

Mathematics and Science Education,
Faculty of Education,
Bogazici University,
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FATMA ASLAN-TUTAK

EDUCATION

- 01/05 - 12/09** **Ph.D. in Curriculum and Instruction - Mathematics Education & Minor in Research Methods**
University of Florida, School of Teaching and Learning, Gainesville, FL, USA.
Title of Doctoral Dissertation: A Study of Geometry Content Knowledge of Elementary Preservice Teachers: The Case of Quadrilaterals (Chair: Prof. Thomasenia L. Adams)
- 09/98 - 07/04** **Integrated BS&MS Program in Teaching Mathematics**
(1st Rank, High Honor)
Bogazici University, Faculty of Education, Istanbul, Turkey
- 01/03 - 05/03** **Undergraduate Exchange Student**
State University of New York (SUNY) at Binghamton,
College of Liberal Arts and Science, Mathematics Department,
Binghamton, NY, USA

EXPERIENCES

- 08/19 - present** **Associate Professor**
Bogazici University, Istanbul, Turkey
- 09/16 - 04/21** **Associate Dean**
Faculty of Education, Bogazici University, Istanbul, Turkey
- 12/12 - 10/18** **Assistant Professor**
Bogazici University, Istanbul, Turkey
- 05/10 - 12/2012** **Instructor**
Bogazici University, Istanbul, Turkey
- 08/09 - 12/09** **Research Assistant**
University of Florida, Gainesville, FL, USA
Exploring African-American School Girls' Achievement in Science and Mathematics Education through Positionality
- 08/08 - 05/09** **Research Assistant**
University of Florida, Gainesville, FL, USA
Florida Fund for Minority Teachers (FFMT)
- 08/08 - 08/09** **Teaching Assistant**
University of Florida, Gainesville, FL, USA
Mathematics Methods course for elementary school teachers

- 08/06 – 08/07 **Teaching Assistant**
University of Florida, Gainesville, FL, USA
Mathematics Methods course for elementary school teachers
- 08/05 – 07/06 **Research Assistant**
University of Florida, Gainesville, FL, USA
Project TALL Math (Teachers as Learners Learning Mathematics)
- 09/04 – 12/04 **Research Assistant**
Bogazici University, Istanbul, Turkey
- 09/03 – 06/04 **High School Mathematics Teacher**
A private after-school institution, Istanbul, Turkey
- PROJECTS**
- 2023- **Digital Ecosystem for Teacher Training Project: Training and Content Development Consultancy**, (*Mathematics Education Expert*), Project No: Edu/Tura/2022-H, UNICEF
- 2021-2024 **Developing a Model for Area Specialised Effective Mentoring and Implementing Professional Development for Mentors / Etkili Alan Eğitimi Mentörlük Modeli Oluşturulması ve Mentörlük Mesleki Gelişim Programının Geliştirilerek Uygulanması** (*Project Manager*), TÜBİTAK 1001.
- 2021-2023 **Digitools: Digitalization of the Training Contents** (*Mathematics Education Expert*), Project No: 20201TR01KA226SCH098485, ERASMUS + Digital Education Action Plan.
- 11/2022-04/2023 **Technical Assistance for Increasing the Quality of the Special Education Services for Inclusive Education - Senior STEM Training** (*Non-Key Experts*) Project No: EuropeAid/139588/IH/SER/TR, Ministry of Education, Special Education Department
- 2020-2022 **Effective Mentoring in Mathematics Teaching: Exploring Mathematics Preservice Teachers' and Their Mentor Teachers' Perceptions** (*Project Manager*), Bogazici Research Fund, BU-BAP-15961
- 2020-2021 **Oceanographers of the Future (in Turkish: Geleceğin Deniz Bilimcileri)** (*Researcher*) TUBITAK-4004: Nature and science summer school for high school students
- 2017-2019 **An E-Mentoring Model to Improve Novice Mathematics Teachers' Mathematical Knowledge for Teaching.** (in Turkish: Göreve Yeni Başlayan Öğretmenlerin Matematik Öğretme Bilgilerini Geliştirmeye Yönelik Bir Model Önerisi: E-Mentörlük Uygulaması), (*Researcher*), Karadeniz Technical University Research Fund.
- 2017-2018 **School and Classroom Based Assessment: Strengthening Teachers Capacity**, (*Researcher - Mathematics Education Expert*), UNICEF

