



**CURRICULUM VITAE (CV)**  
of  
**NOR HANIZA SARMIN**

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**PERSONAL INFORMATION**

Name : Nor Haniza Sarmin  
Citizenship : Malaysian  
Date of birth : September 8, 1967  
Place of birth : Pontian, Johor, Malaysia  
Marital Status : Married, three children  
Home Address : 23, Jln Keindahan 23, Taman Skudai Indah 2, 81300 Skudai, Johor, Malaysia  
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**EDUCATION BACKGROUND**

**PhD** (Mathematics), State University of New York at Binghamton, Binghamton,  
New York 13902-6000, USA; January 1995 - May 1998.  
*Thesis : On Two-generator Groups of Class Two and Their Nonabelian Tensor Squares.*

**M.A.** (Mathematics), State University of New York at Binghamton, Binghamton,  
New York 13902-6000, USA; August 1989 - December 1990.

**B.Sc.** (Mathematics) with honors, State University of New York at Binghamton, Binghamton, New York  
13902-6000, USA; January 1986 - May 1989.

**Minor in Economics.**

**PROFESSIONAL MEMBERSHIP**

Malaysian Mathematical Sciences Society (PERSAMA), Lifetime Member (Exco since 2004)  
Institute of Electrical and Electronics Engineer (IEEE ), 2011- present  
American Mathematical Society (AMS), 1995- present  
Mathematical Association of America (MAA), 1995 - present  
Persatuan Kakitangan Akademik (PKAUTM), 1991 - present  
Akademi Sains Islam (ASASI), 2003 – present  
UTM Toastmaster Club, July 2016-present

**PRESENT JOB**

**Professor**  
Department of Mathematical Sciences, Faculty of Science, Universiti Teknologi Malaysia  
Starting date: June 6, 2014



No.	Name	Year	Title
	<i>(graduated on 16 Sept. 2008)</i>		Groups of Nilpotency Class 2.
3	Nor Muhainiah Mohd Ali <i>(graduated on 31 Dec 2008)</i>	2005 – 2008	Homological Functors and Capability of 2-Generator Groups of Nilpotency Class Two
4	Rohaidah bte Masri (co) <i>(graduated on 17 Nov 2009)</i>	2005-2009	The Nonabelian Tensor Squares of Some Bieberbach Groups With Cyclic Point Group of Order 2
5	Norashiqin Mohd Idrus (PT) <i>(graduated on 4 April 2011)</i>	2004 – 2011	Bieberbach Groups With Finite Point Groups
6	Loh Ser Lee (co) <i>(graduated on 23 Nov 2011)</i>	2008-2011	Graph Theoretical Characterizations and Techniques for Minimization of Connected Graphs Into Single-row Networks.
7	Samad Rashid (Iran) <i>(graduated on 30 Jan 2012)</i>	July 2009-2012	The Nonabelian Tensor Squares and Capability of Some Finite Groups
8	Yuhani Yusof <i>(graduated on 29 Feb 2012)</i>	Dec 2008-2011	DNA Splicing System Inspired by Bio Molecular Operations
9	Mohd Sham Mohamad <i>(graduated on 26 March 2012)</i>	Dec 2008-2011	Compatibility Conditions and Nonabelian Tensor Products of Finite Cyclic Groups Of $p$ -Power Order
10	Fadila Normahia Abd Manaf <i>(graduated in March 2013)</i>	July 2009-2012	Commutativity Degrees of Nilpotent Groups of Class Two
11	Fariba Karimi (Iran) <i>(graduated in July 2013)</i>	Dec 2009-2012	Mathematical Modeling of Splicing Systems in DNA Computing
12	Sheila a/p Ilangovan <i>(graduated in November 2013)</i>	July 2010-2013	Conjugacy Classes and Graph of Some 2-Groups of Nilpotency Class 2.
13	Faiz Muhammad Khan (Pakistan) <i>(graduated in December 2013)</i>	July 2010 – 2013	Fuzzy Ideals in Ordered Semigroups and Their Generalisations
14	Yasamin Barakat (Iran) <i>(graduated in December 2013)</i>	July 2010-2013	Automorphisms of Nonabelian 2-Generated $p$ -Groups of Class 2
15	Kayvan Moradipour (Iran) <i>(graduated in December 2013)</i>	2011-2013	The Exact Number and Size of Conjugacy Classes, Commutativity Degrees and Non-Commuting Graphs of Finite Metacyclic Groups
16	Abdulqader Mohammed Bin Basri Assaqqaf (Yemen) <i>(graduated in January 2014)</i>	Dec 2009-2013	Capability and Homological Functors of Finite Metacyclic $p$ -Groups
17	Hazzirah Izzati Mat Hassim <i>(graduated in November 2014)</i>	July 2010-2014	The Homological Functors of Bieberbach Groups with Cyclic Point Groups of Order Two, Three and Five
18	Sanaa Mohamed (Libya) <i>(graduated in November 2014)</i>	Sept 2011-2014	Extension of the Commutativity Degrees of Some Finite Groups and Their Related Graphs
19	Gan Yee Siang (co) <i>(graduated in Mac 2015)</i>	Sept 2011-2015	Finite Automata in DNA Splicing and Sticker Systems with the Presence of Weights
20	Hidayat Ullah Khan (Pakistan) <i>(graduated in 2015)</i>	Feb 2012 – 2015	Generalized Interval-Valued Fuzzy Sets of Ordered Semigroups
21	Mathuri Selvarajoo (co) <i>(graduated in 2015)</i>	Sept 2011-2015	Probabilistic Splicing System and Sticker Systems in DNA Computing
22	Zainab Yahya (co) <i>(graduated in 2016)</i>	Sept 2011-2015	Representation of Some Finite Groups and Galois Stability

