08/11/2021

CURRICULUM VITAE

Ferhan Merdivenci Atıcı

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Western Kentucky University
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UNIVERSITY EDUCATION

• Ph.D (Mathematics) University of Nebraska at Lincoln, 1995.
• M.S (Mathematics) University of Nebraska at Lincoln, 1993.
• B.S (Mathematics) Ege University, 1989.

ACADEMIC EXPERIENCE

• University Distinguished Professor, Department of Mathematics, Western Kentucky University, 2018-present.
• Professor, Department of Mathematics, Western Kentucky University, 2011-present.
• Associate Professor, Department of Mathematics, Western Kentucky University, 2005-2011.
• Assistant Professor, Department of Mathematics, Western Kentucky University, 2003-2005.
• Visiting Assistant Professor, Department of Mathematics, Western Kentucky University, 2001-2003.
• Associate Professor, Department of Mathematics, Ege University, 1999-2002.
• Assistant Professor, Department of Mathematics, Ege University, 1996-1999.
• Visiting one year position, Department of Mathematics and Statistics, University of Nebraska at Lincoln, 1995-1996.
• Teaching Assistant, Department of Mathematics and Statistics, University of Nebraska at Lincoln, 1991-1995.
• Teaching Assistant, Department of Mathematics, Ege University 1989-1990.

CERTIFICATES

• Certificate to teach at High School. (A Certificate was earned after completing 12 months of training at Ege University) 1989.
• Certificate to teach at College Level. (A Certificate was earned after completing 9 months of training at University of Nebraska) 1991.

DISSERTATION TITLE

Fixed Points Techniques in Cone Theory with Applications to Difference Equations. Supervisor: Dr. Allan C. Peterson

CURRENT FIELDS OF INTEREST

Difference Equations, Differential Equations, Calculus on Time Scales, Dynamic Equations and Their Applications to Economics, Fractional Calculus and Their Applications to Medical Sciences.

SUPERVISED THESIS

• Master Thesis: "h - Discrete Fractional Model of Tumor Growth and Anticancer Effects of Mono and Combination Therapies," Kamala Dadashova, 2020.
• Master Thesis: "Controllability and Observability of Linear Nabla Discrete Fractional Systems, " Tilekbek Zhoroev, 2019.
• Master Thesis: "The Controllability and Observability of the Discrete Fractional Linear State-Space Model," Duc Nguyen, 2018.
• Master Thesis: "Discrete Fractional Hermite-Hadamard Inequality," Aykut Arslan, 2017.
• Master Thesis: "Stability of Linear Difference Systems in Discrete and Fractional Calculus ," Aynur Er, 2017.
• Master Thesis: "Analysis of Discrete Fractional Operators and Discrete Fractional Rheological Models," Meltem Uyanık, 2015.
• Master Thesis: "Green's Functions of Discrete Fractional Boundary Value Problems and Application of Discrete Fractional Calculus to a Pharmacokinetics Model," Sutthirut Charoenphon, 2014.
• Master Thesis: "Anayzing and Solving Nonlinear Stochastic Dynamic Models on Non-periodic Discrete Time Domains", Gang Cheng, 2013.
• Master Thesis: "Nabla Fractional Calculus and its Application in Analyzing Tumor Growth of Cancer", Fang Wu, 2012.
• Master Thesis: "Development of Nabla Fractional Calculus and A New Approach to Data Fitting in Time Dependent Cancer Therapeutic Study", Nihan Acar, 2012.

• Master Thesis: "Cagan Type Rational Expectation Models on Time Scales with Their Applications to Economics", Funda Ekiz, 2011.
• Master Thesis: "Development of Fractional Trigonometry and An Application of Fractional Calculus to Pharmacokinetic Model", Amera Almusharff, 2011.
• Master Thesis: "Deterministic and Stochastic Bellman's Optimality Principles on Isolated Time Domains and Their Applications in Finance", Nezihe Turhan, 2011.
• Master Thesis: "Discrete Fractional Calculus and Its Applications to Tumor Growth", Sevgi Şengül, 2010.
• Master Thesis: "Fractional Calculus: Definitions and Applications", Joseph Kimeu, 2009.
• Master Thesis: "Calculus of Variations on Time Scales and its Applications to Economics", Christopher S. McMahan, 2008.
• Master Thesis: "Lebesgue Nabla Measure and Riemann Nabla Integration", Heather Bjorum, 2005.
• Master Thesis: "Analysis of Economic Models Through Calculus of Variations", Raman Arora, 2005.
• Master Thesis: "Bounds of eigenvalues which guarantee the existence of positive solutions", Sibel Delibalci, 1999.
• Ph.D Thesis: "Calculus and Dynamic Equations on Time Scales", Serap Gulsan Topal, 2001.