- 2017-2018 **Children of Bosphorus Getting to Know City through Sea II**
(Nature and science summer school for gifted students), TUBITAK,
(Project: 117B083), *Researcher*.
- 2016-2017 **Children of Bosphorus Getting to Know City through Sea**
(Researcher), TUBITAK-4004: Nature and science summer school for
gifted students)
- 2012-2015 **FIRSTMATH, The First Five Years of Mathematics Teaching**
Turkish *coordinator* of the international comparative project on novice
teachers
- 2014-2016 **FIRSTMATH-Turkey (The First Five Years of Mathematics
Teaching)** (*Project Manager*), Bogazici Research Fund, BU-BAP-8624
- 2014-2016 **Integrating 'Science, Technology, Engineering, and Mathematics
(STEM) Education' in Pre-service Chemistry and Mathematics
Teacher Education**, (*Researcher*), Bogazici Research Fund, BU-BAP,
14D03P2
- 2011-2013 **An Investigation on Specialized Content Knowledge of Preservice
Secondary School Mathematics Teachers**, (*Project Manager*), Bogazici
Research Fund BU-BAP, 11D03P3
- 2012 **Baba Beni Okula Gönder: Kız Yurtlarında Gelişim Odaklı Yaşam
Alanı Oluşturma.**
(A project on improving accommodation settings of school age girls ,
funded by a non-profit organization on supporting disadvantaged
girls' schooling), *Researcher*.

PUBLICATIONS

Peer-Reviewed International Journal Articles

- 2026 Kilic, H., & Aslan Tutak, F. (2026). Exploring preservice teachers' knowledge for teaching: self-perception versus actual performance. *European Journal of Mathematics and Science Education*, 7(1), 41-54.
- 2025 Özbey-Demir, Ö., Karabacak, H. **Aslan-Tutak, F.** (2025). An Examination of the Interaction in Online Professional Development for Area Specialized Teaching. *European Journal of Mathematics and Science Education*, 6(2), 137-146.
- 2025 Şahin, A.*, **Aslan-Tutak, F.** (2025). Translation of the Mentoring Conception Scale and the Mentoring Motivation Scale into Turkish: Validity and Reliability Study. *Bogazici University Journal of Education*, 42(1), 1-22.
- 2025 Civan, B. S., **Aslan-Tutak, F.**, (2025). Book Review: Mentoring mathematics teachers in the secondary school: a practical guide: edited by Archer, R., Morgan, S., Swanson, D., Clemmet, C., & Sullivan, S., Abingdon, Oxon. *Research in Mathematics Education*, 1-6.

- 2024 **Aslan-Tutak, F.**, Güven, O. (2024). Implementing Mathematical Modelling with Calculus of Variations to Design a Disaster Tent. *Osmangazi Journal of Educational Research*, 11(2), 199–212.
- 2024 **Aslan-Tutak, F.**, Şahin, A.*, Civan, B. S.*, & Ertas, G. (2024). Adaptation and validation of Mentoring for Effective Mathematics Teaching (MEMT) – Mentee and Mentor scales to Turkish. *Mentoring & Tutoring: Partnership in Learning*, 32(4), 466–488.
- 2024 İmamoğlu, Y., **Aslan-Tutak, F.**, Aşık, G., Oncar-Ekiz, B.* (2024). Experiences of Mathematics Teachers of a Test Preparation Center during Professional Development for Incorporating Critical Thinking Skills into Their Practice. *Bartın University Journal of Faculty of Education*, 13(3), 722-734.
- 2023 Guler, M., Taylan, R. D., Baki, M., Demirel D., Celik, D., Guzel, E. B., **Aslan-Tutak, F.**, Ozaltun Celik, A. (2023). Supporting novice mathematics teachers: The impact of an e-mentoring and video-based professional development program on teachers' noticing skills. *International Electronic Journal of Mathematics Education*, 18(2), em0737.
- 2021 Ertaş, G*., and **Aslan-Tutak, F.** (2021). Mathematics teacher education in Turkey through the lens of international TEDS-M study. *REDIMAT –Journal of Research in Mathematics Education*,10(2), 152-174.
- 2017 Saraç, A.* & **Aslan-Tutak, F.** (2017) The Relationship of Teacher Efficacy, and Students' Trigonometry Self-Efficacy and Trigonometry Achievement. *International Journal for Mathematics Teaching and Learning*, 18(1), 66-83.
- 2016 Akaygün, S. & **Aslan-Tutak, F.** (2016) STEM Images Revealing STEM Conceptions of Pre-Service Chemistry and Mathematics Teachers. *International Journal of Education in Mathematics, Science and Technology*, 4(1), 56-71.
- 2015 **Aslan-Tutak, F.** & Adams, T.L. (2015) A Study of Geometry Content Knowledge of Elementary Preservice Teachers. *International Electronic Journal of Elementary Education*, 7(3), 301-318.
- 2015 Arici, S.* & **Aslan-Tutak, F.** (2015) The Effect of Origami-Based Geometry Instruction on Spatial Visualization, Geometry Achievement and Geometric Reasoning. *International Journal of Science and Mathematics Education*, 13(1), 179-200. 2011
- 2014 Browning, C. A., Edson, A. J., Kimani, P. M., **Aslan-Tutak, F.** (2014). Mathematical Content Knowledge for Teaching Elementary Mathematics: A Focus on Geometry and Measurement. *The Mathematics Enthusiast*, 11(2), 333-383.

