



Yaser Alizadeh  
Department of  
Mathematics and  
Computer Science,  
Hakim Sabzevari  
University, Sabzevar,  
Iran.  
y.alizadeh@hsu.ac.  
ir  
Tel: (051) 4401-3355

# Yaser Alizadeh

Assistant Prof. Hakim Sabzevari University

## About me

Birthday: June 1, 1983

Place of Birth: Hamedan, Iran.

## Education

**2008-2012, Tarbiat Modares university, Tehran**

PhD. Pure Mathematics (Algebraic graph theory)

Supervisor: Prof. Ali Iranmanesh

**2005-2008, Tarbiat Modares university, Tehran**

M.Sc. Pure Mathematics (Algebraic graph theory)

Advisor: Prof. Ali Iranmanesh

**2001-2005, Birjand university, Birjand**

B.Sc. Pure Mathematics

## Membership of societies

**Iranian Mathematical Society**

## Publication

Y.Alizadeh, S. Klavžar, On the relation between degree distance and eccentric connectivity index. to appear in MATCH-COMMUN MATH CO.

**Y. Alizadeh, E. Deutsch, S. Klavžar, On the Irregularity of  $\pi$ -Permutation Graphs, Fibonacci Cubes, and Trees. Bull. Malays. Math. Sci. Soc. <https://doi.org/10.1007/s40840-020-00932-9>.**

Y.Alizadeh, S. Klavžar, Complexity of the Szeged index, edge orbits, and some nanotubical fullerenes, Hacet. J. Math. Stat. 48 (2020) 87-95

**Y.Alizadeh, E. Estaji, S. Klavžar, M. Petkovšek, Metric properties of generalized Sierpiski graphs over stars, Discrete Applied Mathematics.266(2019) 48-55.**

A. Alhevaz, M. Baghipur, E. Hashemi, Y. Alizadeh , Minimum covering reciprocal distance signless Laplacian energy of graphs, Acta Univ. Sapientiae, Informatica. 10 (2018) 218–240.

**Y. Alizadeh, Szeged Dimension and  $PI_v$  Dimension of Composite Graphs, Iranian Journal of Mathematical Sciences and Informatics. 13 (2018) 45-57.**

Y. Alizadeh, T. Dosli, K. Xu, On the Eccentric Complexity of Graphs, Bull. Malays. Math. Sci. Soc. (2017)1-17. <https://doi.org/10.1007/s40840-017-0564-y>.

**Y. Alizadeh, S. Klavžar, On graphs whose Wiener complexity equals their order and on Wiener index of asymmetric graphs, Appl. Math. Comput. 328 (2018) 113118.**

K. Xu, Y. Alizadeh, K.Ch.Das, On two eccentricity-based topological indices of graphs, Discrete Applied Mathematics. 233 (2017) 240-251