DIRECTED SENIOR PROJECTS

• "Introduction to Discrete Calculus and Some Applications", by Sarah Angelle, WKU, Fall 2017.
• "Mittag-Leffler Functions of Fractional Calculus", by Scott Greschel, WKU, Spring 2014.
• "The best way to shoot a free throw", by Blake Martin, WKU, Spring 2010.
• "Fractional q-Fourier Transform: A Fresh Look at a Staple Integral Transform", by Landon Oakes, WKU, Spring 2010.
• " A Quasilinearization Method and Its Applications in Physics", by Britney Barrow, WKU, Spring 2009.
• " Math and Dance: Contra and Square Dancing", by Emily Hartman, WKU, Spring 2008.
• "Government Funded Market Manipulations", by Nathan Russell, WKU, Spring 2007.
• "Quantum Calculus: A beginning of a closer look at one type of calculus", April Williams, WKU, Fall 2006.
• "Fractional Calculus", Nicole Zirkelbach, WKU, Fall 2006.

INDEPENDENT STUDY WITH UNDERGRADUATE STUDENTS

• "Eigenvalue problems in discrete fractional calculus," by Samuel Chang, Gatton Academy of Science and Mathematics, WKU, Jan. 2020 - Apr.2021.
Outcome: F. M. Atıcı, S. Chang, and J. Jonnalagadda, Grunwald-Letnikov Fractional

Operators: From Past to Present, Fractional Differential Calculus, 11(2021), no.1, 147–159.
• "Discrete Ponzi Scheme Model," by William Bennett, Department of Economics, WKU, May 2019-April 2020.
Outcome: F. M. Atıcı and W. Bennett, A study on discrete Ponzi Scheme model through Sturm-Liouville theory, *International Journal of Dynamical Systems and Differential Equations*, 11(2021), no.1, 147–159.
• "Implementation of Nelder-Mead Method for Discrete Fractional Models," by Sarah Pedersen, Gatton Academy of Science and Mathematics, WKU, Jan. 2019 - May 2020.
Outcome: F. M. Atıcı, N. Nguyen, K. Dadashova, S. Pedersen, and G. Koch, Pharmacokinetics and Pharmacodynamics Models of Tumor Growth and Anticancer Effects in Discrete Time, *Computational Mathematical Biophysics*, 8(2020), 114–125.
• "Discrete Fractional Gompertz Equation", by Michael Belcher, Gatton Academy of Science and Mathematics, WKU, Jan. 2014- May 2015.
Outcome: F. M. Atıcı, M. Atıcı, M. Belcher, and D. Marshall, A New Approach for Modeling with Discrete Fractional Equations, *Fundamenta Informaticae,* 151(2017), 313–324. doi:10.3233/FI-2017-1494

AWARDS

• 2018 University Distinguished Professor.
• 2015 Women in Science and Engineering Award.
• 2011 University Faculty Award, Research/Creativity.
• 2011 Ogden College Faculty Award, Research/Creativity.
• 2006 Recognition of superior achievement in the field of mathematics, Pi Mu Epsilon, Kentucky Beta Chapter.
• 1995 Graduate award winner(Emeritus Faculty Fellowships) Department of Mathematics and Statistics , University of Nebraska at Lincoln.
• 1991-1995 Teaching Assistantship, Department of Mathematics and Statistics, University of Nebraska at Lincoln.
• 1990 Teaching Assistantship, Department of Mathematics, Ege University.
• 1989 Honorary BS degree, First Place in the Science College and in the Mathematics Department, Ege University.

