

Vita

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Chapter 1

Vita

1.1 Education

- 1988: Graduation from Cumhuriyet Lisesi, Ankara, Turkey.
- 1988–1992: Undergraduate study of Mathematics at Hacettepe Üniversitesi, Ankara, Turkey. Graduation with a Bachelor degree in mathematics.
- 1995–2000: Graduate study of Mathematics at University of Nebraska–Lincoln.
- August 16, 1997: Master of Science.
- December 16, 2000: Doctor of Philosophy. Advisor of Ph.D. Thesis: Professor ALLAN PETERSON. Title of Ph.D. Thesis: Boundary value problems, oscillation theory, and the Cauchy functions for dynamic equations on a measure chain.

1.2 Awards/Grants/Fellowships

- 1995–2000: Fellowship from the Ministry of Education, Turkey.
- 1999–2000: Award of “The Emeritus Faculty Fellowship”, University of Nebraska–Lincoln.
- 2004-2005: New Faculty Teaching Scholar, University of Missouri-Rolla.
- 2004-2005: Outstanding Teaching Award, University of Missouri-Rolla.
- 2004-2005: College of Arts and Sciences Excellence in Teaching Award, University of Missouri-Rolla.

- June 1, 2005-June 1, 2006: UM Research Board Grant. Applications of Dynamic Equations on Time Scales.
- November 14, 2005: Travel Grant, AWM (Association for Women in Mathematics)-NSF.
- March 14, 2006: AWM-NSF Mentoring Grant.
- March, 2006: Honorary Knight of Saint Patrick's, UMR.
- May 2009: Winner of "We Love Your Class" Award, MST.

1.3 Appointments

- 1992–1995: Lecturer at Kızılay Dersanesi, Ankara, Turkey.
- 2002-2003: Visiting Assistant Professor at University of Missouri–Rolla.
- Since 2003: Assistant Professor at Missouri University of Science and Technology (formerly University of Missouri–Rolla).
- Since September 1, 2009: Associate Professor at Missouri University of Science and Technology.

1.4 Talks Presented

- April 1998: MAA Nebraska and Southeast South Dakota Section at Hastings College.
- April 1999: MAA Nebraska and Southeast South Dakota Section.

- November 20–21, 1999: Second Annual Regional Workshop in Mathematics and Statistics at University of Nebraska–Lincoln.
- October 20–21, 2000: Midwest Differential Equations Conference, Fargo, ND.
- October 27–28, 2000: Third Annual Regional Workshop in Mathematics and Statistics at University of Nebraska–Lincoln.
- January 6–9, 2002: Joint Mathematics Meetings, San Diego, California.
- March 8–10, 2002: 975th AMS Sectional Meeting, Atlanta, Georgia.
- June 11, 2002: Dynamic Equations Day at METU, Ankara-Turkey.
- July 8–19, 2002: University of Wyoming, Rocky Mountain Mathematics Consortium Summer Conference, Laramie, Wyoming.
- April 4–6, 2003: 985th AMS Sectional Meeting, Bloomington, Indiana.
- July 28–August 1, 2003: 8th International Conference on Difference Equations and Applications, Brno, Czech Republic.
- January 7–10, 2004: Joint Mathematics Meetings, Phoenix, Arizona.
- April 1, 2004: Colloquium Talk, San Diego State University, California.
- April 3–4, 2004: 996th AMS Sectional Meeting, University of Southern California Los Angeles, California.
- June 1, 2004: University of New South Wales, Sydney, Australia. Colloquium Speaker.
- July 5–10, 2004: Dynamic Systems and Applications, Antalya, Turkey.

