# Dr. Ayman Badawi

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(Violation of political correctness statements: Palestinian, I will be 60 years old on Feb 14, 2023, Married to Rawya Abuhijleh, she will be 50 years old on October 17, 2023 (Working at the Ohio State University since November 2022), my son Nadeem 23 years old (MBA from the University of Oregon), my daughter Raneem, she is 18 years old (now attending Stockton Univ, New Jersey USA, and most likely that she will come back to the AUS in the Fall of 2023).

## Professional Positions

Associate Professor and then Professor, American University of Sharjah. (August 2003 - Present).

Assistant Professor and then Associate Professor, Birzeit University. (August 1997 - June 2003).

Visiting Assistant Professor, Emory and Henry College. (August 1994 - July 1996).

Visiting Assistant Professor, University of Tennessee, Knoxville, USA (August 1999—August 2000)

## Education

Ph.D., Ring Theory: Pi-regular rings. University of North Texas, 1993.

MS, Master's degree in Mathematics. Tennessee Tech. University, 1988.

Bachelor, Double major: Mathematics and Computer Science. Tennessee Tech. University, 1986.

## Languages: Mathematics, Arabic, English.

## Professional Memberships

American Math. Society, AMS. (August 1994 - Present).

## Awards and Honors

Excellence Research-Award for the Academic year 2014-2015.

Excellence Teaching -Award for the Academic year 2012-2013.

## Peer-Reviewed Publications

Anderson, D. F., Badawi, A. R. (2022). The n-zero-divisor graph of a commutative semigroup. *Communications in algebra, Published online: 16 Apr 2022*(Published online: 16 Apr 2022). https://www.tandfonline.com/doi/full/10.1080/00927872.2022.2057521

Badawi, A. R & Coykendall, J. (Eds.), *Rings, Monoids and Module Theory (AUS-ICMS20, Proceedings of the special session on rings, monoids and module theory organized by Ayman Badawi)*. Springer. https://link.springer.com/book/10.1007/978-981-16-8422-7

Badawi, A. R., Anderson, D. F., Asir, T., Chelvam, T. Tamizh (2021). *Graphs from Rings*. Springer. https://link.springer.com/book/10.1007/978-3-030-88410-9#authorsandaffiliationsbook

Badawi, A. R., Rissner, R. (2020). Ramsey numbers of partial order graphs (comparability graphs) and implications in ring theory. *Open Mathematics, 18*(1), 1645-1657. https://www.degruyter.com/document/doi/10.1515/math-2020-0085/html

Badawi, A. R., Fahid, B. (2020). On weakly 2-absorbing δ-primary ideals of commutative rings. *Georgian Mathematical Journal, 27*(4), 503-516. https://www.scopus.com/record/display.uri?eid=2-s2.0-85056554127&origin=resultslist

Abdulla, M., Badawi, A. R. (2020). ON DOT PRODUCT GRAPH OF A COMMUTATIVE RING II. *International Electronic Journal of Algebra, 28*(28), 61-74. https://dergipark.org.tr/tr/pub/ieja/issue/55997/768135

Anderson, D. F., Badawi, A. R. (2020). On n-semiprimary ideals and n-pseudo valuation domains. *COMMUNICATIONS IN ALGEBRA, Published on line*. https://www.scopus.com/record/display.uri?eid=2-s2.0-85089546554&origin=resultslist

Badawi, A. R., Çelikel, E. (2020). On 1-absorbing primary ideals of commutative rings. *Journal of Algebra and its Applications, 19*(6). https://www.worldscientific.com/doi/abs/10.1142/S021949882050111X

Badawi, A. R., Issoual, M., Mahdou, N. (2019). On n-absorbing ideals and (m,n)-closed ideals in trivial ring extensions of commutative rings. *Journal of Algebra and its Applications, 18*(7). https://www.worldscientific.com/doi/10.1142/S0219498819501238

Badawi, A. R., J. Coykendall (Eds.), (2019) *Advances in commutative algebra*. Springer International Publishing,. https://www.springer.com/gp/book/9789811370274