- 2011** **Aslan-Tutak, F.** & Bondy, E. & Adams, T. L. (2011). Critical Pedagogy for Critical Mathematics Education. *International Journal of Mathematical Education in Science and Technology*, 42 (1), 65-74.
- 2008** Adams, T. L. & **Aslan-Tutak, F.** (2008). Venn diagram model for professional development for teachers of mathematics, *Southeastern Regional Association of Teacher Educators (SRATE) Journal*, 17(1), 19-24.
- 2005** Adams, T. L. & **Aslan-Tutak, F.** (2005). Serving up Sierpinski. *Mathematics Teaching in the Middle School*, 11(5): 248-253.
- * Graduate Student

International Book Chapters

- 2023** Jeong, S., Bateman, K. M., Akaygun, S., **Aslan-Tutak, F.**, Şen-Akbulut, M., & Safak, R. A. (2023). Entanglement of the United States and Turkish Science and Mathematics Educators Through the Lens of Becomings: Conceptualizing STEM Education Using a Bakhtinian Dialogic Approach. In *Reforming Science Teacher Education Programs in the STEM Era: International and Comparative Perspectives* (pp. 217-232). Cham: Springer International Publishing.
- 2020** Akaygun, S. & **Aslan-Tutak, F.** (2020). Collaboratively learning to teach STEM: A model for learning to integrate STEM education in preservice teacher education. In V. L. Akerson & G. A. Buck (Eds.), *Critical Questions in STEM Education* (pp 147-163). Switzerland: Springer.
- 2009** **Aslan-Tutak, F.** & Ekmekci, A. (2009). Being a Cross-Cultural Mentor: Challenges and Suggestions. In G. Zimmerman, P. Guinee, L. M. Fulmore, E. Murray (Eds.) *Empowering Mentor of the Preservice Mathematics Teacher*, (p. 56). Reston, VA: National Council of Teachers of Mathematics.
- 2009** **Aslan-Tutak, F.** & Ekmekci, A. (2009). Being a Cross-Cultural Mentor: Challenges and Suggestions. In G. Zimmerman, P. Guinee, L. M. Fulmore, E. Murray (Eds.) *Empowering Mentor of the Beginning Mathematics Teacher*, (p. 65). Reston, VA: National Council of Teachers of Mathematics.
- 2009** **Aslan-Tutak, F.** & Ekmekci, A. (2009). Being a Cross-Cultural Mentor: Challenges and Suggestions. In G. Zimmerman, P. Guinee, L. M. Fulmore, E. Murray (Eds.) *Empowering Mentor of the Experienced Mathematics Teachers*, (p. 67). Reston, VA: National Council of Teachers of Mathematics.

Peer-Reviewed National Journal Articles

- 2020** Akaygun, S., **Aslan-Tutak, F.**, Özel, S. (2020). Türkiye’de STEM Eğitiminde Araştırmalar ve Uygulamalar. *Bogazici University Journal of Education*, 37, 1-2.