- January 5–8, 2005: Joint Mathematics Meetings, Atlanta, Georgia.
- June 16-18, 2005: The 1008th AMS Joint Meeting, Mainz, Germany.
- June 27-August 1, 2005: The First International Workshop on Dynamic Equations on Time Scales, Istanbul, Turkey.
- July 25-30, 2005: 10th International Conference on Difference Equations and Applications (ISDE), Munich, Germany.
- October 7, 2005: Designing and Redesigning Academic Experiences to Enhance Student Learning, NFTS. (Panelist)
- October 21-23, 2005: 1011th AMS Sectional Meeting, Lincoln, Nebraska.
- November 9, 2005: Running a Successful Collaborative Learning Center, NFTS.
- November 10, 2005: Discrete Calculus for Math 1, UMR.
- January 12–15, 2006: Joint Mathematics Meetings, San Antonio, TX.
- May 23, 2006: Izmir University of Economics, Turkey. Colloquium Speaker.
- May 27, 2006: Ankara Differential Equations Seminars: Middle East Technical University, Ankara, Turkey. Main Speaker.
- June 15–20, 2006: Marrakesh World Conference on Differential Equations and Applications, Marrakesh, Morocco.
- July 24–28, 2006: 11th International Conference on Difference Equations and Applications, Kyoto, Japan.

- January 5-8, 2007: 1023rd Joint Mathematics Meeting, New Orleans.
- July 23-27, 2007: 12th International Conference on Difference Equations and Applications, Lisbon, Portugal.
- July 28-August 2, 2007: Conference in Honor Allan Peterson, Abbazia di Novacella, Italy. Plenary Speaker.
- October 22, 2007: Discrete Calculus for Math 1, UMR.
- July 21–25, 2008: 14th International Conference on Difference Equations and Applications, Istanbul, Turkey. Main Speaker.
- October 10–11, 2008: 28th Southern-Atlantic Regional Conference on Differential Equations, University of Arkansas at Little Rock, Arkansas.
- June 8-19, 2009: Recent Developments in Dynamic Equations on Time Scales, Rocky Mountain Mathematics Consortium, summer school, Laramie, Wyoming. (Main speaker).
- July 20-24, 2009: Equadiff 12, Brno, Czech Republic.

1.5 Conferences Attended

- July 1997: RMMC Summer Conference at University of Wyoming, Laramie, Wyoming.
- January 2000: Joint Mathematics Meetings, Washington, D.C.
- April 2000: 953rd AMS Meeting at Notre Dame University, Notre Dame, Indiana.

- October 2000: Fargo Preconference Workshop on BVPs and Oscillation Theory for Differential Equations on Measure Chains at North Dakota State University.
- July 30–August 3, 2001: Sixth International Conference on Difference Equations and Applications, Augsburg, Germany.
- October 2001: 970th AMS Meeting at University of Tennessee, Chattanooga.
- September 20–21, 2002: Time Scales Workshop, University of Dayton, Dayton, Ohio.
- October 23-24, 2004: TA Development Using Case Studies: A Workshop for Faculty, 1001th AMS Meeting (2004 Fall Central Sectional Meeting), NWU, Evanston, IL.
- November 19-20, 2004: 24th Annual Western Kentucky University Mathematics Symposium: “Dynamic Equations on Time Scales“, Bowling Green, Kentucky.
- January 24-26, 2005: The Teaching Renewal Conference at UMC.
- March 28-April 1, 2005: The Easter Academy 2005, AbiTUMath Ab-bacy of Novacella, Italy.
- May 16-19, 2005: Building Your Academic Portfolio (NTFS).
- June 9, 2006: Ankara Differential Equations Seminars: Atilim University, Ankara, Turkey.
- July-August 2009: Dr. Agarwal’s series of lecturers. Ankara, 2009.

1.6 Professional Activities

- Associate Editor for Selcuk Journal of Applied Mathematics since 2004.
- Associate Editor for Journal of Contemporary Mathematics since 2006.
- Reviewing proposals for the Research Grants Council (RGC) of Hong Kong since 2005.
- Guest Associate Editor for a special issue of Advances in Dynamical Systems and Applications dedicated to Professor Allan Peterson's 65th Birthday.
- A member of a technical program committee for the Third International Conference on Modelling, Simulation, and Applied Optimization, 2008.
- A member of the scientific committee for the "First International Workshop on Dynamic Equations on Time Scales", 2005.
- Referee and reviewer for numerous journals manuscripts.
- Organizing the Graduate Student Seminar for Mathematics and Statistics at UMR since Spring 2005.
- Participating in the Graduate Policy Committee 2003-2005.
- Participating in the Departmental Policy Committee 2005-2007.
- Participating in the Facilities Planning Committee since 2008.
- Advising some undergraduate students since Fall 2004.