No.	Name	Year	Title
23	Rosita Zainal (co) ( <i>graduated in 2016</i> )	Feb 2012-2016	The Schur Multipliers, Nonabelian Tensor Squares and Capability of Some Finite $p$ -Groups
24	Muhammad Azrin Ahmad ( <i>graduated in 2016</i> )	Sept 2012 - 2016	Second Order Limit Language and Its Properties in Yusuf-Goode Splicing System
25	Mustafa El-Sanfaz (Libya) ( <i>graduated in 2016</i> )	Oct 2013 -2016	The Probability that an Element of a Non- Abelian Group Fixes a Set and its Applications in Graph Theory
26	Adnin Afifi Nawi (co)	Sept 2012 – 2016	The Schur Multiplier and Capability of Pairs of Some Finite Groups
27	Muhanizah Abdul Hamid (co)	Sept 2012 – 2016	The Relative $n$ -th Nilpotency Degree of Two Subgroups of a Finite Group Related to a Graph
28	Nurhidaya Mohamad Jan (co) ( <i>graduated in 2017</i> )	Sept 2012 - 2016	The Modelling of Watson-Crick Petri Net and Place-Labelled Petri Net Controlled Grammar using Formal Language Theory
29	Siti Afiqah Mohammad	Feb 2014 - 2017	The Homological Functors of Bieberbach Groups of Dimension Six with Quaternion Point Group of Order Eight
30	Norarida Abd Rhani (co)	Sept 2014-2017	An Extension of the Commutativity Degree of Some Finite Groups and Their Graphs
31	Siti Norziahidayu Amzee Zamri	Mac 2015-2017	A Variance of the Probability That a Metacyclic $p$ -Groups Fixes a Set and Its Related Graphs
32	Rabiha Birkia (Sudan)	Sept 2015-2018	Energy of Some Graphs Associated to Finite Groups
33	Ibrahim Gambo (Nigeria)	Oct 2015-2018	Innovative Types of Fuzzy Gamma Ideals in Ordered Gamma Semigroups
34	Suad Saed M Alrehaili	Aug 2016 - 2019	Homological Functors of Metabelian Groups
35	Alia Husna Mohd Noor	Aug 2016 - 2019	3-generator Groups of $p$ -power Order and Some Related Graphs
36	Nabilah Najmuddin	Aug 2016 - 2019	Homological Functors of Bieberbach Groups
37	Amira Fadina Ahmad Fadzil	Feb 2017 - 2020	The Energy of Cayley Graphs of Some Finite Groups
38	Nur Idayu Alimon	Sept 2017 - 2020	The Spectrum and Laplacian Spectrum of Some Graphs of Metacyclic $p$ -Groups
39	Aqilahfarhana Abdul Rahman (co)	Sept 2017 - 2020	New Computational Models for Biological Data Analysis Based on Static Watson-Crick Grammars
40	Nurul Izzaty binti Ismail (co)	Sept 2017 - 2020	Mathematical Modelling of DNA Splicing Systems with Palindromic and Non-Plindromic Restriction Enzymes
41	Athirah Zulkarnain	Feb 2018 - 2021	The Prime Cayley Graphs of Non-Abelian $p$ -Groups
42	Nabilah Fikriah Rahin	Feb 2018 - 2021	Moore-Penrose Inverse Matrix of Directed Simple Graphs to some Finite Groups
43	Nurhidayah Zaid	Sept 2018 - 2021	Probabilistic Characterizations of Finite Rings and Their Related Graphs

External co-supervisor:

1. Hossein Mousa Jafarabadi (PhD by Mixed mode - Iran) – Title: Semihypergroups and Dynamics  
Created by Them

LATEST PUBLICATIONS

Indexed Journals/Proceedings

**ISI Web of Knowledge**

(2018)