INTERNAL AND EXTERNAL GRANTS

External Grants

• "A Study on Drug Effects using Discrete Fractional Pharmacokinetics - Pharmacodynamics model of Tumor Growth", KSEF-3904-RDE-020, July 2017- Dec 2018. (50,000.00 Dollars)

• "Parameter Estimations of Sigmoidal Models of Cancer", KSEF-2488-RDE-014, July 2011- June 2013. (60,000.00 Dollars)

Internal Grants

• "Parameter Estimations of Sigmoidal Models of Cancer Using Fractional h-difference Operators," BISC(Bioinformatics and Information Science Center) Graduate Student Research Assistantship, August 2012-May 2013. (5,000.00 Dollars)
• " Sigmoidal Models of Tumor Growths: The Gompertz Model", BISC Graduate Student Research Assistantship, January 2011-May 2011. (2,750.00 Dollars)
• Summer Faculty Scholarship Award, May 2009- Sept. 2009. (6,000.00 Dollars)

Travel Grants

• NSF-CBMS Conference at the University of Alabama, Lodging (300 Dollars)
• Ogden College of Science and Engineering WISE award Travel Grant (2000 Dollars)
• AWM-NSF (Association of Women in Mathematics-NSF) Travel Grant (Awarded) (1270 Dollars)
• AWM-NSF (Association of Women in Mathematics-NSF) Travel Grant, March 2007. (543 Dollars)
• Ogden College of Science Travel Fund, Jan. 2004. (500 Dollars)

UNIVERSITY SERVICE

Departmental Committees

• Sabbatical Committee, Aug. 2016 - present.
• Scholarship/Award Committee, Chair, Aug. 2019 - present.
• Graduate Studies Committee, Aug.2016 - present.
• Student Organization Committee, Aug.2016 - present.
• Scholarship/Award Committee, Aug. 2016 - 2019.
• The Calculus Textbook Committee, Spring 2017.
• Graduate Studies Committee, Chair, Aug.2013 - Aug.2016.
• Strategic Planning Committee, Aug.2013 - Aug 2016.
• The Calculus Textbook Committee, Spring 2014.
• Graduate Studies Committee, 2003 - 2013.
• Department Chair Hiring Committee, 2011 - 2012.
• Colloquium/Symposium Committee, 2006 - 2012.
• Scholarship/Award Committee, 2009 - 2013.
• Math 126- Math 227 Curriculum Committee, Chair, 2008 - 2009.
• Graduate Studies Committee, Chair, Spring 2009
• Advisory Committee, representing Associate Professors, 2006 - 2008.
• KYMAA Local Arrangements Committee, 2007 - 2008.
• The Graph Theory Tenure-Track Position Hiring Committee, Chair, 2006 - 2007.
• The PDE Tenure-Track Position Hiring Committee, Chair, 2006 - 2007.

• 109 Textbook Selection Committee, 2006 - 2007.
• Revision of Tenure and Promotion Document Committee, 2006 - 2007.
• Department Chair Hiring Committee, 2005 - 2006.
• Tenure-Track Position Hiring Committee 2005 - 2006.
• Department representative of "Doers and Deers", Spring 2006.
• AMS Local Arrangements Committee, 2003 - 2005
• Organizer of 24th Annual Mathematics Symposium at WKU, 2004.
• Co-Organizer of 23rd Annual Mathematics Symposium at WKU, 2003.

College Committees

• Ogden College Scholarships and Award Committee, Fall 2019–present.
• Tenure-Promotion Committee, Fall 2019.
• Tenure-Promotion Committee, Spring 2016.
• Ogden College Graduate Curriculum Committee, Sept.2013 - Aug.2016.
• Ogden College Conference and Seminar Committee, 2012 - 2013.
• Executive Committee, The Bio-informatics and Information Science Center, May 2006 - present.
• Ogden/Ashland Scholarship Programs Committee, Chair, 2011 - 2013.
• Ogden College Award Committee, Spring 2012.
• Ogden College Undergraduate Curriculum Committee Aug.2009 - Aug.2011.
• BISC Committee for Graduate Assistantship, Nov.2010 - present.
• Ogden College Faculty Awards Committee, Spring 2010.
• Advisory Committee, department representative, 2007 - 2008.
• Consultation Committee, The Bioinformatics and Information Science Center, May 2006 - 2007.