- Invited as a panelist “The Expanding Your Horizons in Mathematics and Science Conference”, The Forest Community College, St. Louis, March 13, 2006.
- Participating at hiring committee for a visiting position at Department of Mathematics and Statistics, March 2007.
- March 3, 2005: Interviewing candidates for a tenure-track position in the Chemistry Department at UMR.
- January 19-February 2, 2005: Selection Committee for Math 204 Textbook.
- Supervised talk of Fusun Yalcin in Graduate Student Seminar. UMR, 2003.

1.7 Society Memberships

- MAA (Mathematical Association of America).
- ISDE (International Society of Difference Equations).

1.8 Collaborators

- Agarwal, Ravi. Florida Institute of Technology, USA.
- Akin, Faysal, Dicle University, TURKEY.
- Atici, Ferhan Merdivenci. University of Western Kentucky, USA.
- Bohner, Martin. Missouri University of Science and Technology, USA.

- Djebali, Smail. Ecole Normale Superieure, ALGERIA.
- Zuzana Dosla. Masaryk University Brno, CZECH REPUBLIC.
- Erbe, Lynn. University of Nebraska-Lincoln, USA.
- Grace, Said. Cairo University, EGYPT.
- Hoffacker, Joan. Clemson University, USA.
- Kaymakcalan, Billur. Georgia Southern University, USA.
- Lawrence Bonita. Marshall University, USA.
- Moussaoui, Toufik. Ecole Normale Superieure, ALGERIA.
- Peterson, Allan. University of Nebraska-Lincoln, USA.
- Raffoul, Youssef. University of Dayton, USA.
- Saker, Samir. Mansoura University, EGYPT.
- Zhang, Wei Nian. Sichuan University, CHINA.

Chapter 2

Teaching

2.1 Teaching Experience

- Fall 2002: Math 22 (Calculus III) and Math 204 (Elementary Differential Equations, two sections)
- Spring 2003: Math 21 (Calculus II) and Math 204 (Elementary Differential Equations, two sections)
- Fall 2003: Math 15 (Calculus II for Engineers) and Math 229 (Differential Equations with Linear Algebra)
- Spring 2004: Math 300 (Special Problems: Introduction to Real Analysis) and Math 15 (Calculus II for Engineers)
- Fall 2004: Math 351 (Introduction to Complex Variables), Math 300 (Special Problems: Introduction to Real Analysis) and Math 15 (Calculus II for Engineers)
- Spring 2005: Math 204 (Elementary Differential Equations) and Math 15 (Calculus II for Engineers)
- Fall 2005: Math 15 (Calculus II for Engineers) and Math 302 (Intermediate Differential Equations)
- Spring 2006: Math 15 (Calculus II for Engineers) and Math 431 (The Theory of Differential Equations)
- Fall 2006: Math 15 (Calculus II for Engineers) and Math 204 (Elementary Differential Equations)
- Spring 2007: Math 15 (Calculus II for Engineers) and Math 315 (Partial Differential Equations)

- Fall 2007: Math 15 (Calculus II for Engineers) and Math 302 (Intermediate Differential Equations)
- Spring 2008: Maternity Leave.
- Fall 2008: Math 15 (Calculus II for Engineers) and Math 302 (Intermediate Differential Equations)
- Spring 2009: Math 15 (Calculus II for Engineers) and Math 400 (Special Problems)
- Fall 2009: Math 15 (Calculus II for Engineers), Math 302 (Intermediate Differential Equations), Math 400 (Special Problems)

2.2 Educational Activities

- October 12, 1993: The Teaching Certificate from Hacettepe University, Turkey.
- Participating in the Mathematics Learning Center of collaborative problem-based learning for students in Calculus for Engineers II since Spring 2004.
- December 10, 2004: Interviewer for Chancellor's Scholars Day.
- September 30-October 2, 2004: Course Design Retreat, Lake of the Ozarks.
- October 23-24, 2004: TA Development Using Case Studies: A Workshop for Faculty, 1001th AMS Meeting (2004 Fall Central Section Meeting), NWU, Evanston, IL.

