(1),* 235-258.
- 7. **Aydınoğlu, A.U.** & Özdemir, B.E. (2022). Yeşil Mutabakat: Tarihçe ve akademik araştırmaların incelenmesi. *Trakya Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 11(2),* 107-121.
- 8. **Aydınoğlu, A.U.** (2021). Girişimcilik üzerine akademik çalışmalar: 2000-2019 yıllarının bibliyometrik analizi. In Akçomak, İ.S., Beyhan, B., Çetindamar, D. & Tandoğan, S. (Eds.) *Türkiye'de Yenilik Tabanlı Girişimcilik*, p.21-36. İstanbul: İstanbul Bilgi Üniversitesi Yayınları.
- 9. Turanlı, A., Şahinol, M. & **Aydınoğlu, A.U.** (2020). STS TURKEY 2019 Konferansı Kitabı. İstanbul: İstanbul Teknik Üniversitesi Yayınları.
- Aydinoglu, A.U. (2020). Bilim iletişimi ve tarihi üzerine kısa bir inceleme. In Turanlı, A., Şahinol, M. & Aydınoğlu, A.U. (Eds.) STS TURKEY 2019 Konferans Kitabı, p.59-68. İstanbul: İstanbul Teknik Üniversitesi Yayınları.
- 11. Aydinoglu, A.U. (2019). Türkiye Dijital Dönüşümü Nasıl Gerçekleştirebilir?. Anahtar, 371.

- 12. Akyol, M.A., Kilic, O.O., Taskaya Temizel, T., **Aydinoglu, A.U.**, Surer, E. (2019). Sosyal Fayda için Büyük Veri Analizi: Suriyeli Mülteciler için bir Durum Çalışması. *Türk Standartları Enstitüsü Dergisi, 679*, 34-41.
- 13. **Aydınoğlu, A.U.** (2018). Bilim yapmak yetmiyor bir de iletişimini mi yapmak gerek? *ODTÜLÜ, 65,* 36-39
- 14. Alkan, S. & Aydınoğlu, A.U. (2017). Akademi iş dünyası birlikte çalışırsa. ODTÜLÜ, 61, 54-55.
- 15. Aydınoğlu, A.U. & Kaygan, P. (2016). Çok aktörlü süreçler. Yirmibir Mimarlık, Tasarım, Mekân Dergisi. 149, 34-36.

INVITED PRESENTATIONS AT TECHNICAL AND PROFESSIONAL MEETINGS

- 1. **Aydinoglu, A.U.** (2024). Nitel Araştırma Desenleri. [Presentation delivered at the 32. Ulusal Yönetim ve Organizasyon Kongresi, 2024, May 22-24, Giresun, Turkey.]
- 2. **Aydinoglu, A.U.** (2024). Akıllı şehirlerde veri mahremiyeti riskleri. [Presentation delivered at the Araç Teknolojilerinde "Yeşil ve Mavi Dönüşüm" Mobilite Çalıştayı 2024, April 25, Istanbul, Turkey.]
- 3. **Aydinoglu, A.U.** (2024). Decoding the discourse: Public perception of quantum technologies on Twitter through text analysis. [Presentation delivered at the Responsible Quantum Technologies 2024, 16-18 April, Karlsruhe, Germany.]
- Aydinoglu, A.U. (2023). The need for science communication in quantum technologies. [Presentation delivered at the Responsible Quantum Technologies 2023, 27-28 July, Karlsruhe, Germany.]
- 5. **Aydınoğlu, A.U.** (2023). Bilim İletişiminin Faydaları ve Zorlukları. [Türkiye'de Bilim Tarihi Eğitimi ve Araştırmaları Sempozyumu, 13-14 Ekim, İstanbul, Türkiye.]
- 6. **Aydinoglu, A.U.** & Sahinol, M. (2023). STS in ethics education. [Presentation delivered at the Ethics4Challenges Workshop, 27-28 April, Athens, Greece.]
- 7. **Aydınoğlu, A.U.** (2023). Technology and Society: Technology Assessment. [Presentation delivered at the Political Leadership Excellency Program, March 24-26, 2023, İstanbul, Türkiye.]
- 8. **Aydınoğlu, A.U.** (2022). Tasarım Odaklı Düşünmeye Giriş. [Keynote speech delivered at the Educating Designerly Thinkers for Vocational Education and Training: Design Thinking Tool for Educators DT4VET Kapanış Semineri, 31 October 2022, online.]
- Aydinoglu, A.U. (2022). Interdisciplinary Research Collaborations as Complex Adaptive Systems. [Online presentation at the George Mason University Computational and Data Sciences Colloquium, February 8, 2022, Washington, D.C., USA.]
- Aydinoglu, A.U. (2022). Ötegezegen araştırmalarının bibliyometrik analizi: Disiplinlerarası bir yaklaşım. [Çevrimiçi sunum, Yıldız Teknik Üniversitesi Biyoteknoloji ve Genetik Klubü Astrobiyoloji Konferansı, 5-6 Şubat 2022, İstanbul, Türkiye]