1. **Nor Haniza Sarmin**, Hazzirah Izzati Mat Hassim, Siti Afiqah Mohammad, Nor'ashiqin Mohd Idrus, Rohaidah Masri, Yee Ting Tan. "Recent Updates on Homological Invariants of Bieberbach Groups", Southeast Asian Bulletin of Mathematics, 42(5), 729-246, 2018.
2. M. H. Hooshmand and **Nor Haniza Sarmin**. "f-Grouplikes", Journal of Mathematical Extension, 12(1), 41-45, 2018.
3. Nur Idayu Alimon, **Nor Haniza Sarmin** and Ahmad Erfanian. "Topological Indices of Non-commuting Graph of the Dihedral Groups", Malaysian Journal of Fundamental and Applied Sciences, Special Issue on Natural Sciences and Mathematics (ESCon2018), 473-476, 2018.
4. Nabilah Najmuddin, **Nor Haniza Sarmin** and Ahmad Erfanian. "The Independence and Clique Polynomial of the Conjugacy Class Graph of Dihedral Group", Malaysian Journal of Fundamental and Applied Sciences, Special Issue on Natural Sciences and Mathematics (ESCon2018), 434-438, 2018.
5. Aqilahfarhana Abdul Rahman, Wan Heng Fong, **Nor Haniza Sarmin**, Sherzod Turaev and Nurul Liyana Mohamad Zulkufli. "Static Watson-Crick Regular Grammar", Malaysian Journal of Fundamental and Applied Sciences, Special Issue on Natural Sciences and Mathematics (ESCon2018), 457-462, 2018.
6. Alia Husna Mohd Noor, **Nor Haniza Sarmin**, Hamisan Rahmat. "Related graphs of the conjugacy classes of a 3-generator 5-group", Malaysian Journal of Fundamental and Applied Sciences, Special Issue on Natural Sciences and Mathematics (ESCon2018), 454-456, 2018.
7. Nur Idayu Alimon, **Nor Haniza Sarmin**, Amira Fadina Ahmad Fadzil. "The Energy of Four Graphs of Some Metacyclic 2-Groups", Malaysian Journal of Fundamental and Applied Sciences, 14(1), 59-66, 2018.
8. Muhammad Azrin Ahmad, **Nor Haniza Sarmin**, Mohd Firdaus Abdul-Wahab, Fong Wan Heng and Yuhani Yusof. "Biomolecular aspects of second order limit language", Malaysian Journal of Fundamental and Applied Sciences, 14(1), 15-19, 2018.
9. Nurul Izzaty Ismail, Wan Heng Fong and **Nor Haniza Sarmin**. "Computation of Splicing Languages from DNA Splicing System with One Palindromic Restriction Enzyme", Journal of Fundamental and Applied Sciences, 14(2), 188-192, 2018.
10. Nabilah Najmuddin, **Nor Haniza Sarmin** and Ahmad Erfanian, "Graph polynomials of the conjugate graph of dihedral groups", AIP Conference Proceedings, 1774, 030005 (2018). <https://doi.org/10.1063/1.5041649>.
11. Amira Fadina Ahmad Fadzil, **Nor Haniza Sarmin** and Rabiha Mahmoud Birkia, "The energy of conjugacy class graphs of some metabelian groups", AIP Conference Proceedings, 1774, 030014 (2018). <https://doi.org/10.1063/1.5041658>.
12. Alia Husna Mohd Noor, **Nor Haniza Sarmin**, Siti Norziahidayu Amzee Zamri and Hamisan Rahmat, "On the orbit graph of some 3-generator 2-groups", AIP Conference Proceedings, 1774, 030011 (2018). <https://doi.org/10.1063/1.5041655>.

13. Nurhidayah Zaid, **Nor Haniza Sarmin**, Siti Norziahidayu Amzee Zamri and Hamisan Rahmat, "On the orbit of some metabelian groups of order 24 and its applications", AIP Conference Proceedings, 1974, 030004 (2018). <https://doi.org/10.1063/1.5041648>.
14. Nor Muhainiah Mohd Ali, Norarida Abd Rhani, **Nor Haniza Sarmin** and Ahmad Erfanian, "The subset relative degree for two different sets in a finite group", AIP Conference Proceedings, 1974, 030024 (2018). <https://doi.org/10.1063/1.5041668>

