

NAJLA ALTWAIJRY

Assistant Professor of Mathematics
Department of Mathematics, College of Science, King Saud University

ADDRESS

King Saud University
P O Box 1241
Riyadh 11431
Saudi Arabia

Telephone No.: +966 11 8052921
+966 5 04220433
Email Address: najla@ksu.edu.sa

EDUCATION

University of Oxford Oxford, United Kingdom
DPhil in Mathematics (Major field: Theory of JB^ -triples; Functional Analysis)* 2007
Dissertation: Certain aspects of JB^* -Triples and JBW^* -Triples.

King Saud University Riyadh, Saudi Arabia
MSc in Mathematics (Major field: Functional Analysis) 2002

King Saud University Riyadh, Saudi Arabia
BSc in Mathematics 1998

CURRENT ACADEMIC POSITION

- Assistant Professor, Department of Mathematics, College of Science, King Saud University.

OTHER CURRENT PROFESSIONAL POSITIONS

- Vice Dean, Deanship of Admissions, Registration ,and Student Affairs, Dar Al- Uloom University, Mar. 2016 - to date.
- Vice Chair, Postgraduate Program, Department of Mathematics, King Saud University, Sep. 2007 – to date.
- Reviewer, Mathematical Reviews for MathSciNet, American Mathematical Society, Oct. 2015 – to date.

PREVIOUS ACADEMIC POSITIONS HELD

- Program Advisor, Masters degree in Mathematics, Hail University, Mar. 2009 – Apr. 2010.
- Demonstrator, Department of Mathematics, King Saud University, Nov. 1998 – Dec. 2007.

PREVIOUS PROFESSIONAL POSITIONS HELD

- Vice Dean, Deanship of Graduate Studies, King Saud University, Sep. 2011 – Mar. 2016.
- Vice Chair, Department of Mathematics, King Saud University, Sep. 2010 – Sep. 2011.
- Vice Chair, Department of Mathematical Skills, Preparatory Year, King Saud University, Sep. 2008 – Sep. 2009.
- Deputy Leader, Saudi Mathematical Olympiad Team, Sep. 2010 – Aug. 2014.
- Part-time Consultant, Studies and Research Centre, Ministry of Higher Education, Sep. 2008 – Aug. 2009.

AWARDS AND GRANTS

- Almarai Award for Scientific Innovation, King Abdulaziz City for Science and Technology, June 2009.
- Grant for the British Council Post-Doctoral Summer Research Program, Jul. – Aug. 2009.
- Funding for two scientific projects "Splitting Methods for Monotone Operators and Applications " and "Nonlinear Analysis Methods and their Applications to Economics and Finance" from King Abdulaziz City for Science and Technology, June 2013.

TEACHING AND SUPERVISION

Teaching Post-Graduate Level

Measure Theory, Functional Analysis, Advanced Functional Analysis, Stochastic Differential Equations.

Teaching Undergraduate Level

Calculus, Multivariable Calculus, Linear Algebra, Ordinary and Partial Differential Equations, Real Analysis, Multivariable Analysis, Number Theory, Introduction to Graph Theory and Combinatorics.

Supervision Post-Graduate Level

- Supervised an MSc Thesis titled "Inner Ideals in JBW^* -triples", by Safa Abuhilwa, June 2013.
- Supervised an MSc Thesis titled "An introduction to JB^* -triple Theory", by Gazia Alsohaily, ongoing.
- Member of the defense committee for an MSc Thesis titled "Measure of Non-Compactness Fixed Points Theorems and Nash Equilibria in Abstract Economy", June 2013.

Supervision Undergraduate Level

I have supervised the graduation projects of over 15 undergraduate students from the department of Mathematics from 2007 to date.

RESEARCH AND PUBLICATIONS

Journal Articles

- N. Altwaijry, S. Chebbi, and H.K. Xu, "*Properties and splitting method for the p -Elastic Net*", Pacific Journal of Optimization, Sep. 2015.
- N. Altwaijry, S. Chebbi, and H.K. Xu, "*Ergodic Convergence of the Double Backward Method for Monotone Operators*", Journal of Nonlinear and Convex Analysis (ISI, IF: 2.4), 2015.
- M. Alqurashi, N. Altwaijry, C. M. Edwards, C. Hoskins, "*The Banach-Lie Algebra of Multiplication Operators on a W^* -algebra*", Asian European Journal of Mathematics, June 2011.
- N. Altwaijry and C. M. Edwards, "*The Banach-Lie Algebra of Multiplication Operators on a JBW^* -triple*", Journal of Functional Analysis, 254 (2008) 2866–2892.

Books

- "*Principles of Geometry for Olympiad Students*", N. Altwaijry, M. Samhan, L. Topan, Al-Obaikan Press, March 2016.
- Translation into Arabic of the book "*Introductory Functional Analysis with Applications*" by Erwin Kreyszig, ongoing.