- Initiator of the Mathematics Learning Center, Fall 2004, in cooperation with Missouri S&T LEAD.
- January 24-26, 2005: The Teaching Renewal Conference at UMC.
- March 28-April 1, 2005: Mentoring undergraduate and high school students on my research area during the Easter Academy 2005, Abi-TuMath Abbacy of Novacella, Italy.
- April 14, 2005: Participating in the visit to UMR of UMSL campus leadership to observe and understand the operation of LEAD learning centers.
- May 16-19, 2005: Building Your Academic Portfolio (NTFS).
- Member of the pilot project “Personal Response System” at UMR in Math 15 since Fall 2005.
- October 7, 2005: Designing and Redesigning Academic Experiences to Enhance Student Learning, NFTS. (Panelist)
- November 9, 2005: Running a Successful Collaborative Learning Center, NFTS.
- Web Conference on Personal Response System, UMR, February 2, 2006.
- August 30, 2006: Invited Speaker at LEAD Luncheon, UMR.
- December 5, 2006: Hosting UMSL Faculties to introduce LEAD, UMR.
- April 2-4, 2007: Reaching and Teaching the Digital Native: The Digital Campus Institute @ Missouri, Columbia, Missouri.

- October 10, 2007: Running a Successful Collaborative Learning Center for Your Course, NFTS Luncheon, UMR.
- November 8, 2007: What Do You Wish You Had Known About Teaching? by Dr. Margaret Gunderson. A Workshop at UMR.
- October 10, 2008: Running a Successful Collaborative Learning Center, NFTS.

Chapter 3

Publications

3.1 Theses

1. E. Akin. *Boundary value problems, oscillation theory, and the Cauchy functions for dynamic equations on a measure chain.* PhD thesis, University of Nebraska–Lincoln, 2000.

3.2 Chapters/Journals

2. E. Akin. Boundary value problems for a differential equation on a measure chain. *Panamer. Math. J.*, 10(3):17–30, 2000.
3. E. Akin, L. Erbe, B. Kaymakçalan, and A. Peterson. Oscillation results for a dynamic equation on a time scale. *J. Differ. Equations Appl.*, 7:793–810, 2001.
4. E. Akin. Cauchy functions for dynamic equations on a measure chain. *J. Math. Anal. Appl.*, 267:97–115, 2002.
5. E. Akin, M. Bohner, L. Erbe, and A. Peterson. Existence of bounded solutions for second order dynamic equations. *Journal of Difference Equations and Applications*, 8(4):389–401, 2002.
6. R. P. Agarwal, S. R. Grace, and E. Akin–Bohner. On the oscillation of higher order neutral difference equations of mixed type. *Dynamic Systems and Applications*, 11:459–470, 2002.
7. W. Zhang, R. P. Agarwal, and E. Akin–Bohner. On well-posedness of impulsive problems for nonlinear parabolic equations. *Nonlinear Studies*, 9(2):145–153, 2002.