Badawi, A. R., Sonmez, D., Yesilot, G. (2018). On Weakly δ-Semiprimary Ideals of Commutative Rings. *Algebra Colloquium, 25*(3), 387-398. https://www.worldscientific.com/doi/abs/10.1142/S1005386718000287

Badawi, A. R., Anderdon, D. F., Fahid, B. (2018). Weakly (m,n)-closed ideals and (m,n)-von Neumann regular rings. *Journal of the Korean Mathematical society, 55*(5), 1031-1043. http://koreascience.or.kr/article/JAKO201828138443639.page

Badawi, A. R. (2018). Matrix Algebra, Basics of. In R. Alhajj & J. Rokne (Eds.), *Encyclopedia of Social Network Analysis and Mining* (pp. 1270-1279). New York: Springer. https://link.springer.com/referenceworkentry/10.1007%2F978-1-4939-7131-2_151

Badawi, A. R., Vedadi, M. R., Yassemi, S., Darani, A. Y. (2018). *Homological and Combinatorial Methods in Algebra* (vol. 228). New York/Germany: Springer;. https://link.springer.com/book/10.1007%2F978-3-319-74195-6

Badawi, A. R. (2017). n-Absorbing Ideals of Commutative Rings and Recent Progress on Three Conjectures: A survey. In M. Fontana, S. Frisch, S. Glaz, & F. Tartarone (Eds.), *Rings, Polynomials, and Modules* (pp. 33-52). New York: Springer. https://link.springer.com/chapter/10.1007%2F978-3-319-65874-2_3

Anderson, D. F., Badawi, A. R., (2017). The Zero-Divisor Graph of a Commutative Semigroup: A Survey,. In M. Droste, L. Fuchs, B. Goldsmith, & L. Strüngmann (Eds.), *Groups, Modules, and Model Theory-Surveys and Recent Developments* (pp. 23-39). Germany/NewYork: Springer. https://www.springer.com/gp/book/9783319517179

Badawi, A. R. (2017). Recent results on annihilator graph of a commutative ring: A survey. In K. Prasad & K. Prasad (Eds.), *Nearrings, Nearfields, and Related Topics* (pp. 170-184). New Jersey: World Scientific.

Anderson, D. F., Badawi, A. R. (2017). On (m, n)-closed ideals of commutative rings. *Journal of Algebra and its Applications, 16*(1). https://www.scopus.com/record/display.uri?eid=2-s2.0-84959045630&origin=resultslist

Badawi, A. R. (2016). On weakly semiprime ideals of commutative rings. *Beitraege zur Algebra und Geometrie, 57*(3), 589-597. https://www.scopus.com/record/display.uri?eid=2-s2.0-84981287379&origin=resultslist

Badawi, A. R., Tekir, Ü., Aslankarayiğit Uğurlu, E., Ulucak, G., Yetkin Çelikel, E. (2016). Generalizations of 2-absorbing primary ideals of commutative rings. *Turkish Journal of Mathematics, 40*(3), 703-717. https://www.scopus.com/record/display.uri?eid=2-s2.0-84964435056&origin=resultslist

Badawi, A. R. (2015). On the Dot Product Graph of a Commutative Ring. *Communications in Algebra, 43*(1), 43-50. https://www.scopus.com/record/display.uri?eid=2-s2.0-84905270275&origin=resultslist

Badawi, A. R., Tekir, U., Yetkin, E. (2015). On weakly 2-absorbing primary ideals of commutative rings. *Journal of the Korean Mathematical Society, 52*(1), 97-111. https://www.scopus.com/record/display.uri?eid=2-s2.0-84920261628&origin=resultslist

Badawi, A. R. (2014). On the Total Graph of a Ring and Its RelatedGraphs: A Survey. In M. Fontana & M. Fontana (Eds.), *Commutative Algebra: Recent Advances in Commutative Rings,Integer-Valued Polynomials, and Polynomial Functions, DOI 10.1007/978-1-4939-0925-4__3* (pp. 39-54). New York: Springer Science. https://link.springer.com/chapter/10.1007%2F978-1-4939-0925-4_3