## (2017)

15. **Nor Haniza Sarmin**, Alia Husna Mohd Noor, Sanaa Mohamed Saleh Omer. "On Graphs Associated to Conjugacy Classes of Some Three-Generator Groups", Jurnal Teknologi, 79(1), 55 – 61, 2017.
16. **Nor Haniza Sarmin**, Ain Asyikin Ibrahim, Alia Husna Mohd Noor, Sanaa Mohamed Saleh Omer. "The Conjugacy Classes of Some Metabelian Groups and Their Related Graphs", Jurnal Teknologi, 79(1), 69 – 73, 2017.
17. Nurhidayah Zaid and **Nor Haniza Sarmin**. "On the Generalized Conjugacy Class Graph of Some Dihedral Groups", Malaysian Journal of Fundamental and Applied Sciences, 13(2), 36 – 39, 2017.
18. Norarida Abd Rhani, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin**, Ahmad Erfanian. "On the Dominating Number, Independent Number and the Regularity of the Relative Co-prime Graph of a Group", Malaysian Journal of Fundamental and Applied Sciences, 13(2), 72 - 74, 2017.
19. Nur Idayu Alimon, **Nor Haniza Sarmin**, Amira Fadina Ahmad Fadzil. "The Adjacency Matrix of the Conjugate Graph of Some Metacyclic 2-Groups", Malaysian Journal of Fundamental and Applied Sciences, 13(2), 79 - 81, 2017.
20. Athirah Zulkarnain, **Nor Haniza Sarmin**, Alia Husna Mohd Noor. "On the Conjugate Graphs of Finite  $p$ -groups", Malaysian Journal of Fundamental and Applied Sciences, 13(2), 100 - 102, 2017.
21. Rabiha Mahmoud, Amira Fadina Ahmad Fadzil, **Nor Haniza Sarmin**, Ahmad Erfanian. "The Laplacian Energy of Conjugacy Class Graph of Some Dihedral Groups", Malaysian Journal of Fundamental and Applied Sciences, 13(2), 129 - 131, 2017.
22. Nurhidaya Mohamad Jan, Sherzod Turaev, Fong Wan Heng, **Nor Haniza Sarmin**. "Place-labelled Petri Net Controlled Grammars", ScienceAsia, 43S, 9 – 19, 2017.
23. Siti Norziahidayu Amzee Zamri, **Nor Haniza Sarmin**, Mustafa Anis El-Sanfaz and Hamisan Rahmat. "On the Generalized Commuting and Non-commuting Graphs of Metacyclic 3-groups", Malaysian Journal of Fundamental and Applied Sciences, 13(3), 181 - 185, 2017.
24. Nabilah Najmuddin and **Nor Haniza Sarmin**, "The Independence Polynomial of  $N$ -th Central Graph of Dihedral Groups", Malaysian Journal of Fundamental and Applied Sciences, 13(3), 271 - 274, 2017.
25. Yee Siang Gan, Wan Heng Fong, **Nor Haniza Sarmin** and Sherzod Turaev, "Generative Capacity of Sticker Systems with the Presence of Weights", ScienceAsia, 43(S), 35 – 42, 2017.
26. Wan Heng Fong, Yee Siang Gan, **Nor Haniza Sarmin** and Sherzod Turaev, "Variants of Weighted Sticker Systems with Different Weighting Spaces", ScienceAsia, 43(S), 43 – 51, 2017.
27. Nor Fadzilah Abdul Ladi, Rohaidah Masri, Nor'ashiqin Mohd Idrus, **Nor Haniza Sarmin**, Tan Yee Ting. "The Central Subgroups of the Nonabelian Tensor Squares of Some Bieberbach Groups with Elementary Abelian 2-Group Point Group", Jurnal Teknologi, 79(7), 115-121, 2017.
28. Siti Afiqah Mohammad, **Nor Haniza Sarmin**, Hazzirah Izzati Mat Hassim, "Polycyclic transformations of crystallographic groups with quaternion point group of order eight", Malaysian Journal of Fundamental and Applied Sciences, 13(4), 788-791, 2017.
29. Siti Norziahidayu Amzee Zamri, **Nor Haniza Sarmin**, Sanhan Muhammad Salih Khasraw, Mustafa Anis El-Sanfaz, Hamisan Rahmat, "On the commutativity degree of metacyclic groups of 5-power order using conjugation action", Malaysian Journal of Fundamental and Applied Sciences, 13(4), 784-787, 2017.