- 2019 Küçükler,H. Akaygün, S., İmamoğlu,Y., **Aslan-Tutak, F.** & Özel, S. (2019). Deniz ve Kent Yaz Okulunun Özel Yetenekli Ortaokul Öğrencilerinin Deniz ve Kente Yönelik Tutum ve Algularına Etkisi. *Fen Bilimleri Öğretimi Dergisi*, 7(2) 189-223.
- 2018 Tosmur Beyazit, N., Akaygun, S., Demir K. & **Aslan-Tutak, F.** (2018). Bir STEM Öğretmen Eğitimi Örneği: Yenebilir ArabalarEtkinliğinin Öğretmen Eğitimi Açısından İncelenmesi. *Fen Bilimleri Öğretimi Dergisi*, vol. 6, no. 2, pp. 213–232
- 2017 Ertaş, F.G.* & **Aslan-Tutak, F.** (2017). Matematik Öğretmen Adaylarının Öğretmek için Matematik Bilgilerinin (ÖMB) TEDS-M Maddeleri ile Karşılaştırılması. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 18 (3), 86-102.
- 2017 **Aslan-Tutak, F.**, Akaygun, S., & Tezsezen, S.* (2017). İşbirlikli FeTeMM (Fen, Teknoloji, Mühendislik, Matematik) Eğitimi Uygulaması: Kimya ve Matematik Öğretmen Adaylarının FeTeMM Farkındalıklarının İncelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 32(4), 794-816.
- 2017 Karataş, F.I.* & **Aslan-Tutak, F.** (2017). Lise Matematik Öğretmenlerinin Teknolojik Pedagojik Alan Bilgileri Ve Teknolojiyi Bütünleştirme Öz-Yeterlilikleri. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14(37), 180-198.
- 2014 Kılıç,H., **Aslan-Tutak, F.** & Ertaş, F.G.* (2014). TIMSS Merceğiyle Ortaokul Matematik Öğretim Programındaki Değişiklikler. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 10(2), 129-141.
- National Book Chapters**
- 2021 Akaygün, S. & **Aslan Tutak, F.** (2021) STEM Eğitiminde Disiplinlerarası Düşünme, In Hasret Nuhoglu (ed.) *Eğitimcinin STEM Öğrenme Yolculuğu* (146-167), PEGEM Akademi
- 2020 Dede, Y., Dogan, M.F. & **Aslan-Tutak, F.** (2020) Matematik Eğitiminde Etkinlikler ve Uygulamaları (Edited Book), Ankara: PEGEM Akademi
- 2020 Dede, Y., Dogan, M.F. & **Aslan-Tutak, F.** (2020) Matematik Eğitiminde Etkinliklere Genel Bakış. In Y. Dede, M. F. Doğan & F. Aslan-Tutak (Ed.s) *Matematik Eğitiminde Etkinlikler ve Uygulamaları*, Ankara: PEGEM Akademi
- 2020 **Aslan-Tutak, F.** (2020) Disiplinlerarası Matematik Eğitimi. In Y. Dede, M. F. Doğan & F. Aslan-Tutak (Ed.s) *Matematik Eğitiminde Etkinlikler ve Uygulamaları*, Ankara: PEGEM Akademi
- 2019 **Aslan-Tutak, F.**, Akaygun, S. (2019). Fen Bilimleri Eğitiminde Mühendislik Uygulamaları. D. Akgündüz (Ed.) *Fen ve Matematik Eğitiminde Teknolojik Yaklaşımlar* (551-564). Ankara: Anı Yayıncılık.

- 2017 Akaygün, S. & **Aslan Tutak, F.** (2017). FeTeMM (Fen, Teknoloji, Mühendislik, Matematik) Eğitimi Yaklaşımı. Mustafa Ergun (ed.) *Fen Bilimleri Öğretiminde Yeni Yaklaşımlar* (1-34), Nobel Akademik Yayıncılık (This book chapter introduces Integrated STEM education model for Turkish audience and address how to implement it)
- 2016 **Aslan-Tutak, F. & Köklü, O. *** (2016). Öğretmek İçin Matematik Bilgisi, İ. Ö. Zembat, E. Bingölbali, S. Arslan (Ed.) *Matematik Eğitiminde Teoriler*. PEGEM, Ankara. (This book chapter explains Mathematical Knowledge for Teaching, MKT, model for Turkish audience)
- 2013 **Aslan-Tutak, F. (2013)**. Tarihi ve Uygulama Alanları ile Logaritma Fonksiyonu. İ. Ö. Zembat, M. F. Özmantar, E. Bingölbali, H. Şandır & A. Delice (Ed.) *Tanımları ve Tarihsel Gelişimleriyle Matematiksel Kavramlar* (400-414), PEGEM, Ankara. (This book is collection of chapters written for teachers to deepen their content knowledge. This chapter is about history and applications of Logarithm Function)

RESEACHER PROFILES

- Orcid: <https://orcid.org/0000-0002-9078-6144>
- Google Scholar: <https://scholar.google.com/citations?user=uG--670AAAAI&hl=en>

SELECTED PRESENTATIONS

International

- 02/26 **Aslan-Tutak, F., Sahin, A., Celik, D., Guler, M.** (2026). Three first-time mathematics mentor teachers' mentoring perspectives while attending professional development for area specialised mentoring. *Nineteenth ERME Topic Conference: Connecting the Learning of Mathematics Teaching to Practice*, Prag, Czech Republic.
- 09/25 Sezer, S.* & **Aslan-Tutak, F.** (2025). Pre-service Mathematics and Science Teachers' Designing Interdisciplinary Tasks with Mathematical Modeling. *European Conference on Educational Research (ECER)*, Belgrade, Serbia.
- 09/25 **Aslan-Tutak, F., Akaygun, S., Ateskan, A., Celik, D., Karatas, F. O., Mercan, F. C.** (2025). Effective Area Specialized Mentoring Practices for Mathematics and Science Teaching. *European Conference on Educational Research (ECER)*, Belgrade, Serbia.
- 09/25 Sahin, A.*, Kurt, G., Ozdemir, O., **Aslan-Tutak, F.** (2025). Experiences of Physics Mentor Teachers during the Mentor Teacher Professional Development Program. *European Conference on Educational Research (ECER)*, Belgrade, Serbia.
- 05/25 **Aslan-Tutak, F., Ateskan, A., Akaygun, S., Celik, D., Guler, M., Karatas, F. O., Mercan, F. C., Sahin, A., & Budak, U. S.** Designing an online professional development for mathematics and science mentor