Badawi, A. R., Tekir, U., Yetkin, E. (2014). On 2-absorbing primary ideals in commutative rings. *Bulletin of the Korean Mathematical Society, 51*(4), 1163-1173. https://www.scopus.com/record/display.uri?eid=2-s2.0-84905643723&origin=resultslist

Badawi, A. R. (2014). On the annihilator graph of a commutative ring. *Communications in Algebra, 42*(1), 108-121. https://www.scopus.com/record/display.uri?eid=2-s2.0-84886419917&origin=resultslist

Badawi, A. R., Darani, A. Y. (2013). On weakly 2-absorbing ideals of commutative rings. *Houston Journal of Mathematics, 39*(2), 441-452. https://www.scopus.com/record/display.uri?eid=2-s2.0-84881422675&origin=resultslist

Anderson, D. F., Badawi, A. R. (2013). The generalized total graph of a commutative ring. *Journal of Algebra and its Applications, 12*(5). https://www.scopus.com/record/display.uri?eid=2-s2.0-84874792299&origin=resultslist

Anderson, D. F., Badawi, A. R. (2012). Von neumann regular and related elements in commutative rings. *Algebra Colloquium, 19*(SPL. ISS. 1), 1017-1040. https://www.scopus.com/record/display.uri?eid=2-s2.0-84868602178&origin=resultslist

Anderson, D. F., Badawi, A. R. (2012). On the total graph of a commutative ring without the zero element. *Journal of Algebra and its Applications, 11*(4). https://www.scopus.com/record/display.uri?eid=2-s2.0-84864338127&origin=resultslist

A. R. Badawi, J. Abuhlail, S. Kabbaj, A. Jaballah, A. Laradji, & R. Wisbauer (Eds.) (2012), *Selected Papers from the Algebra Sessions at the First International Conference on Mathematics and Statistics (AUS-ICMS'10),* (1st ed., vol. 1). Springer. https://link.springer.com/journal/40065/volumes-and-issues/1-1

A. R. Badawi, J. Abuhlail, S. Kabbaj, A. Jaballah, A. Laradji, & R. Wisbauer (Eds.) (2011) *Mathematics - Part One (pp. 919-1070) First International Conference on Mathematics and Statistics (AUS-ICMS'10); Part Two (pp. 1071-1169): Regular Articles* (6th ed., vol. 36, pp. 1071-1169). Springer ,. https://link.springer.com/journal/13369/36/6/page/1

Anderson, D. F., Badawi, A. R. (2011). On n-absorbing ideals of commutative rings. *Communications in Algebra, 39*(5), 1646-1672. https://www.scopus.com/record/display.uri?eid=2-s2.0-79959523749&origin=resultslist

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Anderson, D. F., Badawi, A. R. (2008). On the zero-divisor graph of a ring. *Communications in Algebra, 36*(8), 3073-3092. https://www.scopus.com/record/display.uri?eid=2-s2.0-49549101445&origin=resultslist

Badawi, A. R., Jaballah, A. (2008). Some finiteness conditions on the set of overrings of a φ-ring. *Houston Journal of Mathematics, 34*(2), 397-408. https://www.math.uh.edu/~hjm/restricted/pdf34(2)/06kanuni.pdf

Badawi, A. R. (2007). On 2-absorbing ideals of commutative rings. *Bulletin of the Australian Mathematical Society, 75*(3), 417-429. https://www.scopus.com/record/display.uri?eid=2-s2.0-34547275279&origin=resultslist

Badawi, A. R. (2007). On pseudo-almost valuation domains. *Communications in Algebra, 35*(4), 1167-1181. https://www.scopus.com/record/display.uri?eid=2-s2.0-34247400232&origin=resultslist

Badawi, A. R. (2006). A Counter example for a question on pseudo-valuation rings. In P. Goeters & O. M. G. Jenda (Eds.), *Abelian Groups, Rings, Modules, and Homological Algebra*. USA: Chapman and Hall/CRC.

