

Curriculum Vitae

Omar A. AbuGhneim,

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Personal Information:

Date of Birth: 01-01-1976.

Place of Birth: Amman-Jordan.

Nationality: Jordanian.

Languages: Arabic and English.

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Education:

1994-1998

B.Sc. in Mathematics.

Jordan University, Amman, Jordan.

GPA: 3.81 out of 4.

1998-2000

Master in Mathematics.

Jordan University, Amman, Jordan.

Thesis Title: On Noetherian Generalized Power Series Rings.

Supervisor: Dr. Shaker Nazzal.

GPA: 3.75 out of 4.

2001- 2005

Ph.D. in Mathematics.

Central Michigan University, Mount pleasant, MI 48859, U.S.A.

Dissertation Title: Nonabelian McFarland and Menon-Hadamard
Difference Sets.

Supervisor: Prof. Ken W. Smith.

GPA: 3.88 out of 4.

Teaching Experience:

1. Professor, The University of Jordan, (March 2016- Now).
2. Associate Professor, The University of Jordan, (March 2011- March 2016).
3. Associate Professor, German Jordanian University, the academic year 2012-2013. (This was during the sabbatical leave given by the University of Jordan).
4. Assistant Professor, The University of Jordan (September 2006- March 2011).
5. Visiting Assistant Professor, Central Michigan University, the academic year 2005-2006.
6. Worked as a Graduate Assistant during the academic year 2004-2005 at Central Michigan University. I Held a Doctoral Fellowship from August 2001 to May 2004 at Central Michigan University.
7. Lecturer, The Hashemite University, the academic year 2000-2001.

Courses taught:

Groups and Fields for Doctoral level, Algebra for graduate level, Abstract Algebra II, Abstract Algebra I, Combinatorics, Cryptography, Partial Differential Equations, Advanced Calculus, Linear Algebra I, Euclidian and Non-Euclidean Geometry, Euclidian Geometry, Advanced Calculus and Partial Differential Equations for Engineering, Differential Equations for Engineering, Differential Equations, Principles of Mathematics, Calculus3, Calculus2, Calculus1, Principles of Statistics, Calculus for Business, College Algebra, and Trigonometry.

Area of Research:

Algebraic Combinatorics and Graph Theory (Difference Sets, Zero Divisor Graphs, Divisor Graphs, Commuting Graphs, and Powers of Graphs).

Publications:

1. Baha' Abughazaleh, Omar Abughneim, and Hasan Al-Ezeh; On co-well covered graphs. *Communications of the Korean Mathematical Society.* 35 (2), 359-370, 2020.
2. Salah Al-addasi, Hasan Al-Ezeh and Omar Abughneim; Line graphs and middle graphs that are divisor graphs. *WSEAS Transactions on Mathematics.* 19, 108-112, 2020.
3. Eman Hussein, Hasan Al-Ezeh and Omar Abughneim; The path graph of the amalgamated graph of C_3 and C_n at an edge or at a vertex. *Italian Journal of Pure and Applied Mathematics.* 43, 492-502, 2020.
4. Omar A. AbuGhneim, Dylan Peifer and Ken W. Smith; All $(96, 20, 4)$ difference sets and related structures. *Bulletin of the ICA.* 85 (2019), 30-45.
5. Manal Al-Labadi, Omar A. AbuGhneim and Hasan Al-Ezeh; Commuting Graph of the Ring of all $m_1 \oplus m_2$ Direct Sum Matrices over $Z_n[i]$ and over $Z_n[\alpha]$. *International Journal of Mathematical Analysis.* 12 (2018) (3), 99-110.
6. Maryam M. AlHoli, Omar A. AbuGhneim and Hasan Al-Ezeh; Metric Dimension of Some Path Related Graphs. *Global Journal of Pure and Applied Mathematics.* 13 (2017) (2), 149-157.
7. Omar A. AbuGhneim; All $(64, 28, 12)$ difference sets and related structures. *Ars Combin.* 125 (2016), 271-285.
8. Eman A. AbuHijleh, Omar A. AbuGhneim and Hasan Al-Ezeh; Characterizing which powers of hypercubes and folded hypercubes are divisor graphs. *Discuss. Math. Graph Theory* 35 (2015), no. 2, 301-311.
9. Omar A. AbuGhneim, Emad E. AbdAlJawad and Hasan Al-Ezeh; The independence number of $\Gamma(\mathbb{Z}_{p^n}(\alpha))$. *Bull. Malays. Math. Sci. Soc.* (2) 37 (2014), no. 2, 345-358.
10. Omar A. AbuGhneim, Basem Al-Khamaiseh and Hasan Al-Ezeh; The geodetic, hull, and Steiner numbers of powers of paths. *Util. Math.* 95 (2014), 289-294.
11. Eman A. AbuHijleh, Omar A. AbuGhneim and Hasan Al-Ezeh; Characterizing when powers of a caterpillar are divisor graphs. *Ars Combin.* 113A (2014), 85-95.