- teachers. *Association for Teacher Education in Europe (ATEE)*, Catalunya, Spain.
- 05/25 Ateskan, A., **Aslan-Tutak, F.**, Akaygun, S., Celik, D., Guler, M., Karatas, F. O., Mercan, F. C., Sahin, A., Vural, N. Mathematics and Science Teacher Educators' Reflection on Effective Mentoring for Teaching Practicum. *Association for Teacher Education in Europe (ATEE)*, Catalunya, Spain.
- 02/25 Sarılıcan, S.* , **Aslan-Tutak, F.**, (2025). Case Study on Mathematics Teacher Educator's Professional Roles During Teaching Practicum Course. *14th Congress of the European Society for Research in Mathematics Education (CERME14)*, Bolzano, Italy.
- 02/25 Kilic, H; **Aslan-Tutak, F.**, (2025). Preservice teachers' self-perceptions about their knowledge for teaching. *14th Congress of the European Society for Research in Mathematics Education (CERME14)*, Bolzano, Italy.
- 05/24 Sarılıcan, S.* , **Aslan-Tutak, F.**, (2024). Becoming a Mathematics Teacher Educator: A self-study on Teaching Practicum Course. *XI International Eurasian Educational Research Congress (EJER)*, Kocaeli, Türkiye.
- 05/23 Sezer, S.* , Arabacı, N. & **Aslan-Tutak, F.** (2023). Investigation of Preservice Secondary School Mathematics Teachers' Conceptions of Interdisciplinary Mathematics Education. 4. International Science Mathematics Entrepreneurship, and Technology Education Congress Bursa, Türkiye.
- 02/22 **Aslan-Tutak, F.**, Civan, B. S. & Şahin, A. (2022- online attendance). Teacher Practicum in Turkey at the Time of Pandemic *12th Congress of the European Society for Research in Mathematics Education (CERME 12)*, 2-5 February, 2022
- 07/21 Kaya,A* & **Aslan-Tutak, F.** (2021-online attendance). Teaching Functions Using RME Approach to Improve Students' Perceptions of Mathematics Learning and Learning of Functions. *14th Conference of International Congress on Mathematics Education (ICME-14)*, Shanghai, China.
- 04/21 Civan, B. S.* & **Aslan-Tutak, F.** (2021). Turkish Mathematics Mentor Teachers' Perceptions of Mentoring Practices in the Context of Teacher Certification Programs. *Annual Meeting of American Education Research Association (AERA)*, Virtual Meeting.
- 04/20 Civan, B. S.* & **Aslan-Tutak, F.** (2020). Turkish Mathematics Mentor Teachers' Exemplars of Effective Mentoring Practices. *13th annual International Conference of Education, Research and Innovation Online Conference*.
- 08/19 Durak, T.* & **Aslan-Tutak, F.** (2019). Comparison of gifted and mainstream 9th grade students' statistical reasoning types. *11th International Conference on Mathematical Creativity and Giftedness* , 22-24 August 2019, Hamburg, Germany .
- 02/19 Pehlivan Z.* & Aslan-Tutak, F. (2019). A Look into Turkish Preservice Teachers' Translation Skills: Case for Model Representations. *11th Congress of the European Society for Research in Mathematics Education (CERME 11)*, 6-10 February, 2019, Utrecht, Netherlands.
- 04/18 Pehlivan Z.* & **Aslan-Tutak, F.** (2018). Investigation on Preservice Mathematics Teachers' Translation Between Representations: From