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A. R. Badawi (Ed.), *Focus on Commutative Rings Research*. United State of America: (2006) Nova Science. http://www.novapublishers.org/catalog/product_info.php?products_id=4305

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Badawi, A. R. (2004). *Abstract Algebra Manual: Problems and Solutions*. Unites state of America: Nova Science. https://www.amazon.com/Abstract-Algebra-Manual-Problems-Solutions/dp/1560728345

Anderson, D. F., Badawi, A. R. (2004). On φ-Prüfer rings and φ-Bezout rings. *Houston Journal of Mathematics, 30*(2), 331-343. https://www.scopus.com/record/display.uri?eid=2-s2.0-3042644529&origin=resultslist

Badawi, A. R. (2003). On Nonnil-Noetherian rings. *Communications in Algebra, 31*(4), 1669-1677. https://www.scopus.com/record/display.uri?eid=2-s2.0-0038474234&origin=resultslist

Anderson, D. F., Badawi, A. R. (2002). Divisibility conditions in commutative rings with zerodivisors. *Communications in Algebra, 30*(8), 4031-4047. https://www.scopus.com/record/display.uri?eid=2-s2.0-0035982307&origin=resultslist

Badawi, A. R. (2002). PSEUDO-VALUATION DOMAINS: A SURVEY. In S. Elaydi, E. Titi, M. Saleh, R. Abu-saris, & S. Jain (Eds.), *Mathematics and Mathematics Education/Proceedings of the Third International Palestinian Conference, Bethlehem, 9 – 12 August 2000* (pp. 38-59). New York: World Scientific. https://doi.org/10.1142/9789812778390_0004

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Badawi, A. R. (2002). On the complete integral closure of rings that admit a phi-strongly prime ideal. In M. Fontana, S.-E. Kabbaj, & S. Wiegand (Eds.), *Commutative Ring Theory and Applications* (pp. 15-22). USA: Chapman and Hall/CRC. https://www.amazon.com/Commutative-Applications-Lecture-Applied-Mathematics/dp/0824708555

Badawi, A. R., Chin, Chen (2002). On rings with near idempotent elements. *International J. of Pure and Applied Math, 1*(3), 255-262. https://www.ayman-badawi.com/My%20old%20papers%20in%20Print/On%20rings%20near%20Idemp%202002.pdf

Badawi, A. R. (2001). On φ-chained rings and φ-pseudo-valuation rings. *Houston Journal of Mathematics, 27*(4), 725-736. https://www.scopus.com/record/display.uri?eid=2-s2.0-0035655554&origin=resultslist

Badawi, A. R., Dobbs, D. E. (2001). Some examples of locally divided rings. In D. D. Anderson & I. J. Papick (Eds.), *Ideal theoretic methods in commutative algebra* (pp. 11). USA: Dekker and now Taylor & Francis.

Badawi, A. R., Anderson, D. F. (2001). Conditions equivalent to seminormality in certain classes of commutative rings. In D. D. Anderson & I. J. Papick (Eds.), *Ideal theoretic methods in commutative algebra*. USA: Taylor & Francis. https://www.taylorfrancis.com/chapters/conditions-equivalent-seminormality-certain-classes-commutative-rings-david-anderson-ayman-badawi/e/10.1201/9780429187902-4?context=ubx&refId=6e044444-55b4-47fe-aa42-f1e7223fce87

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Anderson, D. F., Badawi, A. R., Dobbs, D. E. (2000). Pseudo-valuation rings, II. *Bollettino della Unione Matematica Italiana B, 3*(2), 535-545. https://www.scopus.com/record/display.uri?eid=2-s2.0-0001360309&origin=resultslist

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Anderson, D. F., Badawi, A. R., Dobbs, D. E. (1997). Pseudo-valuation rings. In P.-J. Cahen, M. Fontana, E. Houston, & S.-E. Kabbaj (Eds.), *Commutative ring theory* (vol. 185, pp. 57-67). Dekker and now Taylor & Francis: Dekker and now Taylor & Francis.