30. Ibrahim Gambo, **Nor Haniza Sarmin**, Hidayat Ullah Khan, Faiz Muhammad Khan, “New fuzzy generalized bi gamma-ideals of the type  $(\square, \square) k q$  in ordered gamma-semigroups”, *Malaysian Journal of Fundamental and Applied Sciences*, 13(4), 666-670, 2017.
31. Rabiha Mahmoud, **Nor Haniza Sarmin**, Ahmad Erfanian, “The conjugacy class graph of some finite groups and its energy”, *Malaysian Journal of Fundamental and Applied Sciences*, 13(4), 659-665, 2017.
32. Ibrahim Gambo, **Nor Haniza Sarmin**, Hidayat Ullah Khan, Faiz Muhammad Khan, “The characterization of regular ordered gamma-semigroups in terms of  $(\square, \square) \square k q$  fuzzy gamma-ideals”, *Malaysian Journal of Fundamental and Applied Sciences*, 13(4), 576-580, 2017.
33. Nabilah Najmuddin, **Nor Haniza Sarmin**, Ahmad Erfanian, “The independence polynomial of conjugate graph and noncommuting graph of groups of small order”, *Malaysian Journal of Fundamental and Applied Sciences*, 13(4), 602-605, 2017.
34. Nurhidaya Mohamad Jan, Wan Heng Fong, **Nor Haniza Sarmin**, Sherzod Turaev, “State machine of place-labelled petri net controlled grammars”, *Malaysian Journal of Fundamental and Applied Sciences*, 13(4), 649-653, 2017.
35. Rabiha Mahmoud, **Nor Haniza Sarmin** and Ahmad Erfanian, “On the energy of non-commuting graph of dihedral groups”, *AIP Conference Proceedings* **1830**, 070011 (2017). <http://dx.doi.org/10.1063/1.4980960>
36. Ibrahim Gambo, **Nor Haniza Sarmin**, Hidayat Ullah Khan and Faiz Muhammad Khan, “New Form of Fuzzy Bi  $\Gamma$ -Ideals in Ordered  $\Gamma$ - Semigroup”, *AIP Conference Proceedings* **1830**, 070019 (2017). <http://dx.doi.org/10.1063/1.4980968>
37. Siti Norziahidayu Amzee Zamri, **Nor Haniza Sarmin** and Mustafa Anis El-Sanfaz, “The Conjugate and Generalized Conjugacy Class Graphs for Metacyclic 3-groups and Metacyclic 5-groups”, *AIP Conference Proceedings* **1830**, 070015 (2017). <https://doi.org/10.1063/1.4980964>
38. Wan Heng Fong, **Nor Haniza Sarmin**, Sherzod Turaev and Ahmad Firdaus Yosman, “Generating Finite Cyclic and Dihedral Groups using Sequential Insertion Systems with Interactions”, *AIP Conference Proceedings* **1830**, 070005 (2017). <http://dx.doi.org/10.1063/1.4980954>

**(2016)**

39. Sanaa Mohamed Saleh Omer, **Nor Haniza Sarmin** and Mustafa El-Sanfaz. “Some Applications of Metacyclic 2-Groups of Negative Type”, *ScienceAsia*, 42S(1), 1 – 4, 2016.
40. Wan Heng Fong, Yee Siang Gan, **Nor Haniza Sarmin** and Sherzod Turaev, “The Generative Capacity of Weighted Simple and Non-Semi Simple Splicing Systems”, *AIP Conference Proceedings* **1750**, 050013 (2016). <http://dx.doi.org/10.1063/1.4954601>
41. **Nor Haniza Sarmin**, Mustafa Anis El-sanfaz and Sanaa Mohamed Saleh Omer, “Groups and Graphs in Probability Theory”, *AIP Conference Proceedings* **1750**, 050012 (2016). <http://dx.doi.org/10.1063/1.4954600>
42. Siti Norziahidayu Amzee Zamri, **Nor Haniza Sarmin**, Sanaa Mohamed Saleh Omer and Mustafa Anis El-sanfaz, “The Probability that an Element of a Metacyclic 3-Group of Negative Type Fixes a Set and Its Orbit Graph”, *AIP Conference Proceedings* **1750**, 050011 (2016). <http://dx.doi.org/10.1063/1.4954599>
43. Siti Afiqah Mohammad, **Nor Haniza Sarmin** and Hazzirah Izzati Mat Hassim, “The Central Subgroup of the Nonabelian Tensor Square of a Torsion Free Space Group”, *AIP Conference Proceedings* **1750**, 050005 (2016). <http://dx.doi.org/10.1063/1.4954593>
44. Muhanizah Abdul hamid, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin** and Ahmad Erfanian, “The Cubed Commutativity Degree of Dihedral Groups”, *AIP Conference Proceedings* **1750**, 050004 (2016). <http://dx.doi.org/10.1063/1.4954592>

45. Norarida Abd Rhani, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin**, Ahmad Erfanian and Muhanizah Abdul Hamid, "Multiplicative Degree of Some Dihedral Groups", *AIP Conference Proceedings* **1750**, 050003 (2016). <http://dx.doi.org/10.1063/1.4954591>
46. Adnin Afifi Nawi, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin** and Samad Rashid, "The Schur Multipliers of Pairs of Groups of Order  $p^3q$ ", *AIP Conference Proceedings* **1750**, 050001 (2016). <http://dx.doi.org/10.1063/1.4954589>
47. Siti Afiqah Mohammad, **Nor Haniza Sarmin** and Hazzirah Izzati Mat Hassim, "Consistent Polycyclic Presentation of A Bieberbach Group with A Non-Abelian Point Group", *AIP Conference Proceedings* **1707**, 020012 (2016). <http://dx.doi.org/10.1063/1.4940813>
48. Siti Norziahidayu Amzee Zamri, **Nor Haniza Sarmin** and Sanaa Mohamed Saleh Omer, "The Probability that An Element A Metacyclic 3-Group Fixes A Set of Size Three", *AIP Conference Proceedings* **1707**, 020027 (2016). <http://dx.doi.org/10.1063/1.4940828>
49. Hidayat Ullah Khan, **Nor Haniza Sarmin**, Asghar Khan, Faiz Muhammad Khan. "Classification of Ordered Semigroups in terms of Generalized Interval-valued Fuzzy Interior Ideals", *Journal of Intelligent Systems*, 25(2), 297 – 318, 2016.