8. E. Akın–Bohner and J. Hoffacker. Solution properties on discrete time scales. *J. Differ. Equations Appl.*, 9(1):63–75, 2003.
9. E. Akın–Bohner and J. Hoffacker. Oscillation properties of an Emden–Fowler type equation on discrete time scales. *J. Differ. Equations Appl.*, 9(6):603–612, 2003.
10. E. Akın–Bohner and M. Bohner. Some Dynamic Equations (Chapter 2 of “Advances in Dynamic Equations on Time Scales by M. Bohner and A. Peterson”), Birkhäuser, pages 17–46, Boston, 2003.
11. E. Akın–Bohner, F. Atıcı and B. Kaymakçalan. Upper and lower solutions of dynamic equations (Chapter 6 of “Advances in Dynamic Equations on Time Scales by M. Bohner and A. Peterson”), Birkhaeuser, pages 165–186, Boston, 2003.
12. E. Akın–Bohner and M. Bohner. Miscellaneous dynamic equations. *Methods and Applications of Analysis*, 10(1):11–30, 2003.
13. E. Akın–Bohner and F. Merdivenci Atıcı. A quasilinearization approach for two point nonlinear boundary value problems on time scales. *The Rocky Mountain Journal of Mathematics*, 35(1):19–45, 2005.
14. E. Akın–Bohner, M. Bohner, and F. Akın. Pachpatte inequalities on time scales. *Journal of Inequalities in Pure and Applied Mathematics*, 6(1):1–23, 2005.
15. E. Akın–Bohner. Positive decreasing solutions of quasilinear dynamic equations. *Mathematical and Computer Modelling*, 43(3–4):283–293, 2006.

16. E. Akin–Bohner and Y.N. Raffoul. Boundedness in functional dynamic equations on time scales. *Advances in Difference Equations*, 2006(1–18), 2006.
17. E. Akin–Bohner. Positive increasing solutions of quasilinear dynamic equations. *Math. Inequal. Appl.*, 10(1):99–110, 2007.
18. E. Akin–Bohner, M. Bohner, and S. Saker. Oscillation criteria for a certain class of second order Emden–Fowler dynamic equations. *Electronic Transactions of Numerical Analysis*, 27:1–12, 2007.
19. R. Agarwal, E. Akin–Bohner, and S. Grace. Oscillation criteria for fourth order nonlinear difference equations. *Georgian Mathematical Journal*, 14(2):203–222, 2007.
20. R. Agarwal and E. Akin–Bohner. A generalized upper and lower solution method for singular boundary value problems for the one-dimensional p -Laplacian on time scales. *Advanced Studies in Contemporary Mathematics*, 15(2), 213–228, 2007.
21. E. Akin–Bohner, Z. Dosla and B. Lawrence. Oscillatory solutions of three dimensional dynamic systems. *Nonlinear Analysis*, 69, 483–494, 2008.
22. E. Akin–Bohner. Regularly and strongly decaying solutions for quasilinear dynamic equations. *Advances in Dynamical Systems and Applications*, 3(1), 15–24, 2008.
23. E. Akin–Bohner, M. Bohner, S. Djballi and T. Moussaoui. On the asymptotic integration of nonlinear dynamic equations. *Advances in Difference Equations*, Volume 2008 Article ID 739602, 17 pages, 2008.

24. E. Akin–Bohner, Z. Dosla. Recessive solutions for halflinear dynamic equations. *African Diaspora Journal of Mathematics*, Volume 8, Number 2, 182–195, 2009.

3.3 Proceedings

25. E. Akin–Bohner and M. Bohner. The exponential function and Laplace transform for alpha derivatives. *Proceedings of the Sixth International Conference on Difference Equations*, 231–237, CRC, Boca Raton, FL, 2004.

3.4 Work in Progress

26. with Z. Dosla, and P. Rehak. On Recessive and Dominant Solutions of Half-linear Dynamic Equations. In preparation.
27. with Y. Raffoul and C. Tisdell. Exponential Stability in Functional Dynamic Equations on Time Scales. In preparation.
28. with Z. Dosla and B. Lawrence. Almost oscillatory Three Dimensional Dynamic Systems. In preparation.
29. with M. Cecchi, Z. Dosla, and M. Marini. Strongly Increasing and Decaying Solutions for Dynamic Equations. In preparation.
30. with S. Sun, and Z. Han. Practical stability in terms of two measures for hybrid systems on time scales. In preparation.
31. with S. Sun. Oscillation criteria for second order dynamic inclusions. In preparation.