University Committees

• University Faculty Awards Committee, March-April, 2020.
• FUSE Grants, reviewer, 2019-2020.
• RCAP Grants, reviewer, Spring 2019.
• FUSE Grants, reviewer, 2018-2019.
• UDP Selection Committee, March-April, 2019.
• University Faculty Awards Committee, March-April, 2019.
• The Honorary Degree Committee, August 2018- present.
• Faculty co-advisor for the University WISE student organization, Sept. 2016 - present.
• "Recruiting Trip to India" meeting organized by the Graduate School, Department Representative, August, 2015.
• Graduate Council, May 2013 - May 2015.
• Student Research Grant Committee (from the Graduate Council), Aug 2013 - Aug 2014.
• University Faculty Awards Committee, March-April, 2014.
• University Faculty Awards Committee, March-April, 2013.

• University Faculty Awards Committee, March-April, 2012.
• Graduate Council Representative from Ogden College of Science and Engineering (alternative member), May 2008- May 2009.
• University Senate, May 2004- May 2006.
• The Faculty Welfare and Professional Responsibilities Committee (from the Senate), May 2004- May 2006.
• Chair of the Salary Survey subcommittee (from The Faculty Welfare and Professional Responsibilities Committee), May 2004- May 2006.

PROFESSIONAL ACTIVITIES

• Member of the Scientific Committee of the 4th International Conference on Mathematical and Related Sciences (ICMRS-2021), Oct. 22–24, 2021.
• Judge and Moderator at 2021 WKU Student Research Conference, Apr. 10, 2021.
• Judge at the MAA Student Poster Session at 2021 Joint Mathematics Meetings (JMM), Jan. 6–9, 2021.
• Member of the Scientific Committee of the Eighth International Eurasian Conference on Mathematical Sciences and Applications (IECMSA-2019), Baku-Azerbaijan, August 27-30, 2019.
• Member of the Scientific Committee of the 10th International Conference on non-integer order calculus and its applications, Bolystok Univresity of Technology, Bolystok-Poland, 20-21 Sep., 2018.
• Member of the Scientific Committee of the International Conference on Mathematical Studies and Applications, University of Karaman, Turkey, 4-6 Oct, 2018.
• Founder and faculty advisor for the WKU American Mathematical Society (AMS) Student Chapter, March 2, 2015- present.
• Member of the Scientific Committee of the 2014 International Conference on Pure Mathematics - Applied Mathematics, Venice, Italy, March 15-17, 2014.
• Member of the International Scientific Committee of the 1st WSEAS(World Scientific and Engineering Academy and Society) International Conference on Pure Mathematics (PUMA '14, Tenerife, Spain, January 10-12, 2014.
• Judge in the poster presentation sessions of "The 43rd Annual WKU Student Research Conference," March, 2013.
• Judge in the poster presentation sessions of "The 42nd Annual WKU Student Research Conference," March, 2012.
• Helper in "Wind Power" class at the event "Girls in Science Day ", April 16, 2011.
• Judge in the paper presentation sessions of "The 41st Annual WKU Student Research Conference," March, 2011.
• Judge in the paper presentation sessions of "The 40th Annual WKU Student Research Conference," February 27, 2010.
• Organizer of the session "Time Scales: Theory and Applications," AMS Sectional Meeting at Miami University-Ohio, March 16-17, 2007.
• Organizer and Coordinator in the "Practical Problem Solving" event for High School students, The Kentucky Science Olympiad State Tournament, April 2006.

• One of the organizer of the special session in AMS sectional meeting which was at WKU on March 18-19, 2005.
• The Kentucky Science Olympiad State Tournament, Organizer of "Data Gathering Event", March 2004.
• Organizer of 24th Annual Mathematics Symposium at WKU, 2004.
• The Kentucky Science Olympiad State Tournament, Organizer of "Data Gathering Event", March 2003.
• 2002 Intel International Science and Engineering Fair, Grand Awards Judge for Mathematics.

