

# C.V.



## Personal Information:

Name	Prof. Emad Ahmed Mohammed Abuosba
Place and date of birth	Kuwait – 1966
Social status	Married
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## Qualifications:

1996 – 1999	Ph. D in mathematics (commutative algebra) University of Jordan
1991 – 1992	Master degree in mathematics, University of Jordan
1984 – 1989	B.Sc. in mathematics, Kuwait University
1984	High school, Kuwait

## Experience:

3/4/2017	Professor of Algebra, Math. Depart. University of Jordan
2014 – 2016	Head of mathematics department at University of

	Jordan
2013 – 2017	Associate professor A, Math. Depart. University of Jordan
2010 – 2011	Sabbatical leave to University of Petra
18/9/2009 – 2013	Associate professor B, Math. Depart. University of Jordan
2008 – 2009	Assistant Professor A, Math. Depart. University of Jordan
2004 – 2008	Assistant Professor B, Math. Depart. University of Jordan
1999 – 2004	Assistant Professor, Math. Depart. University of Petra
1996 – 1999	Lecturer, Educational sciences college, UNRWA
1993 – 1996	Teacher, UNRWA schools
1992 – 1993	Lecturer, Hiteen Intermediate college

### **Training:**

1993-1994	Qualifying for high school teachers. UNRWA
26 August – 17 September 2012 (50 hours)	Staff development workshops The University of Jordan

### **Conferences:**

[1] *Purity of Some Ideals in  $C(X)$* , Fourth conference in Jordan University of Science and Technology (23/5/2001).

[2] *A Note on Strongly Regular Elements*,  
First Mathematics conference in Applied Science University , Amman (6 – 8/10/2004)

[3] *Regular Elements in Power Series Rings*  
First International Conference in Mathematical Sciences, AL-Azhar University, Gaza (15 – 17 /5/2007)

[4] *The Intersection Graph of Finite Commutative Principal Ideal Rings*  
Third CARG Workshop, KFUPM, Saudi Arabia, April, 28, 2014

[5] *Controlling zero-divisors in commutative rings.*  
First Abstract Algebra Workshop, The University of Jordan, 28/6/2018

[6] *Prufer Conditions Vs EM Conditions.*  
Second Abstract Algebra Workshop, The University of Jordan, 18/7/2019

### **Master Thesis Students:**

[1] Hasan Alkalaf: (2006) On Strongly Von Neumann Local Regular Rings.

[2] Ahmed Yousef El-Dwiek: (2006) On the Zero Divisor Graph of  $C(X)$ .

[3] Mahmoud Alhmouz: (2007) Some properties of the ring of Gaussian integers.

[4] Abdallah Shehadeh: (2008) Codes over the Gaussian integers.

[5] Maysoon Fahim Al Sallal: (2008) Codes over multiplicative groups of quotient rings of polynomials over finite fields.

[6] Muna Nu'man: (2008) The pure part of the ideals in the ring  $C(X)$ .

[7] Hamzah Alkurdi: (2008) Zero divisor graphs of direct products of commutative rings.

[8] Mohammad Al Kalalilah: (2009) On regular elements in commutative rings.

[9] Basem Kamaysah: (2009) Zero divisor graph of the ring of Gaussian Integers.

[10] Ayat Abu Rukab: (2010) Coloring of Zero Divisor Graphs

[11] Amany Shatara: (2011) Some Properties of the Ring of Continuous Functions Vanishing at Infinity.

[12] Amjad Shanaa': (2011) The Complement Zero Graph for Gaussian Integers Modulo  $n$ .

