Curriculum Vitae

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Personal:

Birth date: 1973
Place of Birth: Babol, Iran
Nationality: Iranian
Sex:Male
Marital Status: Married
Children: Three daughters

Education:

2010 Ph.D Pure Methematics

University of Kashan, Iran.

Thesis topic: *Eigenvalue and Laplacian eigenvalue of a graph and their application in computing energy of fullerenes*

1998 M.Sc. Pure Mathematics

Sharif University of Tecnology, Iran

Project Topic: *Eulerian polynomial identity*

1994 B.Sc. Pure Mathematics

Teacher Training University of Tehran,Iran.

Honors:

2015 Distinguished Researcher of the University of Kashan.
2011 Distinguished Researcher of the University of Kashan.
2011-Present Reviewer of Mathematical Review Published by the American Mathematical Society.

2010 Top Student in Ph.D Class of 2010, University of Kashan, Iran.

2009 Distinguished Ph.D student Researcher of the University of Kashan.

Academic Employment:

2012-201- Head of the Department of Pure Mathematics, University of Kashan, Kashan, Iran.

2011-present member of the Department of Nanocomputing, Institute of NanoSciTech, University of Kashan, Kashan, Iran.
2010-2011 Assistant Professor of Mathematics, Department of Mathematics, University of Kashan, Kashan, Iran.

Subject Taught:

Undergraduate Level: Number Theory, Algebra, Linear Algebra, Graph Theory, Ordinary Differential Equation, Galois Theory, Calculus, Group Theory, Modul Theory and Ring Theory.

Postgraduate Level: Lattice Theory, Group Theory, Advanced Algebra, Linear Groups, Permutation Groups, Graph Theory, Algebraic Graph Theory, Distance in Graphs.

Present Research Works:

Algebraic Graph Theory, Finite Groups, Mathematical Chemistry, Mathematical Nanoscience.

1. **Member of Academic Committees:** The Second Conference And Workshop on Mathematical Chemistry, University of Kashan, April 24-16, 2009.

Papers Published in Mathematics Journals:

2018

47. G. H. Fath-Tabar, Some new upper bounds on the Wiener and edge wiener index of k-connected graphs, Ars combinatoria, 136, (2018), 335-339.

46. E. Ghasemian and G. H. Fath-Tabar, Signed generalized Peterson graph and its charactristic polynomial, Journal of Algebraic Systems, (6) 1, (2018), 13-28.

45. S. Akbari, G. H. Fath-Tabar and E. Ghasemian, An inequality using perfect-matchings and Laplacian spread of a graph, Linear and Multilinear Algebra, (2018), 138-148.

44. G. H. Fath-Tabar F. Taghvaee and M. Javarsineh, The spectral moments of a fullerene graphs and their applications, Chapter 11(Springer book), (2018), 58-75.

2017

43. S. Jafari, A.R. Ashrafi, G.H. Fath-Tabar and M. Tavakloli, Remraks on the inner power of graphs, J. Appl. Math. Informatics, 35(2017), 25 - 32.

42. R. Nasiri, H. R. Ellahi, G. H. Fath-Tabar and A. Gholami, The Signless Laplacian Estrada Index of Unicyclic Graphs, Mathematics Interdisciplinary Research 2 (2017), 155 - 167.

41. R. Nasiri, H. R. Ellahi, A. Gholami A.R. Ashrafi and G. H. Fath-Tabar, Resolvent Estrada and Signless Laplacian Estrada Indices of Graphs, MATCH Commun. Math. Comput. Chem., 77 (2017) 157-176.

40.M. Javarsineh, G.H. Fath-Tabar, Unicyclic and bicyclic graphs with exactly three Q -main eigenvalues, Applied Mathematics and Computation, 315 (2017), 603614,

39. F. Thaghvaee and G.H. Fath-Tabar, On the skew spectral moments of graphs, Transactions on Combinatorics, (2017), 47-54.