- 11. **Aydinoglu, A.U.** (2021). Introduction to Science Communication. [Online seminar presentation at the Mini-course on Technological Innovation, British Embassy, Ankara, Turkey.]
- 12. Aydinoglu, A.U. (2021). Introduction to Design Thinking. [Online seminar presentation at the Mini-course on Technological Innovation, British Embassy, Ankara, Turkey.]
- 13. Aydınoğlu, A.U. (2019). Tasarım Fabrikası: Disiplinlerarası Tasarım Stüdyosu. [ODTÜ STEAM Günü'nde konuşma]
- 14. **Aydınoğlu, A.U.** (2017). METU Design Factory & Interdisciplinary Design Studio. [Seminar given at the Informatics Institute, Middle East Technical University, Ankara, Turkey]
- 15. **Aydınoğlu, A.U.** (2016). Araştırma Verilerinin Yönetimi: Türkiye. [5. Ulusal Açık Erişim Konferansı, Ankara, Türkiye.]
- 16. **Aydinoglu, A.U.** (2015). *Complex adaptive systems framework for virtual teams*. [Business Administration MARC Seminar given at the Middle East Technical University, Ankara, Turkey.]
- 17. **Aydinoglu, A.U.** (2015). *Collaborative practices in astrobiology research: The NASA Astrobiology Institute*. [NASA Postdoctoral Program Alumni Seminar given at NAI at NASA Ames, Moffett Field, CA, USA.]
- 18. Aydinoglu, A.U. (2014). What is interdisciplinary research: Challenges and facilitators in collaborative research? [Seminar given at the Graduate School of Social Sciences Lecture Series at the Middle East Technical University, Ankara, Turkey.]
- 19. Aydinoglu, A.U. (2014). *Multidisciplinarity in Forensic Sciences*. [Invited panel speaker at the 1st International Forensic Biology and Genetics Congress at Ankara University, Ankara, Turkey.]
- 20. Aydinoglu, A.U. (2014). *Cross-disciplinary research in the U.S.* [Invited panel speaker at the "Crossing Scientific Borders" event at the Middle East Technical University, Ankara, Turkey.]
- 21. Aydinoglu, A.U. (2013). *Knowledge transfer in the NASA Astrobiology Institute*. [Invited panel speaker at the National Organization of Research Development Professionals Annual Development Conference in Austin, TX, USA.]
- 22. **Aydinoglu, A.U.** (2012). *Research Networks: Insights from the NASA Astrobiology Institute and DataONE*. [Seminar given at METU-TEKPOL (Science and Technology Policies Center.]
- 23. Aydinoglu, A.U. (2012). *Data Usage: Current practices and perceptions*. [Presentation made at the Astrobiology Science Conference (AbSciCon) 2012 in Atlanta, GA, USA.]
- 24. Aydinoglu, A.U. (2011). The emergence of multidisciplinary and multi-institutional scientific collaborations: DataONE case study. [College of Communication and Information Doctoral Colloquium, University of Tennessee, Knoxville, TN.]

WORK IN PROGRESS

Aydinoglu, A.U. Interdisciplinary Education in Astrobiology.

Aydinoglu, A.U. Challenges and Facilitators in Interdisciplinary Astrobiology Research.

RESEARCH EXPERIENCE

European Commission

Erasmus+ KA220

Innovative Ethics Education for Major Technological and Scientific Challenges (Ethics4Challenges) (2023-Ongoing)

• I am conducting the qualitative research component of the E4C via focus groups with representatives from academia, industry, and NGOs in order to understand the challenges in ethics training.