- Y. Alizadeh, S. Klavžar, Complexity of Topological Indices: The Case of Connective Eccentric Index, MATCH Commun. Math. Comput. Chem. 76 (2016) 659-667.**
- Y. Alizadeh, A. Iranmanesh, T. Došlić, M. Azari, The edge Wiener index of suspensions, bottlenecks and thorny graphs, Glasnik Matematički, 49 (2014) 1-12.
- Y. Alizadeh, S. Klavžar, Wiener Dimension: Fundamental Properties and (5,0)-Nanotubical Fullerenes, MATCH Commun. Math. Comput. Chem. 72 (2014) 279-294.**
- Y. Alizadeh, A. Iranmanesh, T. Došlić, Additively weighted Harary index of some composite graphs, Discrete Mathematics.313, (2013) 26-34
- Y. Alizadeh, On the Higher Randić Index, Iranian J. Math. Chem. 4(2) (2013) 257-263.**
- Y. Alizadeh, S. Klavžar, Interpolation Method and Topological Indices: 2-Parametric Families of Graphs, MATCH Commun. Math. Comput. Chem. 69, (2013) 523-534.
- Y. Alizadeh, S. Klavžar, Interpolation Method and Topological Indices: 2-Parametric Families of Graphs MATCH Commun. Math. Comput. Chem. 69, (2013) 523-534.**
- Y. Alizadeh, A. Iranmanesh, S. Klavžar, Interpolation method and topological indices: the case of fullerenes  $C_{12k+4}$ , MATCH Commun. Math. Comput. Chem. 68 (2012) 303-310.
- Y. Alizadeh, A. Iranmanesh, Balaban and Randić Indices of IPR  $C_{80}$  Fullerene Isomers, Zigzag Nanotubes and Graphene, Int. J. Nanosci. Nanotechnol. 7 (2011) 28-34.**
- Y. Alizadeh, A. Iranmanesh, Computing the Szeged and PI indices of  $VC_5C_7[p, q]$  and  $HC_5C_7[p, q]$  nanotubes, Int. J. Mol. Sci. 9 (2008) 131-144.
- A. Iranmanesh, Y. Alizadeh, Dig J Nanomater Bios, Computing Szeged and Schultz indices of  $HAC_5C_6C_7[p, q]$  nanotube by GAP program, 4 (2009) 67-72.**
- A. Iranmanesh, Y. Alizadeh, Computing Schultz polynomial, Schultz index of  $C_{60}$  Fullerene by GAP program, Dig J Nanomater Bios, 4 (2009) 7-10.
- Y. Alizadeh, A. Iranmanesh, Computing Zagreb indices of  $C_{80}$  fullerene and  $TUZC_6$  nanotube by GAP program, 4 (2009) 885-889.**
- A. Iranmanesh, Y. Alizadeh, Computing Hyper Wiener and Schultz Indices of  $TUZC_6[P, Q]$  Nanotubes by GAP Program, Dig J Nanomater Bios, 4 (2009) 607-611
- A. Iranmanesh, Y. Alizadeh, Computing Wiener Polynomial, Wiener Index, Hyper Wiener index of  $C_{80}$  Fullerene by GAP Program, Fullerenes, Nanotubes and Carbon Nanostructures. 17 (2009) 560-566.**
- Y. Alizadeh, A. Iranmanesh, Eccentric Connectivity Index of  $HAC_5C_7[p, q]$  and  $HAC_5C_6C_7[p, q]$  Nanotubes, MATCH Commun. Math. Comput. Chem. 69 (2013) 175-182.
- Y. Alizadeh, A. Iranmanesh, Computing Wiener index of  $HAC_5C_7[p, q]$  Nanotube by GAP program, Iranian J. Math. Sci. Inf. 3(2008) 1-12.**
- Y. Alizadeh, A. Iranmanesh, An algorithm for computing the Randić and Zagreb indices of a graph, J. Optoelectron. Adv. M. 4 (2010) 50-52.
- Y. Alizadeh, M. Azari, T. Došlić, Computing the eccentricity-related invariants of single-defect carbon nanocones, J. Comput. Theor. 10 (2013) 1297-1300**

Y. Alizadeh, Wiener index of  $SC_5C_7[p, q]$  nanotubes, J. Optoelectron. Adv. M.7(11) 2013, 943-946.

Y. Alizadeh, Szeged Dimension and  $PI_v$  Dimension of Composite Graphs, Iranian J. Math. Sci. Inf. to appear.

## Scientific Paper Presented in Conferences:

On the Wiener Index and Total Eccentricity Index, 8<sup>th</sup> Conference and Workshop on Mathematical Chemistry (ECWMC), Tarbiat Modares University 2018

With Z. Arfaei, Wiener complexity and eccentric complexity of graphs, 10<sup>th</sup> Conference on Algebraic Combinatorics and Graph Theory, Yazd University, 2018.

With Z. Arfaei, On the Eccentric Complexity and Transmission Complexity, 9<sup>th</sup> Conference on Algebraic Combinatorics and Graph Theory, Amir Kabir University, Tehran, 2017.

With E. Estaji, On the topological dimension of graphs, 8th Conference on Algebraic Combinatorics and Graph Theory, Imam Khomeini University, Ghazvin, 2016.

With E. Estaji, An algorithmic approach to distinguishing number problem, 8<sup>th</sup> Conference on Algebraic Combinatorics and Graph Theory, Imam Khomeini University, Ghazvin, 2016.

With E. Estaji, On the Wiener index of Sierpinski graphs, 46th Annual Iranian Mathematics Conference, Yazd University, Yazd, 2015.

With E. Estaji, d-self Center Graphs and Graph Operations, 46th Annual Iranian Mathematics Conference, Yazd University, Yazd, 2015.

Eccentric dimension of graphs, 7th Conference and workshop in Mathematical Chemistry, Saveh University, Saveh, 2015.

## Honors

2013: Distinguished Student Researcher of Tarbiat Modares University.

2009: Distinguished Student Researcher of Tarbiat Modares University.

## Masters Students Advised

L. Bedarieh, On the irregularity of composite graphs and comparison with total irregularity of graphs, 2020.

Z. Arfaei, On the relations between topological indices based on eccentricity in graphs, 2018.

F. Pourhoseini, Self Center Graphs and Graph Operations, 2017.

H. Bidkhorī, Eccentricity in composite graphs, 2016.

M. Shaddel, [On the Wiener Index and the Wiener Dimension of Graphs](#), 2016.

## **Present Research Work:**

[Graph Theory and Combinatorics](#), [Algebraic Graph Theory](#), [Distance in Graphs](#), [Computational Group Theory](#).