- [13] Eman Jafer: (2013) Some Algebraic Properties of the Ring  $C(X)$ .
- [14] Nisreen Al\_Amyrah: (2013) On the complement of the zero-divisor graph of a commutative ring.
- [15] Noor Harb: (2014) On the line graphs for Gaussian integers modulo  $n$ .
- [16] Salah Eddin Harb Bayer: (2014) Von Neumann regular and related elements in commutative rings.
- [17] Baha Abu Ghazaleh: (2015) Elliptic curves cryptography.
- [18] Tasneem Ghatasheh: (2015) Some Properties of Intersection graph of Ideals of Rings.
- [19] Enas Abu Eid: (2015) On relative  $z$ -ideals.
- [20] Isaaf Atassi: (2016) Cozerosets preserving functions.
- [21] Hadeel Al Kharabsheh: (2016) Zero-divisors in polynomial and power series rings.
- [22] Hanan Jawdat: (2018) On the Total Graph of a Commutative Ring.
- [23] Noor Akawi: (2019) Some generalizations of Armendariz rings.
- [24] Maisa Alkronz: (2020) On 2-absorbing Ideals of Commutative Rings.
- [25] Sana'a Shaltaf (2021) On Idealization of Modules in Commutative Rings.
- [26] Osama AlHyari (2021) Properties of Commutative Weakly Nil Clean Rings.
- [27] Haneen Abulebbeh (2023) On Factorization of Elements in Commutative Rings.
- [28] Haneen Alshalout (2023) Some Properties of Nagata's Ring.
- [29] Dareen Al-Shalout (2023) Some Properties of Serre's Conjecture Ring.

[30] Sarah Al-Drabkeh (2023) Some Annihilator Conditions on Commutative Rings.

[31] Malak Jabr (2023) On U-group Rings.

### **PhD Students:**

[1] Ghada AlAfifi: (2013) Some Properties of Graphs Constructed by the Zero-Divisors in Rings of Continuous Functions.

[2] Hamzah Qoqazeh: (2017) Metacompactness in Bitopological Spaces.

[3] Huda Odetallah: (2018) Some New Properties of PF-rings and their Generalizations.

[4] Heba Abd Alkareem: (2019) Some Extensions of EM-Hermite Rings.

[5] Isaaf Atassi: (2021) Some New Properties of the Ring of Continuous Functions.

[6] Mariam Al-Azaizeh: (2022) EM-rings Vs Prufer Rings.

### **Courses Taught:**

B.Sc. Courses: Calculus I, II and III, Linear Algebra I, Linear Algebra II, Abstract Algebra I and II, Number Theory, Operations research, Foundations of Mathematics, Differential Equations I, Mathematics for Engineering I, Principals of Statistics, Discrete Mathematics, Numerical Analysis, Cryptography Theory.

Master Courses: Abstract Algebra I, Abstract Algebra II.

PhD. Courses: Theory of groups and fields.

## **Other Activities:**

- (1) Author in “Dar Al-Manhal” group on “Math. Thinking” school books series.
- (2) Head of the Committee of computerizing calculus I exams.
- (3) Head of the Committee of preparing BSc. students to qualifying exam.
- (4) Member of the math department web site committee.
- (5) Member of Science College Counsel for the academic year 2009 – 2010
- (6) Member of Student's Affairs Counsel in Science College for the academic year 2009 – 2010.
- (7) Member of the student’s election committee for student’s elections year 2009 – 2010
- (8) Member of the web site committee of the Math. Depart. 2018 – 2021
- (9) Member of the translation team for the book: "First course in Abstract Algebra by John Fraglieh".
- (10) Member of Science College Counsel for the academic year 2014 – 2015, 2015 – 2016.
- (11) Reserved Member of Student's Affairs Counsel in Science College for the academic year 2014 – 2015.
- (12) Member of Science College Counsel for the graduate students year 2014 – 2015, 2015 – 2016.
- (13) Member of Science College Counsel for development year 2014 – 2015.
- (14) Member of the students election committee for students elections year 2014 – 2015.
- (15) Member of Neda AL-Khair charity association – Jordan
- (16) Member of Jordan Community Culture association - Jordan
- (17) Member of the accreditation committee of the math. Department year 2014 – 2015, 2016 – 2017, 2017 – 2022
- (18) Head of the Mathematics department, The University of Jordan, 2014 – 2016
- (19) Member of the improvement committee of the college of science year 2014 – 2015, 2016 – 2022
- (20) Head of the ABET accreditation committee for Mathematics Department, 2017 – 2022
- (21) Head of the organizing committee for the first Abstract Algebra Workshop, held at The University of Jordan, 28/6/2018
- (22) Head of the organizing committee for the first Abstract Algebra Workshop, held at The University of Jordan, 18/7/2019

- (23) Member of Mathematics Department Counsel for the graduate students year 2014 – 2016, 2018 – 2019.