38. G. H. Fath-Tabar F. Taghvaee, The Vertex PI Index of Graphs, MCM 21(Book chapter), (2017) 129139.

2016

37. M. Javarsineh and G. H. Fath-Tabar, Graphs with exactly three main eigenvalues, FILOMAT, (2016), 50-66.

36. H. R. Ellahi, G. H. FathTabar, A. Gholami and R. Nasiri, On maximum signless Laplacian Estrada index of graphs with given parameters, ARS MATHEMATICA CONTEMPORANEA 11 (2016) 381-389.

35. F. Taghvaee and G. H. Fath-Tabar,Relationship Between Coefficients of Characteristic Polynomial and Matching Polynomial of Regular Graphs and its Applications, Iranian Journal of Mathematical Chemistry,**1**(2016) 7-24.

2015

34. F. Taghvaee and G. H. Fath-Tabar, Signles Laplacian spectral moments of graphs and ordering some graphs with respect to them, Journal of algebraic structures and their applications, **1**(2015)1133-141.

33. Ramin Nasiri, Hamid Reza Ellahi, Ahmad Gholami, Gholam Hossein Fath-Tabar, The irregularity and total irregularity of eulerian graphs,Iranian Journal of

Mathematical Chemistry, To appear.
32. H. R. Elahi, G. H. Fath-Tabar, R. Nasiri and A. Gholami, On maximum signless Laplacian Estrada index of graphs with given parameters, Ars Mathematica Contemporanea, Accepted.

2014

31.R. Nasiri and G.H. Fath-Tabar, The Second Minimum of the Irregularity of Graphs, Electronic Notes in Discrete Mathematics, **24**(2014)133-140.
30. G. H. Fath-Tabar, Some New Upper Bounds on the Wiener and Edge Weiner Index of k-Connected Graphs, ARS Combinatoria, Accepted.

2013

29. A. Seyed Mirzaei, G. H. Fath-Tabar and A. Graovac, The Estrada Index of (3, 6)-Fullerenes, J. Comput. Theor. Nanosci.,**10**(2013)1-3.

2012

28. G. H. Fath-Tabar, A. R. Ashrafi and D. Stevanovic, Spectral Properties of Fullerenes,J. Comput. Theor. Nanosci.,**9**(2012) 1-3.
27. The similarity measure of generalized fuzzy numbers based on interval distance, M. Adabitabar Firozja, G.H. Fath-Tabar and Z. Eslampia, Apll. Math. Lett., **9**(2012) 1528-1534.
26. G. H. Fath-Tabar and A. Loghman, On vertex matching polynomial of graphs, ARS Combinatoria, **104**(2012) 325-331.
25. M. Mogharrab, M. J. Nadjafi, G. H. Fath-Tabar, A. R. Ashrafi, Some bounds on Balaban Index of a graph, Utilitas Mathematica,**84**(2012) 325-331.
24. G. H. Fath-Tabar, Z. Gholam-Rezaei and A. R. Ashrafi, On the Tutte polynomial of benzenoid chains, Iranian Journal of Mathematical Chemistry,**3**(2012) 113-119.
23. G. H. Fath−Tabar, S. Moradi and Z. Yarahmadi, Some Relations Between the Second GA Index, $(Sz)_{-1}$-Index, and $(Sz)_{-1/2}$-Index of Graphs, MATCH Commun. Math. Comput. Chem., (2012) 495-504.

2011

22. Ali Astaneh-Asl and G. H. Fath−Tabar, Computing the First and Third Zagreb Polynomials of Cartesian Product of Graphs, Iranian. J. Math. Chem., **2**(2) (2011).

21. A. R. Ashrafi and G. H. Fath−Tabar, Bounds on the Estrada index of ISR (4,6)-fullerenes, Appl. Math.Lett. **24** (3) (2011), 337–339.

20. M. Mogharrab, M. J. Nadjafi-Arani, G. F. Fath-Tabar and A. R. Ashrafi, Some bounds on Balaban index of a graph, Util. Math., **84** (4) (2011), 325–332.

19. A. R. Ashrafi and G. H. Fath-Tabar, New upper bounds for Estrada index of bipartite graphs, Linear Algebra Appl., **435** (10), 2607–2611.