REVIEWER

• Reviewer for Mathematical Reviews (Jan 2005 - present)
• External research reviewer, King Fahd University of Petroleum and Minerals (Dec 2008 - present).

EDITORIAL BOARD MEMBER

• **Associate Editor** of the Journal "The International Journal of Applied Mathematics Statistics"(IJAMAS). (Sept 2006-present)
• **Associate Editor** of the Journal "Advances in Difference Equations" (June 2015-July 2021.)
• Editor of the Journal: International Journal of Mathematics and Computation. (Sept 2009- present)
• Editor of the Journal: Journal of Black Sea Science and Engineering. (Feb 2011-present)
• Editor of the Journal: Fractional Differential Calculus. (March 2012- present)
• Editor of the Journal: Communication in Fractional Calculus. (Nov 2012-present)
• Editor of the Journal: International Journal of Mathematical Models and Methods in Applied Sciences. (Oct. 2013-present)
• Editor of the Journal: Progress in Fractional Differentiation and Applications. (Sep. 2014-present)
• Editor of the Journal: International Journal of Dynamic Systems and Differential Equations. (Oct. 2014- present)
• Review Editor of the Journal: Frontiers in Physics- Interdisciplinary Physics. (Aug. 2019- present)
• Editor of the Journal: Turkish Journal of Inequalities. (Nov 2019 - present)
• Editor of the Journal: Fractal and Fractional (June 2021 - present)
• Editor of the Journal: Differential Equations and Applications (May 2021 - present)
• Editor of the Journal: Abstract and Applied Analysis (AAA). (Jan 2007-May 2017.)

CONTRIBUTED TALKS AT CONFERENCES

• 4th International Conference on Mathematical and Related Sciences (ICMRS-2021), Oct. 22–24, 2021.(**Key Note Speaker**)
• 40th Annual Mathematics Symposium at WKU, Feb. 20, 2021, Western Kentucky University, Bowling Green, Kentucky.
• 2021 Virtual Joint Mathematics Meetings (JMM), January 6–9, 2021. (**Invited**)
• International Symposium on Bioinformatics and Ecology Education and Research(e-BEER-XIII), Nov 13–15, 2020. (Paper Presentation)
• AMS Sectional Meeting (Fall Southeastern Virtual Sectional Meeting), October 10-11, 2020. (**Invited**)
• The Virtual Conference on Recent Advances in Differential and Difference Equations and their Applications, June 9 11, 2020. (**Invited**)
• International Symposium on Bioinformatics and Ecology Education and Research, Oct 4-6, 2019, La Crosse, Wisconsin. (Poster and **Invited** Paper Presentation)
• NSF-CBMS conference on Mathematical Molecular Bioscience and Biophysics, May 13-17, 2019, The University of Alabama, Tuscaloosa, AL. (Poster and **Invited** Paper Presentation)
• 2019 Annual Meeting of KYMAA, March 29-30, 2019 Centre College, Danville, Kentucky.
• 34th Annual Mathematics Symposium at WKU, Nov. 9-10, 2018, Western Kentucky University, Bowling Green, Kentucky.
• 2018 Annual Meeting of KYMAA, April 6-7, 2018, Western Kentucky University, Bowling Green, Kentucky.
• AMS Sectional Meeting (Spring Central Sectional Meeting), March 16-17, 2018 Ohio State University at Columbus-Ohio.(**Invited**)
• The 19th International Symposium on Bioinformatics and Ecology Education and Research, Oct 6-8, 2017, Normal, Illinois. (Poster Presentation)
• KBRIN Bioinformatics, August 25th, 2017, Shaker Village, Lexington, KY.(**Invited**)
• UT-KBIRN Bioinformatics Summit 2017, April 20-22, 2017, Montgomery Bell State Park, TN. (Poster Presentation)
• The Wolfram Technology Conference, Oct. 18-21, 2016, Urbana-Champaign, Illinois.
• The 40th SIAM Southeastern Atlantic Section Conference (SIAM-SEAS), March 11-13, 2016, Athens, Georgia, (**Invited**)
• The 8th Annual Symposium on Biomathematics and Ecology Education and Research, Oct 9-11, 2015, Normal, Illinois.
• The 8th Annual Symposium on Biomathematics and Ecology Education and Research, Oct 9-11, 2015, Normal, Illinois. (Poster Presentation)
• International Conference on Applied Analysis and Mathematical Modeling, June 8-12, 2015, Istanbul, Turkey.
• The Seventh International Conference on Dynamic Systems and Applications, May 27- 30, 2015, Atlanta, Georgia. (**Invited**)
• The 34th Southeastern-Atlantic Regional Conference on Differential Equations, Oct. 11-12, 2014, Memphis, Tennessee.