Working Papers

- S. Chebbi, N. Altwaijry, and H.K. Xu, "*A Strongly Convergent Modification of the Proximal Point Algorithm in Nonsmooth Banach Spaces*", Fixed Point Theory and Applications, under review.
- M. Garayev, N. Altwaijry, and A. Baazeem, "*Distance Estimates, Hankel Operators and Berezin Symbols, and Related Questions*", under review.
- N. Altwaijry, S. Chebbi, P. Gourdél, "*Borsuk's antipodal fixed points theorems for compact or condensing set-valued maps*", Fixed Point Theory and Applications, under review.
- N. Altwaijry and C. M. Edwards, "*The Banach-Lie Algebra of Multiplication Operators on a Hilbert Space*", under review.
- N. Altwaijry and C. M. Edwards, "*The Banach-Lie Algebra of Multiplication Operators on a spin-triple*", under review.

CONFERENCES AND PRESENTATIONS

Academic Conferences

- 17th Conference of the Saudi Educational and Psychological Association: Educational Integration between Public and Higher Education, March 2016.
- 3rd International Conference on Mathematical Sciences and their Applications: Equilibrium and Optimization Methodology in Finance and Economics, Riyadh, Saudi Arabia, November 2015.
- 23rd International Conference on Finite or Infinite Dimensional Complex Analysis and Applications, Fukuka, Japan, August 2015.
- Conference on Jordan Geometric Analysis and Applications, September 2014.
- Workshop on Jordan Theory, Analysis and Optimization, Daejeon, South Korea, May 2013.
- International Conference on Jordan Theory, Analysis, and Related Topics, Hong Kong, May 2012.
- 22nd International Workshop on Operator Theory and its Applications, Sevilla, Spain, July 2011.

Professional Conferences

- Women Leadership Forum in Higher Education, Riyadh, Saudi Arabia, March 2016.
- Council of Graduate Schools Annual Meeting, Washington, USA, December 2014.
- Council of Graduate Schools Annual Meeting, San Diego, USA, December 2013.
- Council of Graduate Schools Annual Meeting, Washington, USA, December 2012.

Presentations

- "*Ergodic Convergence of the Double Backward Method for Monotone Operators*", Riyadh, Saudi Arabia, November 2015.
- "*Postgraduate Student Numbers and Disciplines Targeted by King Saud University until 2023*", Riyadh, Saudi Arabia, April 2014.
- "*Proposed Solutions and Mechanisms for Increasing the Number of Postgraduate Students through the Experience of Academic Departments*", Riyadh, Saudi Arabia, November 2013.
- "*The International Olympiads: A presentation for Secondary Schools*", Dammam, Saudi Arabia, June 2013.
- "*The International Olympiads: A presentation for Universities*", Riyadh, Saudi Arabia, August 2012.
- "*Secondary Schools' Role in the International Olympiads*", a presentation given at several schools in Riyadh, Saudi Arabia, January – May 2011.
- "*Postgraduate Students Affairs Management: A Success Story*", Riyadh, Saudi Arabia, December 2010.
- "*Participation of Saudi Arabia in the International Mathematical Olympiad*", Taif, Saudi Arabia, July 2010.

- *"Participation of Saudi Arabia in the International Olympiads: Mathematics, Physics, and Chemistry"*, Riyadh, Saudi Arabia, May 2010.
- *"The Banach-Lie Algebra of Multiplication Operators on a JBW*-Triple"*, Riyadh, Saudi Arabia, November 2007.

UNIVERSITY AND COMMUNITY SERVICES

Committee Membership

- Postgraduate Program, Department of Mathematics.
- Mathematical Analysis Committee, Department of Mathematics.
- Saudi Association of Mathematical Sciences.
- Postgraduate Admissions Committee, Deanship of Graduate Studies, King Saud University.
- Member of the CGS (Council of Graduate Schools), Washington DC, USA.
- Member of the Distinguished Students Program steering committee, King Saud University.

University Services

- Member of the project "Attracting and Increasing the Numbers of Outstanding Postgraduate Students", September 2014 to June 2015.
- The Deanship of Graduate Studies obtained the ISO 9001:2008 Quality Certification from TÜV NORD in March 2013 while I was Vice-Dean of Graduate Studies.
- The Department of Mathematics obtained Academic Accreditation by ASIIN Accreditation Association in May 2011 while I was Vice-Head of the Department.
- Supervision of the "Introductory Program for the Preparatory Year Students: 2008", Preparatory Year, King Saud University, September 2008.

National Services

- I have written and assessed hundreds of questions in mathematics used in the national tests administered by QIYAS, the National Center for Assessment in Higher Education, 2012 – to date.
- Supervision of Several training camps for the Saudi Mathematical Olympiad Team. 2010 – 2014.
- Interviewing candidates for the program "Discover: Mathematics and Science" administered by Saudi ARAMCO, October 2013.
- Participation in several judging committees for the "National Olympiad for Scientific Creativity" administered by MAWHIBA, 2010 – 2013.
- Supervision of several test centers for "QIYAS: The National Center for Assessment in Higher Education", Riyadh, Saudi Arabia, 2008 – 2013.