- Graph to Model. *Annual Meeting of American Education Research Association (AERA)*, New York City, USA.
- 02/17 **Aslan-Tutak, F. & Durak, T.*** (2017). A Novice High School Teacher's Perception on The Effect of Content Course Taken as Preservice. *10th Congress of the European Society for Research in Mathematics Education (CERME 10)*, Dublin, Ireland.
- 07/16 **Aslan-Tutak, F. & Akaygun** (2016). Preservice mathematics teachers interdisciplinary work for STEM education. S. *13th Conference of International Congress on Mathematics Education (ICME-13)*, Hamburg, Germany.
- 02/15 F. G. Ertas * & **Aslan-Tutak, F.**, (2015). Secondary mathematics teacher candidates' pedagogical content knowledge and the challenges to measure. *9th Congress of the European Society for Research in Mathematics Education (CERME 9)*, Prague, Czech Republic.
- 04/15 Köklü, O. * & **Aslan-Tutak, F.** (2015). Shifting Focus from What You Say to What You Hear. *Annual conference of National Council of Teachers of Mathematics (NCTM)*, Boston, USA.
- 02/13 **Aslan-Tutak, F & F. G. Ertas. *** (2013). Practice to Enhance Preservice Secondary Teachers' Specialized Content Knowledge. B. Ubuz, C. Haser, M.A. Mariotti (Ed.) *8th Congress of the European Society for Research in Mathematics Education (CERME 8) Proceedings*, 2917-2926.
- 02/13 Arici, S.*, **Aslan-Tutak, F.** (2013). Using Origami to Enhance Geometric Reasoning and Achievement. B. Ubuz, C. Haser, M.A. Mariotti (Ed.) *8th Congress of the European Society for Research in Mathematics Education (CERME 8) Proceedings*, 585-594.
- 07/12 **Aslan-Tutak, F.** (2012). Preservice Secondary School Mathematics Teachers' Specialized Content Knowledge of Complex Numbers. *12th conference of International Congress on Mathematics Education (ICME-12)*, Seoul, Korea.
- 07/12 Ertas, G.*, **Aslan-Tutak, F.** (2012). The Preservice Teachers' Perception of Rationality and Irrationality (Poster). *12th conference of International Congress on Mathematics Education (ICME-12)*, Seoul, Korea.
- 10/11 Browning, C. A., Edson, A. J., Kimani, P. M., **Aslan-Tutak, F.** (2011). Geometry and Measurement Content Knowledge of Preservice K-8 Mathematics Teachers: A Synthesis of Research. *Annual Conference of Psychology of Mathematics Education-North America (PME-NA)*, Reno, USA.
- 07/11 **Aslan-Tutak, F.** (2011). Addressing Preservice Teachers' Needs of Geometry Content Knowledge: A Qualitative Study to Transform Theory into Practice. *Annual Conference of Psychology of Mathematics Education (PME-35)*, Ankara, Turkey.
- 02/11 **Aslan-Tutak, F.** (2011). Preservice Elementary Teachers' Geometry Content Knowledge in Methods Course. *7th Congress of the European Society for Research in Mathematics Education (CERME)*, Rzeszow, Poland.
- 11/10 **Aslan-Tutak, F.** (2010). Mixed Research on Preservice Elementary Teachers' Geometry Content Knowledge. *International Conference on New Trends in Education and Their Implications (ICONTE)*, Antalya, Turkey.

- 09/09 **Aslan-Tutak, F.** (2009). Analysis of Geometry Learning Stories of Elementary School Preservice Teachers. *Annual Conference of Psychology of Mathematics Education-North America (PME-NA)*, Atlanta, USA.
- 02/09 **Aslan-Tutak, F.** (2009). What is your story? Geometry Learning Stories of Preservice Elementary School Teachers. *Annual Conference of Association of Mathematics Teacher Educators (AMTE)*, Orlando, USA.
- 02/09 Adams, T. L., **Aslan-Tutak, F.**, Peterek, E. & LaFramenta, J. (2009). Qualitative Research Methods in Mathematics Education. *Annual Conference of Association of Mathematics Teacher Educators (AMTE)*, Orlando, USA.
- 11/06 **Aslan-Tutak, F.**, Adams, T. (2006). Pre-service Teachers' Perceptions of the Achievement Gap: Implications for Mathematics Teacher Education (Poster). *Closing the Achievement Gap Through Partnerships University of Florida College of Education Centennial Conference*, St. Petersburg, USA
- 11/06 Adams, T., **Aslan-Tutak**, LaFramenta, J & Peterek, E. (2006). Teachers of Mathematics on the Frontline. *Closing the Achievement Gap Through Partnerships University of Florida College of Education Centennial Conference*, St. Petersburg, USA.
- 01/06 **Aslan-Tutak, F.** & Adams, T. L. (2006). Project EMERGE: Establishing a Mathematics Education Research Group Endeavor (Poster). *Annual Conference of Association of Mathematics Teacher Educators (AMTE)*, 2006, Tampa, USA.