• 10th Kentucky Innovation and Entrepreneurship 2014 Conference, Louisville-KY, September 5th, 2014. (Poster Presentation)
• UT-KBIRN Bioinformatics Summit 2014, April 11-13, 2014, Cadiz, Kentucky. (Poster Presentation)
• 2014 Annual Meeting of KYMAA, March 28-29 2014, Murray State University, Murray, Kentucky.
• 9th Kentucky Innovation and Entrepreneurship 2013 Conference, Lexington-KY, August 29th, 2013. (Poster Presentation)
• New Trends in Differential and Difference Equations, Chattanooga, TN, March 15-17, 2013. (**Invited**)
• International Symposium on Biomathematics and Ecology Research and Education, St. Louis-Missouri, Nov 10-11, 2012.
• International Workshop on Dynamic Systems, Ankara-Turkey, June 26-28th, 2012. (**Invited**)
• 8th Kentucky Innovation and Entrepreneurship 2012 Conference, Louisville-KY, June 1st, 2012. (Poster Presentation)
• AMS Sectional Meeting at University of Nebraska, Lincoln-Nebraska, Oct. 14-16, 2011. (**Invited**)
• Second International Symposium on Computing in Science and Engineering, Kusadasi, Izmir-Turkey, June 1-4, 2011.
• The 6th International Conference: 2010 Dynamical Systems and Applications, Antalya-Turkey, July 10-14, 2010. (**Key Note Speaker**)
• AMS Sectional Meeting at Baylor University, Waco-Texas, Oct. 16-18, 2009. (**Invited**)
• International Symposium on Biomathematics and Ecology Research and Education, Izmir - Turkey, June 13-17, 2009.
• 14th International Conference on Difference Equations and Applications, Istanbul-Turkey, July 21-25, 2008. (**Invited**)
• The 27th Southeastern-Atlantic Regional Conference on Differential Equations, Oct 2007, Murray, Kentucky.
• International Conference: 2007-Dynamic Systems and Applications, July 2007, Kusadasi-Izmir, Turkey.
• AMS Sectional Meeting at Miami University-Ohio, March 16-17, 2007. (**Session Organizer and Presenter**)
• 2006 Annual Meeting of KYMAA, March 2006, Centre College, Danville, Kentucky.
• The 25th Southeastern-Atlantic Regional Conference on Differential Equations, Oct 2005, Dayton, Ohio.
• Spring Southeastern Sectional Meeting of AMS at WKU, Bowling Green, KY, March 18-19, 2005. (**Session Organizer**)
• AMS National Meeting, Jan 2005, Atlanta, Georgia. (**Invited**)
• International Conference: 2004-Dynamic Systems and Applications, July 2004, Antalya-Turkey.
• AMS National Meeting, Jan 2004, Phoenix- Arizona. (**Invited**)
• AMS Section Meeting, Bloomington-Indiana, April 2003.

• Workshop on Time Scales, University of Dayton, Dayton-Ohio, September 2002. (**Session Organizer and Presenter**)
• International Conference on Dynamic Systems and Applications, Atlanta-Georgia, May 1999.
• XI. National Mathematics Symposium, Isparta - Turkey, September 1998.
• Fourth International Conference on Difference Equations and Applications, Poznan - Poland, August 1998.
• International Conference Functional Differential-Difference Equations and Applications, Antalya - Turkey, August 1997.
• Rocky Mountain Mathematics Consortium Summer Conference Difference Equations and Their Applications, University of Wyoming, Laramie-Wyoming, July 1997.
• 24. Midwest Differential Equations Conference, University of Nebraska-Lincoln, Nebraska, October 1995.
• 23. Midwest Differential Equations Conference, University of Oklahoma, Oklahoma, October 1994.