### **Published Articles:**

- [1] **MR1816622 (2002c:54012)** Abu Osba, E. and Al-Ezeh, H. (1999) Purity of the ideal of continuous functions with compact support. *Math. J. Okayama Univ.* 41, 111-120. 54C35 (46E25 46J20)
- [2] **MR1883054 (2003d:54032)** Abu Osba, E. and Al-Ezeh, H. (2001) Some properties of the ideal of continuous functions with pseudocompact support. *Int. J. Math. Math. Sci.* 27 (3), 169-176. 54C40 (46J20)
- [3] **MR1895750 (2003a:54019)** Abu Osba, E. (2002) Purity of the ideal of continuous functions with pseudocompact support. *Int. J. Math. Math. Sci.* 29 (7), 381-388.
- [4] **MR2038840 (2005a:16046)** Abu Osba, E and Al-Ezeh, H. (2003) The pure part of the ideals in  $C(X)$ . *Math. J. Okayama Univ.* 45, 73-82. 16S60 (46E25 54C35)
- [5] **MR2099923 (2005h:13009)** Abu Osba, E. Henriksen, M. and Alkam, O. (2004) Combining local and von Neumann regular rings. *Comm. Algebra* 32 (7), 2639-2653. 13A99 (16E50)
- [6] **MR2103145 (2005h:54040)** Abu Osba, E. and Henriksen, M. (2004) Essential P-spaces: a generalization of door spaces. *Comment. Math. Univ. Carolin.* 45 (3), 509-518. 54H13 (16E50 54G10)
- [7] **MR2223962 (2007b:13004)** Abu Osba, E. Henriksen, M. Alkam, O. and Smith, F. A. (2006) The maximal regular ideal of some commutative rings. *Comment. Math. Univ. Carolin.* 47 (1), 1-10. 13A15 (16E50)
- [8] **MR2399840** Alkam, O. and Abu Osba, E. (2008) On the regular elements in  $Z_n$ . *Turkish J. Math.* 32 (1), 31-39. 13M05 (11A25)

- [9] **MR2458411** Abu Osba, E. Al-Addasi, S. and Abu Jaradeh, N. (2008) Zero divisor graph for the ring of Gaussian integers modulo  $n$ . *Comm. Algebra* 36 (10), 3865-3877. 13A99 (05C75)
- [10] **MR2510957** Abu-Osba, E. (2009) Von Neumann inverses and cryptography. *Dirasat Pure Sci.* 36 (1), 76-79. 94A60 (94B60)
- [11] **MR2652950** Alkam, O. and Abu Osba, E. (2010) On Eisenstein integers modulo  $n$ . *Int. Math. Forum* 5 (21-24), 1075–1082.
- [12] **MR2783168** Abu Osba, E. Al-Addasi, S. and Al-Khamaiseh, B. (2011) Some properties of the zero-divisor graph for the ring of Gaussian integers modulo  $n$ . *Glasg. Math. J.* 53 (2), 391–399. 13A99 (05C25)
- [13] **MR2924491** Abu Osba, E. (2012) The complement graph for Gaussian integers modulo  $n$ . *Comm. Algebra* 40 (5), 1886 – 1892. 13Axx (05C10 05C25 05C40 05C45)
- [14] **MR3060277** Abu Osba, E. and Al-Ezeh, H. (2013) Eulerian zero-divisor graphs. *Ars Combin.* 108, 305–311. 13M05 (05C15)
- [15] **MR315160** AlAfifi, G. and Abu Osba, E. (2013) On the Line Graph for Zero-Divisors of  $C(X)$ , *International Journal of Combinatorics* Volume 2013, Article ID 756179, 6 pages. 05C76 (05C25)
- [16] **MR3272976** AlAfifi, G. and Abu Osba, E. (2014) Complement Graph for Zero-Divisors of  $C(X)$ , *Jordan Journal of Mathematics and Statistics*, 7(3), 185-205. 05C25 (54C40)
- [17] **MR3266307** Abu Osba, E. Al\_Adasi, S. and Abughneim, O. (2014) Some Properties of the Intersection Graph for Finite Commutative Principal Ideal Rings, *International Journal of Combinatorics*, Volume, 2014, Article ID 952371, 6 pages, 05C25
- [18] Alkam, O. and Abu Osba, E. (2014) Zero Divisor Graph for the Ring of Eisenstein Integers Modulo  $n$ , *Algebra*, Volume 2014, Article ID 146873, 6 pages.
- [19] Abu Osba, E.(2016) Intersection Graph for finite Principal Ideal Rings. *Acta Mathematica Academiae paedagogicae Nyiregyhaziensis*, 32(1), 15-22.