18. G. H. Fath-Tabar, B. Vaez-Zadeh, A. R. Ashrafi and A. Graovac, Some inequalities for the atom-bond connectivity index of graph operations, Discrete Appl. Math., **159** (2011), 1323–1330.

17. G. H. Fath-Tabar and A. R. Ashrafi, The Hyper-Wiener Polynomial of Graphs,

Iranian J. Math. Sci. Inf., **6** (2) (2011), 67–74.

16. G. H. Fath-Tabar, Old and new Zagreb index, MATCH Commun. Math. Comput. Chem., **65**(2011)79-84.

15. Z. Yarahmadi and G. H. Fath-Tabar, The Wiener, Szeged, PI, Vertex PI, the First and Second Zagreb Indices of N-branched Phenylacetylenes Dendrimers, MATCH Commun. Math. Comput. Chem., **65** (2011) 201-208.

14. M. Mogharrab and G. H. Fath-Tabar, Some Bounds on GA_1 Index of Graphs, MATCH Commun. Math. Comput. Chem., **65**(2011) 33-38.

13. I. Gutman, A. R. Ashrafi and G. H. Fath-Tabar, Equienergetyic Graphs, Farhang va Andishe Riazi, **45**(2011).

2010

12. G. H. Fath-Tabar, M. J. Nadjafi-Arani, M. Mogharrab and A. R. Ashrafi, Some Inequalities for Szeged-Like Topological Indices of Graphs, MATCH Commun. Math. Comput. Chem., **63**(1) (2010), 145–150.

11. G. H. Fath-Tabar, T. Doslic, A. R. Ashrafi, On the Szeged and the Laplacian Szeged spectrum of a graph, Linear Algebra Appl., **433**(3) (2010), 662–671.

10. G. H. Fath-Tabar, A. Azad and N. Elahinezhad, Some Topological Indices of Tetrameric 1,3-Adamantane, Iranian. J. Math. Chem., **1**(1) (2010), 111-118.

9. G. H. Fath-Tabar, B. Furtula and I. Gutman, A new geometricarithmetic index, J. Math. Chem., **47** (2010), 477486.

8. G. H. Fath-Tabar and A. R. Ashrafi, Bounds on the Estrada index of ISR (4, 6)-fullerenes, Appl. Math. Lett., **24** (2010), 337-339.

7. M. J. Najafi-Arani, G. H. Fath-Tabar and M. Mirzargar, Sharp Bounds on the PI Spectral Radius, Iranian. J. Math. Chem., **1**(1) (2010), 111-117.

6. G. H. Fath-Tabar and A. R. Ashrafi, Some remarks on Laplacian eigenvalues and Laplacian energy of graphs, Math. Commun., **2**(15) (2010)443-451.

2009

5. G. H. Fath-Tabar, A. R. Ashrafi and I. Gutman, Note on Estrada and L-Estrada indices of graphs, Bull. Acad. Serbe Sci. Arts. (Cl. Math. Natur.), **139** (2009), 1-16.

4. M. J. Nadjafi-Arani, G. H. Fath-Tabar, A. R. Ashrafi, Extermal graphs with respect to the vertex PI index, Apl. Math. Let, **22**(2009)1838-1840.

3. G. H. Fath-Tabar, B. Furtula, I. Gutman, A new geometric-arithmetic index, J. Math. Chem., **47** (2010) 477 - 48.

2008

2. G. H. Fath-Tabar, A. R. Ashrafi, I. Gutman, Note on Laplacian energy of graphs,

Bulletin de l'Academie Serbe des Sciences et des Arts (Classe des Sciences Mathematiques et Naturelles), **33**(2008), 1–10.

2007

1. G. H. Fath-Tabar, The automorphism group of a graphs, Iranian Journal of Mathematica Sciences and Informatics, 2(2007) 1-5.

Papers Published in Chemistry and NanoSciTech Journals:

2012

6. G. H. Fath-Tabar, A. R. Ashrafi and D. Stevanovic, Spectral Properties of Fullerenes, Journal of Computational and Theoretical Nanoscience,**9**(2012)1-3.