LIST OF PUBLICATIONS

62) F. M. Atıcı, S. Chang, and J. Jonnalagadda, Grunwald-Letnikov Fractional Operators: From Past to Present, Fractional Differential Calculus, 11(2021), no.1, 147–159.

61) F. M. Atıcı and W. Bennett, A study on discrete Ponzi Scheme model through Sturm-Liouville theory, *International Journal of Dynamical Systems and Differential Equations*, 11(20210, Nos. 3/4, 227–240.

60) F. M. Atıcı, N. Nguyen, K. Dadashova, S. Pedersen, and G. Koch, Pharmacokinetics and Pharmacodynamics Models of Tumor Growth and Anticancer Effects in Discrete Time, *Computational Mathematical Biophysics*, 8(2020), 114–125.

59) F. M. Atıcı, K. Dadashova, and J. Jonnalagadda, Linear fractional order h-difference equations, Special Issue honoring Professor Johnny Henderson, *International Journal of Difference Equations,* Volume 15, Number 2, pp. 281–300 (2020).

58) F. M. Atıcı and Tilekbek Zhoroev, Controllability and Observability of time-invariant linear nabla fractional systems, *Fractional Differential Calculus*, 10(2020), no.1, 19–39.

57) F. M. Atıcı, M. Atıcı, N. Nguyen, Tilekbek Zhoroev, and Gilbert Koch, A study on discrete and discrete fractional pharmacokinetics-pharmacodynamics models for tumor growth and anti-cancer effects, *Computational Mathematical Biophysics*, 7(2019), 10–24.

56) F. M. Atıcı and D. M. Nguyen, Rank conditions for controllability of discrete fractional time-invariant linear systems, *Journal of Difference Equations and Applications*, 25(2019), Issue 6, Special Issue: Fractional Calculus, Guest Edited by Allan

Peterson, 869–881. doi:10.1080/10236198. 2019.1596265.

55) F. M. Atıcı and Hatice Yaldiz, Refinements on the discrete Hermite-Hadamard inequality, *Arab. J. Math. (Springer)* 7 (2018), no. 3, 175–182.

54) F. M. Atıcı, M. Atıcı, M. Belcher, and D. Marshall, A New Approach for Modeling with Discrete Fractional Equations, *Fundamenta Informaticae,* 151(2017), 313–324. doi:10.3233/FI-2017-1494

53) F. M. Atıcı, Gang Cheng, and Alex Lebedinsky, A Nonlinear Stochastic Growth Model on Discrete Time Domains, *J. Difference Equations and Applications,* 22(2016), issue 11, 1732–1746. doi: 10.1080/10236198.2016.1237509

52) A. Arslan and F. M. Atıcı, Discrete Hermite-Hadamard Inequality and Its Applications, *Applicable Analysis and Discrete Mathematics,* 10(2016), 366–377. doi:10.2298/AADM160617013A

51) F. M. Atıcı and Hatice Yaldiz, Convex Functions on Discrete Time Domains, *Canadian Mathematical Bulletin,* **59** (2) (2016), 225–233.

50) F. M. Atıcı, M. Atıcı, W. M. Hrushesky, and N. Nguyen, Modeling Tumor Growth with Basic Functions of Fractional Calculus, *Progress in Fractional Differentiation and Applications*, **1**(2015), No.4, 1–13.

49) F. Merdivenci Atıcı and Meltem Uyanık, Analysis of Discrete Fractional Operators, *Applicable Analysis and Discrete Mathematics,* Vol. 9, (2015), 139–149.

48) F. Merdivenci Atıcı and Daniel C. Biles, Further Development of Stochastic Calculus on Time Scales, *PanAmerican Mathematical Journal*, 25(2015), No.2, 13–24.

47) F. Merdivenci Atıcı and P. W. Eloe, Linear Forward Fractional Difference Equations, *Communication in Applied Analysis*, Special issue honoring Prof. Allan Peterson, 19(2015), 31–42.

