

CV and Publications

Personal ID:

First Name: Naser

Last Name: Zamani

Date of Birth: 29/ 08/ 1970

Birth Place: Shabestar, East Azarbaijan, Iran

Work Address:

Faculty of Science, Dept. Mathematical Science, University of Mohaghegh Ardabili, Ardabil, Iran. Academic Rank: Professor (since 2015), E-mail: naserzaka@yahoo.com

Education:

B. Sc. in Mathematics, University of Tabriz, Iran 1989–1993.

M. Sc. in Mathematics, Tarbiat Modares University, Tehran, 1993–1995.

Iran, Project: "Modules of Generalized Fractions and complexes of Cousin type", Supervisor: H. Zakeri.

Lecturer:

University of Mohaghegh Ardabili, Ardabil, Iran, 1995-1998.

Education:

Ph.D. in Mathematics, Tarbiat Modares University, Tehran, Iran, 1998–January 2003.

Thesis: "Graded and Un-graded Local Cohomology modules and Modules with Finite Local Cohomology", Supervisor: H. Zakeri

Research Experiences:

Associated Prime Ideals, Local Cohomology Modules, Multiplication modules and Rings, Distributive modules, Reduction number, Rees modules, Fuzzy structures

Publications:

1- N. Zamani, A note on the set of associated primes of local cohomology modules: *Comm. Alg.* 31 (2003), 1203-1206.

2- N. Zamani, On the homogeneous pieces of graded generalized local cohomology: *Colloquium Mathematicum*, 97 (2003), 181-189.

3- With R. Naghipour and H. Zakeri Cohen-Macaulayness of Multiplication Rings, and modules: *Colloquium Mathematicum*, 95 (2003), 133-138.

4- With J. Herzog Duality and vanishing of generalized local cohomology, *Archiv der Math.* 81 (2003), 512-519.

5- N. Zamani, Reduction number of powers of an ideal with respect to a module, *Southeast Asian Bull. Math.* 28 (2004), 949-953.

6- With R. Naghipour Graded distributive modules, *Southeast Asian Bull. Math.* (2005), 1095-1099.

7- N. Zamani, On graded generalized local cohomology, *Archiv der Math.* 86 (2006), 321-330.

- 8- N. Zamani, Results on graded generalized local cohomology, *Comm. Alg.* (2008), 33723377.
- 9- N. Zamani, On graded distributive modules, *Mathematical Notes*, 83 (2008), 185-191.
- 10- N. Zamani, Finiteness results on generalized local cohomology modules, *Algebra Colloquium*, 16 (2009) 65-70.
- 11- N. Zamani, Cohen-Macaulay modules in dimension $>s$ and local cohomology, *Comm. Alg*, 37 (2009), 1297-1307.
- 12- N. Zamani, A formula for reduction number of an ideal relative to a Noetherian module, *International electronic Journal of Algebra*, 5 (2009), 114- 120.
- 13- N. Zamani, Some properties of I -closed modules, *Bull. Iran. Math. Soc.* 35 (2009), 167-173.
- 14- N. Zamani, Reduction number of an ideal relative to a Noetherian module, *International mathematical forum* 2009.
- 15- N. Zamani, On torsion free distributive modules, *Beitrage Zur Algebra und Geometrie*, 50 (2009), 327-336.
- 16- N. Zamani, ϕ -prime submodules, *Glasgow Math. Journal*, 52 (2010), 253-259.
- 17- N. Zamani, Weakly Laskerian, weakly cofinite modules and results on generalized local cohomology, *International Electronic J. Algebra*, 7 (2010), 95-101.
- 18- N. Zamani, Results on local cohomology of weakly Laskerian modules, *Journal of algebra and its applications (JAA)*, 10(2), (2011) 303-308.
- 19- N. Zamani, Rees modules and reduction of an ideal relative to a Noetherian module, *Algebra Colloquium*, 18(Spec 1) (2011), 739-748.
- 20- N. Zamani, Generalized local cohomology relative to (I, J) , *Southeast Asian Bull. Math*, 35(6), (2011), 1045-1050.
- 21- N. Zamani, Finitely generated graded multi. modules, *Glas. Math. J.* 53(2011), 693-705.
- 22- N. Zamani, On the regularity of Gener. local cohomology, *Viet. J. M.* 40, (2012), 497-503.
- 23- N. Zamani, S. Sadeghi, M. Bigan-Zadeh, d -transform functor and some finiteness and isomorphism results, *Vietnam J. M.* 42, (2014), 179-186.
- 25- N. Zamani A. Khojali, Artinian graded generalized local cohomology, *Journal of Algebra and its applications* 14, (2015), (10 pages).
- 26- N. Zamani, M. BijanZadeh, S. Sadeghi, Cohomology with supports in $\dim. < d$, *Journal of Algebra and its applications*, (2016), 10 pages.
- 27- N. Zamani, M. Sayedsadeghi, M. H. BijanZadeh and K. Ahmadi-Amoli, ON the functors $D_d(-)$ and $D_d(M, -)$, *Scientific Journal of Pure and Applied Sciences* 3 (7), 2016, 622-628.
- 28- N. Zamani and A. Shams, On the group structure of the elliptic curve $y^2 = x^3 + 4px$, *EJPAM*, 2015.
- 29- A. Khojali and N. Zamani, V-Gorenstien injective modules, pre-envelops and related dimensions, *Acta Mathematica Sinica*, V. 33, Issue 2, (2017), 187–200.