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## Presentations

Badawi, A. R., International Conference on Noncommutative Algebra and its Applications, "Pi-regular rings and periodic rings," Tarbiat Modares University (Teheran, Iran), online/ https://www.sciencedz.net/en/conference/89100-icnaa-noncommutative-algebra-and-its-applications, Iran. (May 10, 2022).

Badawi, A. R., INTERNATIONAL E-CONFERENCE ON PURE AND APPLIED MATHEMATICAL SCIENCES (ICPAMS-2022), "Absorbing ideals in commutative rings," Mohamed Seddik Ben Yahia University, Jijel , Algeria., online/ http://www.icpams2022.com/, Algeria. (May 6, 2022).

Badawi, A. R., annual Southern Regional Algebra Conference (SRAC), Milledgeville, GA, USA, "The N-zerodivisor graph of a commutative ring," Milledgeville, GA, USA, online / http://ayman-badawi.com/PROGRAM%20-%20Copy.pdf, Georgia, United States. (March 19, 2022).

Badawi, A. R., Department seminar, "Amazing Numbers," Department of Math./ AUS, Nab 006/ AUS, Sharjah, United Arab Emirates. (February 14, 2022).

Badawi, A. R., International Conference on Graphs, Combinatorics and Optimization, "N-ZERO-DIVISOR GRAPH OF A COMMUTATIVE SEMIGROUP,," BITS PILANI Dubai campus, online/ http://www.bits-dubai.ac.ae/downloads/ICGCO_Final_Schedule.pdf, Dubai, United Arab Emirates. (February 7, 2022).

Badawi, A. R., 5th INTERNATIONAL CONFERENCE ON CURRENT SCENARIO IN PURE AND APPLIED MATHEMATICS (ICCSPAM - 2022), "ON DOMAINS WHICH HAVE PRIME IDEALS THAT ARE LINEARLY ORDERED,," Coimbatore - 641029, Tamil Nadu, INDIA, online/ https://sites.google.com/kongunaducollege.ac.in/iccspam2022/speakers. (January 28, 2022).

Badawi, A. R., on Recent Advances in Pure & Applied Algebra (RAPAA-2021), "On 1-absorbing primary ideals of commutative rings," Academy of Physical Sciences/ India, online/ https://www.youtube.com/channel/UC9xo9FZNEsMCTNqm7Jv8X-g/videos/videos. (October 28, 2021).

Badawi, A. R., 27th International Conference of International Academy of Physical Sciences (CONIAPS XXVII) On Graph Theory and Applications (GTA 2021), "On graphs arises from Number Theory," School of Physical and Applied Sciences (SPAS), Goa University, Goa, India., online/ https://sites.google.com/view/gta2021/list-of-speakers, Goa, India. (October 27, 2021).

Badawi, A. R., International Conference on Discrete Mathematics (ICDM 2021), "results on dot product graphs," Academy of Discrete Mathematics and Applications(ADMA) India, online/ https://sites.google.com/view/icdm2021/conference, India. (October 12, 2021).

Badawi, A. R., ICMS 2021, "A characterization of normal subgroups via closed subsets," S.V. National Institute of Technology (SVNIT), Surat (India), online/ https://sites.google.com/view/icms2021/speakers, India. (October 8, 2021).

Badawi, A. R., Conference on Rings and Polynomials, "On n-pseudo valuation domains," Univ. of Graz/ Austria, online/ http://integer-valued.org/rings2021/program.html, Graz, Austria. (July 20, 2021).

Badawi, A. R., NonCommutative Rings and their Applications, VII, "Von Neumann Regular and Related Elements in Commutative Ring," Lens, France, Online/ http://leroy.perso.math.cnrs.fr/Congres%202021/Main2021.html#TITRES, Lens, France. (July 6, 2021).