2011

5. G. H. Fath-Tabar and A.R. Ashrafi, Tutte polynomial of the Stoddart's poly(Ammonium) dendrimer, Optoelectron. Adv. Mater., **5**(2011)96-98.

2010

4. G. H. Fath-Tabar and F. Gholami-Nezhad, Tutte polynomial of an infinite class of nanostar dendrimers, Studia UBB Chemia, **4**(2010)131-135.

3. G. H. Fath-Tabar,A.R. Ashrafi and A. Graovac, On the Estrada index of two class of dendrimers, Studia UBB Chemia, **4**(2010) 97-100.

2. G. H. Fath-Tabar, Z. Yarahmadi and A. R. Ashrafi, Estrada index of dendrimers, Optoelectron. Adv. Mater., **4**(1) (2010), 53–55.

1. A. R. Ashrafi, A. Seyed Mirzaei and G. H. Fath-Tabar, Szeged and GA2 indices of Suzuki's Bi-branched dendrimers , Optoelectron. Adv. Mater., **12** (4)(2010), 2194-2197.

Books:

Professional Lectures:

1. The Estrada Index of Some Fullerenes, MATH/CHEM/COMP 2010, Dubrovnik (2010), Croatia.

2. The Number of Closed Walks of Some Infinite Class of Fullerenes, MATH/CHEM/COMP 2010, Dubrovnik (2010), Croatia.

3. The PI-Idex of Some Nano Structures, MATH/CHEM/COMP 2010, Dubrovnik (2010), Croatia.

4. Computing Closed Walks of Nanostar Dendrimers, 6th Nanoscience and NanotechnologyConference (NanoTR-VI), Izmir (2010), Turky.

5.Some Topological Indices Of Non-Commuting Graph Of Dihedral Groups, The First Iranian Conference on Chemical Graph Theory, Tehran (2010), Iran.

6. Some Bounds On The General Atom-Bond Connectivity Index Of a Graph, The First Iranian Conference on Chemical Graph Theory, Tehran (2010), Iran.
7. Computing the Energy of Two Types of Dendrimers, MATH/CHEM/COMP 2011, Dubrovnik (2011), Croatia.

8.On the Symmetry of (3,6)-Fullerene, MATH/CHEM/COMP 2011, Dubrovnik (2011), Croatia.

9. On 11-Decomposible Finite Groups, Finite groups and their automorphisms, Istanbul(2011), Turky.

10.The Spectral Moments of (3,6)-Fullerene, 7th Nanoscience and Nanotechnology Conference (NanoTR-VII), Istanbul(2011), Turky.

11. Estrada Index of (5,6) and (4,6)-Fullerenes, 7th Nanoscience and Nanotechnology Conference (NanoTR-VII), Istanbul(2011), Turky.

12. Szeged and edge Szeged polynomial of some dendrimers, 7th Nanoscience and Nanotechnology Conference (NanoTR-VII), Istanbul(2011), Turky.

13. The Tutte Polynomial of an Infinite Class of T-Benzil-Terminated Amid-Based Dendrimers, 4th Conference and Workshop in Mathematical Chemistry, Dezful (2011), Iran.

14. On the summation o powers graph eigenvalues, 6th Seminar of Linear Algebra, Arak (2011), Iran.

15. Seged Energy of Graph, The Second Iranian Conference on Chemical Graph Theory and The First Conference on Algebraic Graph Theory, Tehran (2011), Iran.
16. The Szeged Energy of Fullerene Graph, 7th Slovenian International Conference on Graph Theory, Bled (2011), Slovenia.
16.The Rank Polynomial of Bicyclic Graph, 5^{th} Confrence and Workshop on Mathmatical Chemistry, Payame Noor University of Yazd, 15-17 February (2012), Iran.

Served as a Reviewer for Journals/Publishers:

1. Applied Mathematics Letters,

2. Bulletin of the Iranian Mathematical Society,
3. Discrete Applied Mathematics,
4. FILOMAT,
5. Linear Algebra and its Applications,
6. Mathematical Review,
7. Journal of Iranian Mathematical Chemistry.