- 30- A. Khojali and N. Zamani, On WSGC-Projective and WSGC-injective modules, *Palestinian J. Math.* 7 (Special Issue: I), 2018, 148-160.
 - 31- M. Sadek, N El-Sissi, A. Zarghar and N. Zamani, Evaluation of Gaussian hypergeometric series using Huff's models, *The Ramanujan Journal*, 48(2), (2019), 357-368.
 - 32- J. Herzog, M. Mohamadi and N. Zamani, The number of generators of the powers of an ideal, *International Journal of Algebra and Computation*, 29 (5), 2019, 827-847.
 - 33- A.S. Zargar and N. Zamani, A family of elliptic curves of rank ≥ 5 over $\mathbb{Q}(m)$, *Notes on Number Theory and Discrete Math.*, 25(4), 2019, 24-29.
 - 34- A. Azari, A. Khojali and N. Zamani, Hilbert-Kirby polynomials in generalized local cohomology, to appear in *Acta Math. Vietnamica*, (16 pages).
 - 35- With A. Khojali, on the lengths and multiplicities of some graded generalized local cohomology, *Acta Mathematica Vietnamica*, 2022.
 - 36- With S. Azimi and A. Khojali, On some graded objects in graded module categories, *Journal of Algebra and its applications*, 2023.
 - 37-with S. Azimi, M.R. Hooshmand and A. Khojali, Neutrosophic primary submodules, residual quotients and localization, *Journal of Algebra and related topics*, to appear.
- Other Publications:
- 38- N. Zamani, Z. Rezaei, J. Azami, Fuzzy representable sub-modules, *Math. Vesnik*, 2015.
 - 39- N. Zamani and Z. Rezaei, Weak fuzzy prime ideals and submodules, *Advances in fuzzy sets and systems*, 5(2), (2010), 171-179.
 - 40- N. Zamani, Z. Rezaei, A common generalization of fuzzy primes, *Math. Vesnik* 2013.
 - 41- N. Zamani, J. Azami, Fuzzy co-primary sub-modules, *JFSVA*, 2013.
 - 42- N. Zamani, J. Azami and M. Moghimi, Results on general fuzzy prime submodules, *JFSVA*, 2016.

Conference papers:

- 1- Distributive modules and prime divisors, AIMC Zanjan, Iran 3-6 Sept.2007.
- 2- Regularity of the Rees and assoc. graded modules, AIMC Kerman, Iran, 24-27 Aug. 2008.
- 3- Characterization of Graded distributive modules, 2008, Lahaijan.
- 4- (With M. Madani) Generalized L'Hopital's rule, monotony of functions and constancy intervals, AIMC Kerman, Iran, 24-27 Aug.2008.
- 5- I-tame modules and local cohomology, International conference on ring and module, Ankara, Turkey. 18-22 Aug. 2008.
- 6- Prime sub-modules of multi. modules and C-M property, Int. Con. Math. Maltepe University, Istanbul Turkey 4-10 Aug. 2009.
- 7- Reduction number of an ideal relative to a Noet. module, AIMC Sharif Uni. 2-5 Sept. 2009.
- 8- Rees modules, end of associated graded modules and reduction number, 20-th Algebra Seminar, Tarbiat Moallem Uni. 22-23 Apr.2009.
- 9- Some characterization results in multi. modules, ICM 2010, Hyd., India, 19-27 Aug. 2010.

- 10- Asymptotic stability and regularity in GLC, 20 June 2012, Istanbul, Turkey.
- 11- Codes over Frobenius rings and modules, AIMC, 2012, Tabriz, Iran.
- 12- MSD codes over certain quotient rings, AIMC, 2012, Tabriz, Iran.
- 13- With M. Mehrdad, Ferdowsi Mashhad university, AIMC, 2012, Iran.
- 14- With M. Bagherzadeh, self-dual negacyclic codes over finite fields, AIMC, Semnan, Iran, 2014.
- 15- With M. Karimi, constacyclic codes over certain Galois rings, AIMC, Semnan, Iran, 2014.
- 16- With Z. Rezaei, negacyclic codes over $\mathbb{Z}_2^m$, AIMC, Semnan, Iran, 2014.
- 17- On localization formation in fuzzy setting, 8th international math. Conference, 2024, Maltepe University, Istanbul, turkey.

Teaching Experiences:

Undergraduate courses: Algebra1, Algebra2, Algebra 3, Linear Algebra, Elementary Algebraic Topology, Number Theory, Analysis 1, Analysis 2, Calculus 1, 2, Differential Equations.

Graduate courses: Commutative Algebra 1, Homological Algebra, Advanced Algebra, Local Cohomology, Graded Local cohomology, Commutative algebra 2, topics in commutative algebra, Coding theory 1,2, graded rings and modules, universal algebra, lattice theory, Category theory.