46) F. Merdivenci Atıcı and Fang Wu, Existence of Solutions for Nonlinear Fractional Difference Equations with Initial Conditions, *Dynamic Systems and Applications,* Special issue honoring Prof. John Greaf, 23(2014), 265–276.

45) F. Merdivenci Atıcı, F. Ekiz, and A. Lebedinsky, Cagan Type Rational Expectation Model on Complex Discrete Time Domains, *European Journal of Operational Research,* 237(2014), 148–151.

44) F. Merdivenci Atıcı and Nihan Acar, Exponential Functions of Discrete Fractional Calculus, *Applicable Analysis and Discrete Mathematics,* Vol. 7, (2013), no.2, 343–353.

43) F. Merdivenci Atıcı, A. Lebedinsky, and F. Uysal, Inventory Model of Deteriorating Items on Non-periodic Discrete-Time Domains, *European Journal of Operational Research,* 230(2013), pp.284–289.

42) F. Merdivenci Atıcı, D. C. Biles, Dynamic Equations with Rational Expectations on Time Scales, *Int. J. of Res. and Rev. in Appl. Sci.*, Vol. 15, 1(2013), pp. 60–65.

41) F. Merdivenci Atıcı and Thabet Abdeljawad, On the Definitions of Nabla Fractional Operators, *Abstract and Applied Analysis*, 2012, Article ID 406757, 13 pages.

40) F. Merdivenci Atıcı and A. Almushraff, On A Class of Fractional Differential Equations, *Communications in Applied Analysis*, 16(2012), no.3, pp. 423–432.

39) F. Merdivenci Atıcı and P. W. Eloe, Gronwall's Inequality in Discrete Fractional Calculus, *J. Computers and Mathematics with Applications,* 64 (2012), pp. 3193–3200.

38) F. Merdivenci Atıcı and N. Turhan, Sequential Decision Problems on Isolated Time Domains, *J. Mathematical Analysis and Applications,* 388(2012), pp. 753–759.

37) F. Merdivenci Atıcı and P. W. Eloe, Two-Point Boundary Value Problems for Finite Fractional Difference Equations, *J. Difference Equations and Applications,* Vol. 17, 4(2011), pp. 445–456.

36) F. Merdivenci Atıcı, D. C. Biles and A. Lebedinsky, A Utility Maximization Problem on Multiple Time Scales, *International Journal of Dynamical Systems and Differential Equations,* Special issue on Dynamic Equations on Time Scales, Vol. 3, 1-2(2011), pp. 38–47.

35) F. Merdivenci Atıcı and Paul W. Eloe, Linear Systems of Fractional Nabla Difference Equations, *The Rocky Mountain Journal of Mathematics,* Special issue honoring Prof. Lloyd Jackson, Vol. 41, 2(2011), pp. 353–370.

34) F. Merdivenci Atıcı, D. C. Biles, The Stochastic Ito Integral on Time Scales, *PanAmerican Mathematical Journal*, 20(2010), No.4, pp. 45-56.

33) F. Merdivenci Atıcı and Sevgi Şengül, Modeling with Fractional Difference Equations, *Journal of Mathematical Analysis and Applications,* 369(2010), pp. 1–9.

32) F. Merdivenci Atıcı and P. W. Eloe, Discrete Fractional Calculus with the Nabla Operator, *Electronic Journal of Qualitative Theory of Differential Equations,* Spec. Ed I, 2009, No.3, pp.1-12.

31) F. Merdivenci Atıcı and C. S. McMahan, A comparison in the theory of calculus of variations on time scales with an application to the Ramsey model, *Nonlinear Dynamics and Systems Theory,* Vol. 9, 1(2009), pp. 1-10.

30) F. Merdivenci Atıcı and P. W. Eloe, Initial value problems in discrete fractional calculus, *Proceedings of the American Mathematical Society*, Vol. 137, 3(2009), pp 981-989.

29) F. Merdivenci Atıcı and F. Uysal, The production-inventory model of HMMS on time scales, *Applied Mathematics Letters*, Vol. 21, 3(2008), pp 236-243.

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