European Commission Horizon Europe HORIZON-STE: Implementation of the Initiative for Global Leadership in Solar Thermal Electricity (2019-2023)

• I completed a bibliometric assessment of solar thermal electricity research in Turkey.

European Commission

FP7

The Future of EU-Turkey Relations. Mapping Dynamics and Testing Scenarios (2016-2019)

• I was part of the research activities in Turkey.

METU

BAP Grant Mükemmeliyet Merkezleri; Japonya Örneği (2018-2020)

• I investigated The World Premier International Research Center Initiative (WPI Program) in Japan using bibliometric techniques.

Earth-Life Science Institute, Tokyo Institute of Technology EON/ELSI Seed Grant

(2016-2018)

- I conducted a bibliometric analysis of ELSI, part of the World Premier International Research Center Initiative that studies the origin of Earth and life.
- I investigated the ELSI Origins of Life Research Network (EON), an interdisciplinary and international research network, through bibliometric measures and network analysis.

TUBITAK-Marie Curie Co-funded Brain Circulation Scheme

EScience in environmental research: An assessment for an integrated research agenda for Turkey (2014-2016)

- I conducted a multilevel assessment (behavioral, policy, and technological) of Turkish environmental scientists' research data management practices (store, share, reuse) and developing a roadmap for Turkey.
- Together with Asst. Prof. Pinar Kaygan, we investigated interdisciplinary research and education at the Interdisciplinary Design Studio that took place at the Design, Technology, and Innovation Center (TIM), METU.

NASA Postdoctoral Program Fellow, NASA Astrobiology Institute (NAI) Collaborative Practices at the NASA Astrobiology Institute 2012-2014

 I investigated NAI's collaborative practices and assessed the interdisciplinary interaction among NAI teams and researchers to provide insight and recommendations for their evolution and improvement, particularly with respect to remote communication, data sharing and analysis across distance, collaborative problem solving, interdisciplinary science, and institutional identity.

Visiting Assistant Professor, University of South Carolina, School of Library and Information Science

• I coordinated a qualitative job market study with Undergraduate Program Advisor using the alumni network of the School to explore the skill set needed from our graduates in the job market. The findings are used to update the Bachelor of Science in Information Science Program.

Research Assistant for the Center for Information and Communication Studies, University of Tennessee:

- DataONE, Fall 2009 & Spring 2011
- I assisted Dr. Carol Tenopir and Dr. Suzie Allard on baseline assessment surveys on scientific data management practices with different stakeholders: i) scientists, ii) librarians, and iii) libraries.
- User Experience Lab, Summer & Fall 2009 In this lab, researchers can study how people use computers and engage with the Internet. My responsibility was helping the researchers and subjects using the facility and software.
- National Science Foundation (NSF) Grants, Spring & Fall 2008 My responsibility was comparing the newly announced NSF grants to the research interests of the faculty in order to identify possible grant opportunities for the College.

TEACHING EXPERIENCE

As Principal Instructor

Technology Assessment and Responsible Research and Innovation

Graduate class in Science, Technology and Society Department, Middle East Technical University, since Fall 2022

This course is about how to conduct technology assessment and consider the role and responsibility of stakeholders in research and innovation. Class size: 15

Bibliometrics

Graduate class in Science, Technology and Society Department, Middle East Technical University, since Fall 2018

This course is about bibliometrics, scientometrics, social network analysis, and academic evaluation. Class size: 10

Science Communication

Master's class in Science, Technology and Society Department, Ankara University, Fall 2018 This course is about the study of science communication, history of science communication, and current practices in Turkey. Class size: 12

Knowledge, Science and Technology in Information Age

Graduate class in Science and Technology Policies, Middle East Technical University, since Fall 2018

This course is about the study of how knowledge, science, and technology shape and are in turn shaped by society. Class size: 20

History of Science and Technology

Graduate class in Science and Technology Policies, Middle East Technical University, since Spring 2018

This course is the study of the genesis and historical trajectory of the modern science and technology. Class size: 10

Qualitative Research Methods in Science and Technology Studies

Graduate class in Science and Technology Policies, Middle East Technical University, since Spring 2015

This course addresses both the practical "how to" dimensions of qualitative methodology, and the epistemological and theoretical commitments and stances that are tied to these methods. Class size: 10