Badawi, A. R., INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN PURE AND APPLIED MATHEMATICS, "ON THE INTERPLAY BETWEEN RING THEORY AND GRAPH THEORY,," University of Bahrain, ONLINE/ https://icetpam.uob.edu.bh/, Manama, Bahrain. (June 21, 2021).

Badawi, A. R., Southern Regional Algebra Conference (SRAC 2021), "On (m, n)-closed ideals of commutative rings," Dept. of Math, Online/ Milledgeville, Georgia, USA. (March 20, 2021).

Badawi, A. R., 11th Conference on Graph Theory and Algebraic Combinatorics,, "Some results on annihilator graph of a commutative ring.," Dept. of Math, Online/ University of Urmia, Iran. (March 4, 2021).

Badawi, A. R., Department Seminar, "Ramsey number/," Dept. of Math & Stat, Online/ American Univ of Sharjah (AUS), UAE. (February 14, 2021).

Badawi, A. R., International Virtual Conference on Discrete Mathematics 2021, "Some results on annihilator graph of a commutative ring.," Mangalore University, Online/Mangalore University, India. (February 10, 2021).

Badawi, A. R., ICCSPAM-2021, "1-absorbing primary ideals,," Dept. Math, Online/, India. (January 29, 2021).

Badawi, A. R., (RC-MATHEMATICS) at the UGC – Human Resource Development Centre, University of North Bengal., "Graphs attached to rings and partial order graphs.," (RC-MATHEMATICS) at the UGC – Human Resource Development Centre, Online/ University of North Bengal., India. (January 14, 2021).

Badawi, A. R., ICCEMS 2020, "My personal views on Mathematics and Technology,," Online/ Langkawi, Malaysia. (December 24, 2020).

Badawi, A. R., International Conference on Recent Trends in Applied and Computational Mathematics-ICRTACM-2020,, "Rings and graphs," Dept. of Math, Online/ REVA University, INDIA. (December 4, 2020).

Badawi, A. R., Five Days International e-Seminar on Recent Research in Mathematics, "On the zero-divisor graph of commutative semigroups," DEPARTMENT OF MATHEMATICS GITAM SCHOOL OF SCIENCE GITAM, Bengaluru, Online, India. (September 15, 2020).

Badawi, A. R., ICPAM-VAN 2020,, "n-absorbing ideals of commutative rings," Department of Math, On line/ Van Yüzüncü Yıl Üniversites, Turkey. (September 4, 2020).

Badawi, A. R., ICMASE, "On n-Pseudo valuation domains," Department of Math, Online/ ANKARA HACI BAYRAM VELİ UNIVERSITY, Turkey. (July 10, 2020).

Badawi, A. R., 2nd International Conference on Algebra and Discrete Mathematics, "Total graph and trace graph of a ring," Department of Math, Online/ Kamaraj University, India. (June 24, 2020).

Badawi, A. R., Recent Trends in Graph Theory,, "Ramsey numbers of partial order graphs and implications in ring theory," Department of Math., Online/ Alagappa University, India, (May 29, 2020).

Badawi, A. R., INTERNATIONAL CONFERENCE ON ANALYSIS, ALGEBRA, COMBINATORICS AND THEIR APPLICATIONS,, "On generalization of valuation domains," Department of Mathematics, Kolkata, India, Kolkata, India. (January 20, 2020).

Badawi, A. R., 8th International Eurasian Conference on Mathematical Sciences, "n-absorbing ideals of commutative rings," Baku, Azerbaijan. (August 27, 2019).

Badawi, A. R., The second Algebra Workshop, "Absorbing ideals and their generalization," University of Jordan, Amman, Jordan. (July 18, 2019).

Badawi, A. R., International Conference on Mathematics, "On n-absorbing ideals of commutative rings," Fatih University, Istanbul, Turkey. (July 3, 2019).

Badawi, A. R., International Conference on Number Theory and Graph Theory honoring Prof. Adiga renowned Mathematician (Known for his work on Ramanjan's notebook, "Graphs arises from Number Theory," Mysore, India. (June 27, 2019).