- [20] Abu Osba, E. and Alkam, O. (2017) When zero-divisor graphs are divisor graphs? *Turkish J. Math.* 41: 797 – 807.
- [21] Ghanem, M. and Abu Osba, E. (2018) Some extensions of generalized morphic rings and EM-rings. *Analele Stiintifice ale Universitatii Ovidius Constanta (Seria Matematica)* 26(1), 111-123.
- [22] Abu Osba, E., Al-Ezeh, H. and Ghanem, M. (2018) On U-group rings. *Communications of the Korean Mathematical Society* 33(4), 1075-1082.
- [23] Qoqazeh, H. Hdeib, H. and Abu Osba, E. (2018) Metacompactness in bitopological spaces. *International Journal of Pure and Applied Mathematics* 119(1), 191-205.
- [24] Qoqazeh, H. Hdeib, H. and Abu Osba, E. (2018) On D-metacompactness in bitopological spaces. *Jordan Journal of Mathematics and Statistics*, 11(4), 345 – 361.
- [25] Abuosba, E. and Ghanem, M. (2019) Annihilating content in polynomial and power series rings. *J. Korean Math. Soc.* 56(5), 1403–1418.
- [26] Odetallah, H. Al-Ezeh, H. and Abuosba, E. (2019) GPF-properties of group rings. *Jordan Journal of Mathematics and Statistics* 12(4), 485 – 498.
- [27] Odetallah, H. Al-Ezeh, H. and Abuosba, E. (2020) Characterization of almost PP-ring for three important classes of rings. *Italian Journal of Pure and Applied Mathematics*, 43, 642-652.
- [28] Abdelkarim, H. Abuosba, E. and Ghanem, M. (2020) Idealization of EM-Hermite rings. *Commun. Korean Math. Soc.* 35, (1), 13–20
- [29] Abuosba, E. and Ghanem, M. (2020) EM-Hermite rings. *International Electronic Journal of Algebra*, 27, 88-101.
- [30] Abuosba, E. and Ghanem, M. (2021) A survey on EM conditions. Badawi A., Coykendall J. (eds) *Rings, Monoids and Module Theory*.

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[31] D.D. Anderson, E. Abuosba and M. Ghanem.(2022) Annihilating Content Polynomials and EM-rings. *Journal of Algebra and its Applications*, 21(15), 1-18.

[32] Abuosba, E. and Atassi, I. (2022), When is  $C(X)$  an EM-ring? *Commun. Korean Math. Soc.* 37(1), 17-29.

[33] Abuosba, E. Al-Azaizeh, M. and Ghanem, M. (2023) Prüfer Conditions Vs EM Conditions. *Commun. Korean Math. Soc.* **38**(1), 69–77