National Presentations (Türkiye)

- 05/19 Senger, E.* & **Aslan-Tutak, F.** (2019). The Effect Of Sociomathematical Norms And Technology Integrated Instruction To Eliminate The Misconception Of The "disregard Of The Length" For The Concept of Altitude. 4. *Uluslararası Türk Bilgisayar ve Matematik Eğitimi (BİLMAT-4) Sempozyumu*, 26-28 Eylül 2019, İzmir, Türkiye.
- 05/17 Kaya, A.* & **Aslan-Tutak, F.** (2017). Bir Eylem Araştırması: Fonksiyon Öğretiminde Gerçekçi Matematik Eğitimi. *Üçüncü Türk Bilgisayar ve Matematik Eğitimi Sempozyumu (BİLMAT)*, Afyon, Türkiye.
- 05/15 Ertas, F. G. *, **Aslan-Tutak, F.** (2015). İlköğretim Matematik Öğretmen Adaylarının Öğretme İçin Matematiksel Bilgilerinin Uluslararası TEDS-M Çalışması Kapsamında Değerlendirilmesi. *İkinci Türk Bilgisayar ve Matematik Eğitimi Sempozyumu (BİLMAT)*, 2015, Adıyaman.
- 05/15 Akaygün,S., Akcan, S., **Aslan-Tutak, F.**, Mercan F. (2015). 21. Yüzyıl Öğrenme Ortamlarını Oluşturan Öğretmenler. *Türkiye Özel Okullar Birliği Derneği, 14. Geleneksel Eğitim Sempozyumu "Geleceğin Öğretmeni"*, Antalya.
- 09/14 Ertaş, F. G. *, **Aslan-Tutak, F.** (2014). Son Sınıf Matematik Öğretmenliği ve Matematik Bölümü Öğrencilerinin TEDS-M Testinden Aldıkları Puanlara Göre Öğretme İçin Matematiksel Bilgilerinin Karşılaştırılması. *Onbirinci Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi (UFBMEK)*, Adana.
- 06/13 **Aslan-Tutak, F.** (2013). Matematik Öğretme Bilgisi Ölçekleri Çalıştayı. *Birinci Türk Bilgisayar ve Matematik Eğitimi Sempozyumu (BİLMAT)*, Trabzon.

- 06/13 **Aslan-Tutak, F.**, Kılıç, H., Ertaş, F. G. * (2013). Öğretmenlerin Matematik Öğretme Bilgisi Üzerine Uluslar Arası Bir Çalışma: FIRSTMATH. *Birinci Türk Bilgisayar ve Matematik Eğitimi Sempozyumu (BİLMAT)*, Trabzon.
- 06/13 Ertaş, F. G.* , **Aslan-Tutak, F.** (2013). TEDS-M Öğretmenlerin Matematik Alan ve Matematik Öğretme Bilgisi Ölçeğinin Türkçeleştirilmesi ve Değerlendirilmesi. *Birinci Türk Bilgisayar ve Matematik Eğitimi Sempozyumu (BİLMAT)*, Trabzon.
- 06/13 Köklü, O. * , **Aslan-Tutak, F.** (2013). Tahmin Edilemeyen Alan İçerikli Ders Durumları Karşısında Matematiği Öğretme Bilgisi. *Birinci Türk Bilgisayar ve Matematik Eğitimi Sempozyumu (BİLMAT)*, Trabzon.
- 09/12 **Aslan-Tutak, F.** (2012). Lise Öğretmen Adaylarının Karmaşık Sayılar Konusunda Uzmanlaşmış Alan Bilgisi. 11. *Matematik Sempozyumu of Matematikçiler Derneği (MAT-DER)*, Samsun
- 07/11 **Aslan-Tutak, F.** (2011). Öğretmen Adaylarının Geometrik Kavram Yanılgıları: Simetri ve Eşlik. 1. *Matematik Öğretimine Çağdaş Yaklaşımlar Sempozyumu*, Denizli.

OTHER PROFESSIONAL EXPERIENCES

- 2025 Invited speaker on 'Mathematical Modelling' at various Science Centers supported by TÜBİTAK (*The Scientific and Technological Research Council of Türkiye*).
- 2019-2024 Commission member of TÜBİTAK Science High School Mathematics Curriculum Development Team, *TÜBİTAK and National Ministry of Education*.
- 2020-2022 Leader of CERME 12 (Twelveth Congress of European Research in Mathematics Education) TWG 20 *Mathematics Teachers Knowledge, Beliefs and Identity*.
- 2020 Invited panelist for *ERG Eğitim İzleme Raporu 2019'un Yansımaları*, Boğaziçi Üniversitesi, İstanbul, Turkey
- 2019 Invited panelist for Women and STEM, *Women and Science VI, Association for Turkish Women Math*, Balıkesir, Turkey
- 2019 Invited panelist for STEM Eğitimi, *Adıyaman Üniversitesi, Adıyaman, Turkey*
- 2018 Invited panelist for Kuram ve Uygulama Bütünlüğünde Matematik Eğitimi, *Bahçeşehir Üniversitesi 21. Yüzyılda Matematik Eğitimi Konferansı*, İstanbul, Türkiye.
- 2018 Invited Author for Journal Column, *Zorbalık Dedikleri, Boğaziçi Mezunlar Derneği Dergisi*.
- 2018-2020 Coleader of CERME 11 (Eleventh Congress of European Research in Mathematics Education) TWG 20 *Mathematics Teachers Knowledge, Beliefs and Identity*.