Badawi, A. R., 6th International Conference on Pure and Applied Math, "Recent progress: Conjectures on n-absorbing ideals," Istanbul, Turkey. (June 12, 2019).

Badawi, A. R., 3rd International Congress/ Algebra, Number Theory and Applications, "Recent results on absorbing ideals," Mohammed First University, Oujda, Morocco. (April 24, 2019).

Badawi, A. R., AMS Joint Central and Western Sectional Meeting/ Special session on "Factorization and arithmetic properties of integral domains and monoids, "On N-pseudo valuation domains," AMS, University of Hawaii, Manoa, Honolulu, United States. (March 23, 2019).

Badawi, A. R., UAE MATH DAY, "On n-Pseudo valuation domains," American University of Sharjah. (March 16, 2019).

Badawi, A. R., "Magic numbers," American University of Sharjah. (February 14, 2019).

Badawi, A. R., International conference on graph theory and its application, "On annihilator graph of a commutative ring," Amrita Univers, Coimbatore, India. (January 5, 2019).

Badawi, A. R., International Conference on Mathematics (Special Session on Ring Theory Group ), "On 1-absorbing primary ideals of commutative rings," Saigon (Ho Chi Minh ), Vietnam. (December 19, 2018).

Badawi, A. R., International Conference on Algebra, ICACM-2018, "on n-absorbing ideals and recent progress on some conjectures," Shimla, India. (November 23, 2018).

Badawi, A. R., Sixth Palestinian Conference on Modern Trends in Mathematics and Physics PCMTMP-VI, "On n-absorbing ideals of commutative rings," Khadoori University, Tulkarim, Palestine. (August 5, 2018).

Badawi, A. R., 5th International Congress on Fundamental and Applied Sciences 2018, "Graphs associated to commutative rings," International Balkan University,, Skopje, Macedonia. (June 22, 2018).

## Contracts, Fellowships, Grants and Sponsored, Research

Badawi, A. R., "Faculty Research Grant 2020, FRG21 (Short)," Sponsored by American University of Sharjah, American University of Sharjah, AED4,000.00. (June 1, 2021 - January 10, 2022).

Badawi, A. R., "Faculty Research Grant 2020, FRG20 (Short)," Sponsored by American University of Sharjah, American University of Sharjah, AED4,000.00. (June 1, 2020 - January 10, 2021).

Badawi, A. R. (Principal), "Faculty Research Grant 2019 (short )," Sponsored by American University of Sharjah, American University of Sharjah, AED2,500.00. (June 1, 2019 - May 30, 2020).

Badawi, A. R., "Travel Grant," Sponsored by University of Granada , Spain, AED8,500.00. (October 4, 2014).

Badawi, A. R., "Travel Grant ( only housing and meals)," Sponsored by University of Tenessee, Knoxville, USA, AED6,000.00. (November 11, 2013).

Badawi, A. R. (Principal), "Reseach-visitor at University of Roma II," Sponsored by Italian Ministry of University and Scientific and Technological Research (MURST), AED10,000.00. (November 1, 2002 - November 17, 2002).

Badawi, A. R. (Principal), "Ashrawi Scholarship," Sponsored by One-month research grant at Vriji University, Amsterdam, Holand, 1997, AED12,000.00. (October 1, 1997 - October 21, 1997).

Badawi, A. R. (Principal), "Pew Fellowship," Sponsored by Short-Period Research Grant at the University of Kentucky where I visited Prof. Paul Eakin, AED6,000.00. (June 10, 1994 - July 10, 1994).