Technologies for Information Retrieval

Minor in Information Studies and Technology Program, University of Tennessee, Fall 2009 (traditional class), Spring 2010 (online class)

I designed and taught undergraduate level class on information technology for students who are having a minor in information studies. Topics included hardware, application and system software, the Internet and World Wide Web, communications, societal issues, and database management. Class size: 20

Public Speaking

Communication Studies, University of Tennessee, Fall 2008, Spring 2009 I taught Public Speaking class for undergraduate students; lectured to advance the knowledge of public speaking process and evaluated six public speeches for each student. Topics include self-introduction speech, informative speech, persuasive speech, special occasion speech, doing research for speeches, and using technology for speeches. Class size: 20

Web Site Design and Maintenance, and Library Database

- World Bank West Bank and Gaza Office, May 2006
 Taught e-publishing software to the communication staff at the World Bank Office in Jerusalem.
- World Bank Turkey Office, September 2006, February 2007, May 2007, July 2007 Taught the use of library database software to information staff at the World Bank Office in Ankara and the Economic Policy Research Foundation of Turkey (TEPAV).

As Co-lecturer

Design Thinking in Technological Innovation Management

Continuous Education Center, Middle East Technical University, every semester since Fall 2020. My module for this program covered Design Thinking methodology. Class size: 21

Interdisciplinary Teamwork in Design Thinking

Interdisciplinary Design Studio, Middle East Technical University, Fall 2015 - present. My modules for this Studio covered interdisciplinary collaborative work, conflict management, and public speaking. Class size: 25 to 45

Research Methods in Science and Technology Studies

Science and Technology Policies Program, Middle East Technical University, Fall 2014. My module for this graduate level class was about the epistemological aspects of social science research and case study research design. Class size: 17

As Guest Lecturer

Design Management

Department of Industrial Design, Middle East Technical University. Fall 2015. In this graduate course, I discussed the importance of collaboration and teamwork in design process, and barriers to and facilitators of collaborative work.

Architectural Research Studio

Department of Architecture, Middle East Technical University, Fall 2015. For this master's level class, I lectured on what is life, different life forms on Earth, astrobiology, and possible life forms in the universe.

Industrial Design III

Industrial Design, Middle East Technical University, Fall 2015, 2016, 2017. The subject was teamwork in design projects. Students learned how teams evolve, understood other team members' role, improved their communication skills, and conducted teamwork exercises.

Recent Trends in Science and Technology Policy Making

Science and Technology Policies Program, Middle East Technical University, Fall 2014. I lectured on interdisciplinary research (IDR) and how funding agencies measure and develop policies to support IDR.

Doctoral Seminar in Communications Culture and Technology

Communications Media and Instructional Technology, Indiana University in Pennsylvania, Spring 2013. I lectured on interdisciplinary research, approaches to cross-disciplinarity, challenges and benefits in interdisciplinary research.

Sustaining Scientific Collaborations

Earth System Modeling and Supercomputing, NASA Ames Research Center, Summer 2012. In this two-week NASA Short Summer School, I lectured on how scientific collaborations emerge, behave, and are evaluated.

Communication and Information in Science, Technology, Engineering, and Medicine (STEM)

Communication and Information Sciences Program, University of Tennessee, Fall 2009 & Spring 2011. This doctoral course explores the role of communication and information in each of these domains. I discussed the role of data in scientific development in Fall 2009 and the impact of virtual scientific collaborations in research in Spring 2011.

Information Science – Special Topics: Environmental Informatics

Minor in Information Studies and Technology Program, University of Tennessee, Spring 2010. This class explore the intersection of environmental and information sciences by investigating the role of information and technology in environmental science. I covered scientists' data practices.

Public Speaking and Presentation

ProjectGRAD Summer Institute, University of Tennessee, Summer 2009, Summer 2010, Summer 2011

Co-instructed Communications track by teaching Public Speaking to high school students in ProjectGRAD Summer Institute, which is an effort to prepare disadvantaged students to academic life. Class size: 20.

As Coordinator for Curriculum Development

Bachelor of Science in Information Science Program, University of South Carolina, Fall 2011 I worked with graduate teaching assistants to develop new courses for the undergraduate program in the School of Library and Information Science and evaluated their teachings.