- 2018 Professional development team for STEM Education, Akaygün, S., **Aslan-Tutak, F.**, Kartal, G. BILFEN Private High School Schools, Istanbul, Turkey.
- 2018 Member of the *Committee of Developing Mathematics Activities for Turkish Science Centers*, TÜBİTAK.
- 2016-2018 Coleader of CERME 10 (Tenth Congress of European Research in Mathematics Education) *TWG 20 Mathematics Teachers Knowledge, Beliefs and Identity*.
- 2017 Professional Development on Mathematical Modelling in High School, Uğur Okulları Istanbul, Turkey
- 2017 Professional Development on Assessment in Elementary School, Hisar Education Foundation Schools, Istanbul, Turkey
- 2016 Professional development for STEM education: Two-day Workshops with High school teachers and students, Akaygün, S., **Aslan-Tutak, F.**, Bogazici University, Istanbul, Turkey
- 2014-2016 Coleader of CERME 9 (Nineth Congress of European Research in Mathematics Education) *TWG 20 Mathematics Teachers Knowledge, Beliefs and Identity*.
- 2012-2015 Member of the Committee of Elementary (Grades 1-4) Mathematics Curriculum Development, TÜBİTAK.
- 2015 Member of professional development team for STEM education: Two-day Workshops with High school teachers and students, Akaygün, S., **Aslan-Tutak, F.**, Bogazici University, Istanbul, Turkey
- 2014 Professional Development on Assessment in Class, Uğur Koleji Istanbul, Turkey
- 2014 Member of professional development team for STEM education, Akaygün, S., **Aslan-Tutak, F.**, & Mercan, F., FMV Nişantaşı Işık Foundation Schools, Istanbul, Turkey

GRADUATE THESIS DIRECTED

Masters's Level

I directed 21 master's degree thesis on various topics: STEM Education, Mathematics Teacher Knowledge, Realistic Mathematics Education, Interdisciplinary Mathematics Education, Mentoring for Mathematics Teaching.

Doctorate Level

The list of PhD dissertations that I directed:

- Arife Sahin: Teaching Undergraduate Students to Data Interpretation through R (expected graduation Spring 2027)

- Fatma Arıkan (2026): Unpacking Secondary School Mathematics Teachers' Knowledge for Teaching Mathematical Reasoning
- Sanem Sarılıcan (2026): A Mathematics Teacher Educator's Practices in The Practicum: Enacting Experiences for Learning to Teach Mathematics
- Kubra Yildirim (2026): A Case Study on Teachers' Instructional Design and Self-Regulation in Technology Integrated Mathematics Teaching
- Sevil Sezer (2025): Designing a Module to Support Development of Pre-Service Mathematics and Science Teachers' Skills for Interdisciplinary Teaching

AWARDS/ SCHOLARSHIP

- 2016, 2015, 2014,2013 Academic Incentive Award,**
Bogazici University Foundation (BUVAK)
- 2004-2009 Higher Education Institute (Yüksek Öğretim Kurulu) Doctoral Scholarship**
- 2007 Outstanding International Student Award,**
University of Florida, FL, USA.
- 2006 Elizabeth and William F. Leonard Scholarship**
College of Education, University of Florida, FL, USA.
- 2004 High Honor Degree for Graduation**
Bogazici University, Istanbul, Turkey.
- 2004 1st Rank in Graduation for Secondary School Science and Mathematics Education Department (Chemistry, Physics and Mathematics Teaching Programs)**
Bogazici University, Istanbul, Turkey.
- 2001-2002 Prof. Dr. Hikmet Sebüktekin Scholarship (Faculty of Education, Dean's Scholarship)**
Bogazici University, Istanbul, Turkey.
- 1998-2000 Achievement Scholarship**
Boğaziçi University, Istanbul, Turkey
Entered Bogazici University Integrated BS&MS Program in Teaching Mathematics as the third ranking student and awarded with scholarship, Istanbul, Turkey.