**(2015)**

50. Mehrbakhsh Nilashi, Othman bin Ibrahim, Norafida Ithnin and **Nor Haniza Sarmin**. A multi-criteria collaborative filtering recommender system for the tourism domain using Expectation Maximization (EM) and PCA-ANFIS. *Electronic Commerce Research and Applications*. (2015).
51. Nurhidaya Mohamad Jan, Fong Wan Heng, **Nor Haniza Sarmin** and Sherzod Turaev, "k-Watson-Crick Petri Net Controlled Grammars", *International Journal of Applied Mathematics and Statistics (IJAMAS)*, Vol. 53(3) : 99-106, 2015. <http://www.ceser.in/ceserp/index.php/ijamas/article/view/3567>
52. Mathuri Selvarajoo, Wan Heng Fong, **Nor Haniza Sarmin** and Sherzod Turaev, "Computational Power of Probabilistic Bidirectional Sticker System in DNA Computing", *International Journal of Applied Mathematics and Statistics (IJAMAS)*, Vol. 53(3) : 66-72, 2015.
53. Faiz Muhammad Khan, **Nor Haniza Sarmin**, Asghar Khan and Hidayat Ullah Khan. "Some Innovative Types of Fuzzy Bi-Ideals in Ordered Semigroups", *Journal of Advanced Mathematics and Applications*, 2015. 4: 24-36. <http://www.ingentaconnect.com/content/asp/jama/2015/00000004/00000001/art00005>
54. Mathuri Selvarajoo, Selvarajoo, M., Fong, W.H., **Sarmin, N.H.**, and Turaev, S. "The Generative Capacity of Probabilistic Splicing System", *Journal of Applied Mathematics and Information System*, 2015. 9(3): 1191-1198. IF = 1.231 <http://www.naturalspublishing.com/Article.asp?ArtcID=8757>
55. Hidayat Ullah Khan, **Nor Haniza Sarmin**, Asghar Khan and Faiz Muhammad Khan. "Some Characterization of Semigroups in Terms of Intuitionistic Fuzzy Interior Ideal", *Journal of Prime Research in Mathematics*, 2015, Vol 10: 19-36. <http://www.wc2004.sms.edu.pk/journals/jprm/jprmvoll0/02.pdf>
56. Sanaa Mohamed Saleh Omer, **Nor Haniza Sarmin** and Ahmad Erfanian, "The Generalized Conjugacy Class Graph of Some Finite Non-abelian Groups", *AIP Conference Proceedings* **1660**, 050074 (2015). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4915707>
57. Mathuri Selvarajoo, Fong Wan Heng, **Nor Haniza Sarmin**, and Sherzod Turaev. "The properties of probabilistic simple regular sticker systems", *AIP Conference Proceedings* **1682**, 020047 (2015). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4932456>
58. Muhammad Azrin Ahmad, **Nor Haniza Sarmin**, Fong Wan Heng and Yuhani Yusof, "Some Restrictions on the Existence of Second Order Limit Language", *AIP Conference Proceedings* **1682**, 020048 (2015). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4932457>
59. Nurhidaya Mohamad Jan, Sherzod Turaev, Fong Wan Heng and **Nor Haniza Sarmin**, "A New Variant of Petri Net Controlled Grammars". *AIP Conference Proceedings* **1682**, 040015 (2015). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4932488>