THESIS & DISSERTATION ADVISED

- 1. Master's Thesis Betül Yılmaz (2024). Gig Economy in Public Policy: An Application of the Delivery Sector in Türkiye.
- 2. Master's Thesis Esra Ergün Güler (2022). Opportunities for Linking Global Value Chains Research to Policy-Making in Türkiye: A Bibliometric Analysis.
- 3. Master's Thesis Ayşe Işılak (2022). Turkey's Integration to Research Networks and Research Networks' Effects on Scientific Studies: The Case of METU
- 4. Master's Thesis Gökçe Nuhoğlu (2022). Creating Collaborative Research Environment in High Performance Computing: An Analysis of Turkey.
- 5. Master's Thesis Şehnaz Kart (2022). Safe Energy Relations: Unfolding the Precautionary Principle with the Advent of Hydrogen Technologies.
- 6. Master's Thesis Cansu Korkmaz (2022). Women in Space Studies in Turkey: Proposition of Science and Technology Policies to Eliminate Gender Discrimination.
- 7. Master's Thesis Serra Baykal (2021). Design and Proposition of Technology Policies to Diffuse Greenhouse Technologies in Turkey: A Case for Speaking Plant Approach.
- 8. Master's Thesis Beyza Coskun (2021). Fablabs and Their Contribution to Sustainability in the Context of Socio-Technical Systems.
- 9. Ph.D. Dissertation co-advised with Yeşim Aydın Son Özlem Özkan (2018). Essential Design Components of Genetic Data Enabled Mobile Personal Health Record Systems.

PANELS, SEMINARS AND WORKSHOPS

Çalıştay Organizatörü. "'Dijital Sürdürülebilirlik İçin Hukuk, Ekonomi ve Teknoloji Perspektifinden Strateji Çalıştayı." ODTÜ TEKPOL – Özyeğin Üniversitesi, 2023, Ankara, Türkiye. Diğer Organizatörler: Özlem Yenerer Çakmut, M. Teoman Pamukçu, Erkan Erdil, Semih Akçomak, Başak Ozan Özparlak, Müge Çetin.

Çalıştay Organizatörü. "Türkiye'de ve Dünyada Kuantum Teknolojilerinin Geleceği" Workshop. ODTÜ TEKPOL, 2023, Ankara, Türkiye. Diğer Organizatör: Zeki Can Seskir, Karlsruhe Institute of Technology.

STS TURKEY Kış Okulu Düzenleyicisi & Eğitmeni. "**Bilim İletişimi**" – Türkiye Bilim ve Teknoloji Çalışmaları Ağı Kış Okulu 2021, İstanbul, Türkiye. Diğer Organizatörler: Erkan Saka, Bilgi Üniversitesi; Melike Şahinol, Orient Institute Istanbul; Emine Onculer Yayalar, Bilkent University; Şafak Kılıçtepe, Ahi Evran Üniversitesi; Ali Oğulcan İlhan, Özyeğin Üniversitesi.

STS TURKEY Kış Okulu Düzenleyicisi & Eğitmeni. "**Disiplinlerarası Çalışmalar**" – Türkiye Bilim ve Teknoloji Çalışmaları Ağı Kış Okulu 2020, Ankara, Türkiye. Diğer Organizatörler: Melike Şahinol, Orient Institute Istanbul & Emine Onculer Yayalar, Bilkent University.

Co-organizer. **"Experimental Pedagogies of Science and Technology Studies"** Workshop. STS TURKEY, 2020, Ankara, Türkiye. Co-organizers, Emine Onculer Yayalar, Bilkent University; Asli Calkivik, Istanbul Technical University.

STS TURKEY Kış Okulu Düzenleyicisi & Eğitmeni. "**Bilim İletişimi**" – Türkiye Bilim ve Teknoloji Çalışmaları Ağı Kış Okulu 2019, İstanbul, Türkiye. Diğer Organizatörler: Melike Şahinol, Orient Institute Istanbul & Harun Kaygan, ODTÜ

Speaker. "Bilim İletişimi" – TÜBİTAK Bilim ve Toplum Daire Başkanlığı, 2018, Ankara, Türkiye.