## Teaching Experience

MTH 101 Math for Business
MTH 102 Calculus for Business.
MTH 103 Calculus I.
MTH 111 Mathematics for Architects.
MTH 203 Calculus III
MTH 205 Differential Equations.
MTH 211 Geometry for Architects.
MTH 213 Discrete Mathematics.
MTH 221 Linear Algebra.
MTH 320 Abstract Algebra I.
MTH 330 Fundamental Concepts of Geometry.
MTH 418 Graph Theory.
MTH 420 Abstract Algebra II.
MTH 512 Advanced Linear Algebra (Graduate).
MTH 530 Abstract Algebra I (Graduate)
MTH 531 Abstract Algebra II (Graduate)
MTH 420 Abstract Algebra II.
MTH 512 Advanced Linear Algebra

## Directed Student Learning

Directed Individual/Independent Study, "Zero Divisor Graph of Integers Modulo n." (September 15, 2020 - December 14, 2020).
Advised: Saood Almarzooqi

Supervised Research, "GRAPH OF LINEAR TRANSFORMATIONS OVER A FIELD." (February 10, 2018 - May 13, 2019).
Advised: Yasmeen El-Ashi

Directed Individual/Independent Study, "Rings of the form {a + bi, where a, b in Z_n}." (January 22, 2019 - May 12, 2019).
Advised: Reem Mahmoud

Directed Individual/Independent Study, "Z_n Graphs an Application of Graphs to Ring Theory." (September 1, 2018 - December 14, 2018).
Advised: Taha Ameen ur Rahman

Supervised Research, "ON THE UNIT DOT PRODUCT GRAPH OF A COMMUTATIVE RING." (September 1, 2015 - January 3, 2016).
Advised: Mohammad Abdulla

Directed Individual/Independent Study, "On multiplicative groups module n with identity different from one.." (January 22, 2014 - May 10, 2014).
Advised: Aladdin Double

Directed Individual/Independent Study, "Partitioning of Positive Integers." (February 1, 2013 - May 13, 2013).
Advised: Hossam Shoman

## Teaching Innovation and Curriculum Development

I wrote the syllabi for two courses in Abstract Algebra for our new Ph.D. Program

Revise Existing Degree Program. M.S. In Mathematics. August 30, 2017 - October 1, 2018.
We combined the two existing tracks of Math into one track of Mathematics. Under the new track, Abstract Algebra and Advanced Linear Algebra are core courses.

Revise Existing Course. Graduate Abstract Algebra. April 7, 2018 - September 22, 2018.
A new syllabus was designed for such a course. It contains more subjects but is not discussed in detail.

Revise Existing Course. Graduate Abstract Algebra I. February 2, 2018 - September 1, 2018.
A new syllabus for such a course was developed since it has become a core course in the new M.S. Program of Math.

New Course. Graduate Abstract Algebra II. October 1, 2011 - January 7, 2012.
I wrote the syllabus of such a course.

New Course. Graduate Advanced Linear Algebra. October 1, 2011 - January 7, 2012.
I wrote the syllabus of such a course.

New Course. Graduate Abstract Algebra I. August 30, 2011 - January 7, 2012.
I wrote the syllabus of such a course

## Professional Service

Editor, The JP Journal of Algebra, Number Theory and Applications. (January 1, 2022 - Present).

Editor, Communications in Combinatorics and Optimization (CCO). (January 1, 2020 - Present).

Editor, Moroccan Journal of Algebra and Geometry with Applications. (January 1, 2020 - Present).

Editor, Quasigroups and Related Systems, Moldova. (July 1, 2018 - Present).

Editor, Journal of Interdisciplinary Mathematics. (September 1, 2015 - Present).

Editor, Analele Universitatii "Ovidius" Constanta - Seria Matematica, Constanta. (February 1, 2014 - Present).

Editor in chief, Palestine Journal of Math, Hebron. (September 1, 2013 - Present).

# Electrical References

## Google

https://scholar.google.com/citations?hl=en&user=kk6vsV0AAAAJ&view_op=list_works&sortby=pubdate

## Scopus:

https://www.scopus.com/authid/detail.uri?authorId=7005226578

## American Math Society Science Net:

https://mathscinet.ams.org/mathscinet/search/author.html?mrauthid=345474

## Web of Science:

**https://www.webofscience.com/wos/author/record/982138**