12. Emad Abu Osba, Salah Al-Addasi and Omar A. AbuGhneim; Some properties of the intersection graph for finite commutative principal ideal rings. *Int. J. Comb.* 2014, Art. ID 952371, 6 pp.
13. Omar A. AbuGhneim; On $(64, 28, 12)$ difference sets. *Ars Combin.* 111 (2013), 401-419.
14. Salah Al-Addasi, Omar A. AbuGhneim and Hasan Al-Ezeh; Further new properties of divisor graphs. *J. Combin. Math. Combin. Comput.* 81 (2012), 261-272.
15. Omar A. AbuGhneim, Emad E. AbdAlJawad and Hasan Al-Ezeh; The clique number of $\Gamma(\mathbb{Z}_{p^n}(\alpha))$. *Rocky Mountain J. Math.* 42 no. 1 (2012), 1-13.
16. Salah Al-Addasi, Omar A. AbuGhneim and Hasan Al-Ezeh; Characterizing powers of cycles that are divisor graphs. *Ars Combin.* 97A (2010), 447-451.
17. Salah Al-Addasi, Omar A. AbuGhneim and Hasan Al-Ezeh; Merger and vertex splitting in divisor graphs. *Int. Math. Forum* 5 (2010), no. 37-40, 1861-1869.
18. Salah Al-Addasi, Omar A. AbuGhneim and Hasan Al-Ezeh; Divisor orientations of powers of paths and powers of cycles. *Ars Combin.* 94 (2010), 371-380.
19. Omar A. AbuGhneim, Hasan A. Al-Halees and Ahmed M. Assaf; Directed covering with block size 5 and v and λ odd. *J. Combin. Math. Combin. Comput.* 66 (2008), 237-255.
20. Omar A. AbuAarqob, Nabil T. Shawagfeh and Omar A. AbuGhneim; Functions defined on fuzzy real numbers according to Zadeh's extension. *Int. Math. Forum.* 3 (2008), no. 13-16, 763-776.
21. Omar A. AbuGhneim and Ken W. Smith; Tightening Turyn's bound for Hadamard difference sets. *J. Algebraic Combin.* 27 (2008), no. 2, 187-203.
22. Omar A. AbuGhneim and Ken W. Smith; Nonabelian groups with $(96, 20, 4)$ difference sets. *Electronic Journal of Combinatorics.* 14 (2007), no. 1, Research Paper 8, 17 pp. (electronic).

23. Omar A. AbuGhneim, Paul E. Becker, Jennifer K. Mendes and Ken W. Smith; On Menon-Hadamard difference sets in groups of order $4p^2$. 36th Southeastern International Conference on Combinatorics, Graph Theory, and Computing (Boca Raton, FL, 2005). Congr. Numer. 172 (2005), pp 97-121.

24. Omar A. AbuGhneim; On nonabelian McFarland difference sets. Proceedings of the Thirty-Fifth Southeastern International Conference on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 2004). Congr. Numer. 168 (2004), pp. 159-175.

Reviews and Refereeing:

1. Member in the American Mathematical Society Reviews. Reviewed several articles for the American Mathematical Society Reviews.

2. I have refereed several articles and a book for the mathematics community.

Dissertation/Thesis Supervision and Committees:

1. Supervised and cosupervised five Doctoral Dissertation and three Master Thesis.

2. Served as a member in eight Doctoral Dissertation Committees and nineteen Master Thesis Committees.

Department Committees and University Service:

1. Member in the library committee for the academic years 2020-2021, 2019-2020, 2018-2019, 2014-2015, 2013-2014, 2011-2012, 2010-2011, and 2009-2010.

2. Member in the seminars and colloquiums committee for the academic years 2018-2019, 2016-2017, 2014-2015 and 2013-2014.

2. Member in the research committee for the academic years 2017-2018, 2016-2017 and 2014-2015,

3. Member in the social committee for the academic year 2014-2015.

4. Member in the teaching schedule committee, for the academic years 2011-2012, 2010-2011, 2009-2010, 2008-2009, and 2007-2008.

5. Member in the qualifying exam committee for the academic years 2010-2011 and 2009-2010.

6. Member in the accreditation committee of the mathematics department.

7. Member in the students advising committee for the academic years 2020-2021, 2019-2020, 2009-2010 and 2007-2008.

REFERENCES:

Dr. Ken W. Smith.
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Sam Houston State University
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