60. **N. H. Sarmin**, S. M. S. Omer and A. Erfanian. "On The Probability That a Metacyclic 2-Group Element Fixes a Set and Its Generalized Conjugacy Class Graph", *AIP Conference Proceedings* **1682**, 040016 (2015). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4932489>
61. Ahmad Erfanian, **Nor Haniza Sarmin** and Behnaz Tolu, "On the  $n$ th and relative  $n$ th Commutativity Degree of Finite Groups", *Archiv der Mathematik*, Elsevier (IF : 0.373). (Accepted in 2010)
- (2014)
62. Gan Yee Siang, Sherzod Turaev, Fong Wan Heng and **Nor Haniza Sarmin**. Computational Power of Weighted Splicing Systems. *C. R. Acad. Bulg. Sci.* 2014. **67**(6): 753-762 (2014). (IF: 0.211). [http://www.science-bas.org/Comptes%20rendus/2014/No\\_6/EE\\_06-03.pdf](http://www.science-bas.org/Comptes%20rendus/2014/No_6/EE_06-03.pdf)
63. Hidayat Ullah Khan, **Nor Haniza Sarmin**, Asghar Khan & Faiz Muhammad Khan. "A New Interpretation of Interval-Valued Fuzzy Interior Ideals of Ordered Semigroups", *Sci-Int. (Lahore)*, 2014. 27(1), 29-37. <http://www.sci-int.com/pdf/61942514529-37-H.%20Khan%20-MATH--Malaysia-SAWAT-COMPOSED.pdf>
64. Ahmad Erfanian, Fadila Normahia Abd Manaf, Francesco G. Russo and **Nor Haniza Sarmin**, "On the Exterior Degree of the Wreath Product of Finite Abelian Groups", *Bull. Malays. Math. Sci. Soc.* (2) 37(1) (2014), 25–36 (IF: 0.860). <http://www.emis.de/journals/BMMSS/pdf/acceptedpapers/2012-09-042-R1.pdf>
65. Faiz Muhammad Khan, **Nor Haniza Sarmin** and Hidayat Ullah Khan, "A novel approach toward fuzzy generalized bi-ideals in ordered semigroups", *The Scientific World Journal*, Vol. 2014, Article: 275947. (IF: 1.73) <http://www.hindawi.com/journals/tswj/2014/275947/abs/>
66. Loh Ser Lee, Shaharuddin Salleh and **Nor Haniza Sarmin**, "An Extended Partitioning Technique to Transform Trees into Single-Row Networks". *Applied Soft Computing*, 22 (2014), 483-491. DOI: <http://dx.doi.org/10.1016/j.asoc.2014.04.021> (IF: 2.14).
67. Loh Ser Lee, Shaharuddin Salleh and **Nor Haniza Sarmin**. "Linear-Time Heuristic Partitioning Technique for Mapping of Connected Graphs into Single-Row Networks" *Sains Malaysiana* 43(8) (2014), 1263–1269 (IF: 0.48) <http://journalarticle.ukm.my/7525/>
68. Faiz Muhammad Khan, **Nor Haniza Sarmin** and Asghar Khan. "A novel approach towards fuzzy  $\Gamma$ -ideals in ordered  $\Gamma$ -semigroups", *Indian Journal of Pure and Applied Mathematics*, Volume 45, Issue 3, June 2014, Pages 343-362. (IF: 0.274) <http://link.springer.com/article/10.1007%2Fs13226-014-0067-6>
69. Rashid, S., Nawawi, A. A., Zainal, R., Mohd Ali, N. M. and **Sarmin, N. H.** "The Use of Groups, Algorithms and Programming (GAP) Software in Calculating the Commutator Subgroup and Center of Groups of Order  $p^3q$ ", *ScienceAsia*, 2014, 40S: 73-77. (February 2015) IF:0.344 [http://www.scienceasia.org/2014.40S.n1/scias40S\\_73.pdf](http://www.scienceasia.org/2014.40S.n1/scias40S_73.pdf)
70. Muhammad Azrin Ahmad, **Nor Haniza Sarmin**, Fong Wan Heng, and Yuhani Yusof. "An extension of first order limit language", *AIP Conference Proceedings*, **1602**, 627 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4882550>
71. Siti Afiqah Mohammad, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin**, Nor'ashiqin Mohd Idrus and Rohaidah Masri. "On some homological functors of Bieberbach group of dimension four with dihedral point group of order eight", *AIP Conference Proceedings*, **1602**, 754 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/1602>
72. Noor Asma'Adny Mohd Adnan, **Nor Haniza Sarmin**, Nor Muhainiah Mohd Ali, Zainab Yahya and Hamisan Rahmat. "Integral representations of metacyclic groups over a local field", *AIP Conference Proceedings*, **1602**, 704 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/1602>
73. S. M. S. Omer, **N. H. Sarmin** and A. Erfanian. "The orbit graph for some finite solvable groups", *AIP Conference Proceedings*, **1602**, 863 (2014). <http://adsabs.harvard.edu/abs/2014AIPC.1602..863O>