Co-organizer. **"Araştırma Verilerinin Yönetimi Eğitimi"** – TÜBİTAK ULAKBİM, 2017, Ankara, Türkiye. Co-organizers, Güleda Doğan & Zehra Taşkın, Hacettepe Üniversitesi.

Co-organizer. **"Science and Technology Studies Turkey (STS TURKEY) Network Founding Meeting**" – Orient-Institut Istanbul, 2017, Istanbul, Turkey. Co-organizers, Melike Sahinol, OII & Harun Kaygan, METU.

Participant. "Design Factory Bootcamp 2016" – Aalto University Design Factory, 2016, Espoo, Finland.

Participant. "Hasso Plattner Institute Design Thinking Workshop" – METU Design Factory, 2016, Ankara, Turkey.

Participant. "ELSI Origins of Life Network (EON) Roadmap Workshop" – Tokyo Institute of Technology, 2015, Tokyo, Japan.

Workshop co-organizer & presenter. "**Research Data Management in Astrobiology**" – the Astrobiology Science Conference 2015, Chicago, IL, US. Co-organizer, Estelle K. Dodson, NASA Ames.

Workshop organizer & presenter. "**Research Data Management: Getting Your Organization Started**" – the 5th International Symposium on Information Management in a Changing World, Antalya, Turkey, 2014.

Participant. "An International Workshop on Research Data Management" – Ankara, Turkey, 2014.

Session organizer. "The insider, the embedded, and the independent: Three perspectives on interdisciplinary collaborative astrobiology research" – the 5th Annual International Science of Team Science Conference in Austin, TX, USA.

Panel Chair, Panelist & Session Organizer. *"The Question is not 'Are We Alone?' but 'Are We Ready?' The Impact of Astrobiological Discoveries"*. The Annual Conference of the Society for the Social Studies of Science in San Diego, CA, USA, 2013. Other speakers included Margaret Race, SETI Institute; Brian P. Green, Santa Clara University; Linda Billings, National Institute of Aerospace; Kala Perkins, American Jewish University. Participant. "*Sci2: A Tool of Science of Science Research and Practice Workshop"*. The 4th International Science of Team Science Conference, Evanston, IL, USA, 2013.

Workshop Instructor & Organizer. *"Science Communication for the authors of Science and Technology Journal"* – Ankara, Turkey, 2013. Presenter for the following sessions: (1) Introduction to Science Communication; (2) Interviewing Scientists; (3) Scientific Information Seeking for Science Journalists. Other presenters included Suzie Allard, Bob Legg, and Dave Brill, University of Tennessee.

FELLOWSHIPS, AWARDS, AND HONORS

EON/ELSI Seed Grant 2016 – awarded by the Earth-Life Science Institute, Tokyo Institute of Technology

- Co-funded Brain Circulation Scheme 2013 awarded by the Scientific and Technological Council of Turkey (TÜBİTAK) and the Marie Curie Action COFUND of the 7th Framework Programme (FP7) of the European Commission
- Outstanding Dissertation Award 2012 awarded by the College of Communication & Information, University of Tennessee

NASA Postdoctoral Program Fellowship, 2012 – awarded by NASA.

- Best Research Award 2010 awarded by the College of Communication and Information at the 32nd Annual Research Symposium, University of Tennessee.
- Reeder-Siler Scholarship 2008, 2009, and 2010 awarded by the College of Communication & Information, University of Tennessee.

MEMBERSHIPS

- Science and Technology Studies Turkey (STS TURKEY)
- Blue Marble Space Institute of Science
- Science of Team Science (SciTS)
- Society for the Social Studies of Science (4S)

EDITORSHIP

Libri – International Journal for Libraries and Information Studies, Advisory Editor

CONSULTANCY

- *Researcher* ENHANCER Project for International Centre for Migration Policy Development (2020-2021)
- Instructor and Content Builder for Xper^{eka} Program Technology Development Foundation of Turkey (2020-2021)
- *Instructor and Content Builder* for Xnovate Program Technology Development Foundation of Turkey (2018-9)
- *Reviewer* for EU-funded Competitiveness and Innovation Sector Operational Programme (CISOP) Ministry of Industry and Technology (2019)
- *Field Researcher* for Workplace Dialogue Program Ethical Trading Initiative (2018-9)
- Consultant for Open Data & Aperta TÜBİTAK ULAKBİM (2017-9)