Visiting Experiences:

- 17 Apr- 18 Aug 2002, Prof. Jurgen Herzog, Universitat GHS Essen, Germany.
- 2 May-12 June 2004, ICTP, Italy.
- 1 July -31 August 2015, MPIM, Bonn, Germany.
- 13 March 2016-3 April 2016, IHES, Paris, Franc.

MS students:

- 1- M. Za're, modules with finite cousin cohomologies have uniform local cohomological annihilators.
- 2- F. Firoza'ba'di, local cohomology modules and Sere subcategories.
- 3- M. Bighdeli, Co-finiteness of local cohomology modules.
- 4- M. Rajabi, Prime ideals associated to local cohomology.
- 5- Z. Hakimi, Prime sub-modules, multiplication modules and radical formula.
- 6- M A'gha'ei, Minimax and co-minimax modules and local cohomology.
- 7- Z. Safarian Za're, Zariski topology on modules.
- 8- Kh. A. Esmroodi, Radical of sub-modules and its associated primes.
- 9- M. Mehrdad, Codes equivalence and on the maximum distance separable codes.
- 11- N. Raja'vandi, Independence of vectors in codes over rings with Hamming metric.
- 12- M. Taghinejad, Results on Quasi-Frobenius modules and linear codes.
- 13- S. Bahrami, Complementary dual linear and quasi cyclic codes over Quotient rings.
- 14- M. Yousifinia, Free self-dual codes over Frobenius and local rings.
- 15- A. Ebrahimi, the structure of linear and cyclic cods over finite chain rings.

- 16- M. Karimi, cyclic and nega-cyclic codes over finite chain rings.
- 17- M. Ebadzadeh, self-dual codes over finite chain rings.
- 18- R. Bagherzadeh, cyclic and consta-cyclic codes over finite chain rings.
- 19- M. fada, cofiniteness of generalized local cohomology.
- 20- F. Ghanipour, Isodual codes over rings.
- 21- M. Mohamadi, Negacyclic duadic codes.
- 22- F. Mosiry, Consta-cyclic codes over finite chain rings.
- 23- S. Broomand, On cyclic codes over the rings R_2 and S_2 .
- 24- E. Azizi, nega-cyclic codes of even length over the integers modulu 2^m and their duals.
- 25- A. Borji, Cyclic self-orthogonal codes over Z_{2^m} .
- 26- R. Bakhshi, Gorenstien projective dimension with respect to semidualizing module.
- 27- Elnaz Moharrmi, Relative Gorenstien dimensions.
- 28- Sanaz Seyfollahi, Results on graded generalized local cohomology modules.
- 29- Mohsen Froozan, Open loci of graded modules.
- 30- Somayeh Joodi, Homological aspects of semidualizing modules.
- 31- H. Alaei, Ding injective and Ding projective module.
- 32- S. Maykhosh, Chain rings and DNA codes.
- 33- R. Noori, Covers, precovers and purity.
- 34- Y. Gholizadeh, Simple modules over quasi-local rings.
- 35- R. Doosti, Almost F-injective modules and almost flat modules.
- 36- S. Rahimzadeh, On absolutely pure covers.
- 37- S. Jafari, Fuzzy Ideals and Fuzzy Filters of Pseudo complemented Semi lattices.
- 38- M. Yaghoubi, On the structure of rough primary ideals in commutative rings.
- 39- E. Mostafaei, Results on matrices over distributive lattices.

Ph.D students:

- 1- M. S. Seyed Sadeghi (with M. H. Bijan-Zadeh), 2015.
- 2- M. Mohammadi, joint with A. Khojali, and Jurgen Herzog , 2019.
- 3- A. Azari with A. Khojali 2018.
- 5- M. Shafiei with a. Khojali 2021.
- 6- M. Karimi, (current).
- 7- S. Azimi, (current).
- 8- V. SobhKhiz (current).
- 8- A. Makhsous (current).
- 9- A. Ghaffari (current).

Traslated books To Persian:

- 1- Lee Kwang Hyung, A first course in fuzzy sets and its applications (with Z. Rezaei), 2010.
- 2- Lech Vermani, Elements of Algebraic coding theory, (with A. Shams), 2013.
- 3- W. C. Huffman and V. Pless, Fundamentals of error correcting codes, 2015.
- 4- Christof Paar and Jan Pelzl, Understanding Cryptography, 2015.

5- D. R. Finston and Patrick Morandi, Abstract Algebra, with A. Khojali and J. A'zami, 2016.

6-Joao P. Hespanha, Noncooperative game theory: an introduction for engineers and computer scientists, (with Z. Rezaei), 2023.

7-E. N. Barron, Game Theory: An Introduction, 2023.

Books (in Persian):

Elements of Algebra (with A. Khojali), 2015. (مبانی جبر)

Introduction to Finite rings and its applications in coding, 2015.

(مقدمه ای بر حلقه های متناهی و کاربرد آن در کدگذاری)

Executive experience:

Research deputy of faculty (26 months).

Head of Math. Group 12 months.