74. **Nor Haniza Sarmin** and Yasamin Barakat. “Automorphism group of nonabelian groups of order  $p^3$ ”, *AIP Conference Proceedings*, **1602**, 640 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/1602>
75. Nurhidaya Mohamad Jan, Fong Wan Heng, **Nor Haniza Sarmin**, and Sherzod Turaev. “Watson-Crick Petri net languages with finite sets of final markings”, *AIP Conference Proceedings*, **1602**, 876 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/1602>
76. Rohaidah Masri, Hazzirah Izzati Mat Hassim, **Nor Haniza Sarmin**, Nor Muhainiah Mohd Ali, and Nor'ashiqin Mohd Idrus. “The generalization of the exterior square of a Bieberbach group”, *AIP Conference Proceedings*, **1602**, 849 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/1602>
77. Mathuri Selvarajoo, Fong Wan Heng, **Nor Haniza Sarmin**, and Sherzod Turaev. “Probabilistic simple splicing systems”, *AIP Conference Proceedings* **1602**, 760 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/1602>
78. Tan Yee Ting, Nor'ashiqin Mohd. Idrus, Rohaidah Masri, **Nor Haniza Sarmin**, and Hazzirah Izzati Mat Hassim. “Homological functor of a torsion free crystallographic group of dimension five with a nonabelian point group”, *AIP Conference Proceedings* **1602**, 691 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/1602>
79. Fong Wan Heng, Some Properties and Variants of Weighted Sticker System Siang, **Nor Haniza Sarmin**, and Sherzod Turaev. “Automata for subgroups”, *AIP Conference Proceedings*, **1602**, 632 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/1602>
80. Gan Yee Siang, Fong Wan Heng, **Nor Haniza Sarmin**, and Sherzod Turaev. “The generative power of weighted one-sided and regular sticker systems”, *AIP Conference Proceedings*, **1602**, 855 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/1602>
81. Tan Yee Ting, Nora'shiqin Mohd Idrus, Rohaidah Masri, Wan Nor Farhana Wan Mohd Fauzi and **Nor Haniza Sarmin**. “On the abelianization of all Bieberbach groups of dimension four with symmetric point group of order six,” *AIP Conf. Proc.*, **1635**, 479 (2014). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4903625>
82. Rosita Zainal, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin** and Samad Rashid. “On The Capability of Nonabelian Groups of Order  $p^4$ ”, *AIP Conf. Proc.* **1605**. 575-579 (2014) <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4887652>
83. Nurhidaya Mohammad Jan, Fong Wan Heng, **Nor Haniza Sarmin** and Sherzod Turaev. “Watson-Crick Petri Net Languages: The Effect of Labelling Strategies”, *AIP Conf. Proc.*, **1605**, 2014, 690-695 (ISBN: 978-0-7354-1241-5). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4887673>
84. Muhammad Azrin Ahmad, **Nor Haniza Sarmin**, Fong Wan Heng, Yuhani Yusof. “Second Order Limit Language in Variants of Splicing System”, *Conf. Proc.*, Vol **1605**, 2014, pg. 639-643 (ISBN: 978-0-7354-1241-5). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4887664>
85. Yuhani Yusof, **Nor Haniza Sarmin**, Fong Wan Heng. “The Concepts of Persistent and Permanent in Non Semi-Simple DNA Splicing System”, *AIP Conf. Proc.*, Vol **1605**, 2014, pg. 586-590 (ISBN: 978-0-7354-1241-5). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4887654>
86. Wan Nor Farhana Wan Mohd Fauzi, Nor'ashiqin Mohd Idrus, Rohaidah Masri and **Nor Haniza Sarmin**. “The nonabelian tensor square of Bieberbach group of dimension five with dihedral point group of order eight”, *AIP Conf. Proc.*, Vol **1605**, 2014, pg. 611-616 (ISBN: 978-0-7354-1241-5). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4887659>
87. Hazzirah Izzati Mat Hassim, **Nor Haniza Sarmin**, Nor Muhainiah Mohd Ali, Rohaidah Masri and Nor'ashiqin Mohd Idrus. “The homological functor of a Bieberbach group with a cyclic point group of order two”, *AIP Conf. Proc.*, Vol **1605**, 2014, pg. 672-677 (ISBN: 978-0-7354-1241-5). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4887670>
88. Muhanizah Abdul Hamid, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin** and Ahmad Erfanian. “The productivity degree of two subgroups of dihedral groups”, *AIP Conf. Proc.*, Vol **1605**, 2014, pg. 601-

- <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4887657>
89. Pradeep Isawasan, Ibrahim Venkat, K. G. Subramanian and **Nor Haniza Sarmin**. “Morphic images of binary words and Parikh matrices”, *AIP Conf. Proc.*, Vol 1605, 2014, pg. 708-713 (ISBN: 978-0-7354-1241-5). <http://math.usm.my/online-proceeding-of-sksm21/>
  90. Zainab Yahya, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin**, Noor Asma'Adny Mohd Adnan and Hamisan Rahmat. “Irreducible representations of some point groups which are isomorphic to some dihedral groups”, *AIP Conf. Proc.*, Vol 1605, 2014, pg. 617-621 (ISBN: 978-0-7354-1241-5). <http://math.usm.my/online-proceeding-of-sksm21/>
  91. Gan Yee Siang, Fong Wan Heng, **Nor Haniza Sarmin** and Sherzod Turaev. “Computational Power of Weighted Splicing System”. Proceedings of the Bulgarian Academy of Sciences, 67(6), 2014. Pg. 753-762. (IF: 0.21). [http://www.proceedings.bas.bg/firstpg\\_a.html](http://www.proceedings.bas.bg/firstpg_a.html)
  92. Dmitry Malinin, **Nor Haniza Sarmin**, Nor Muhainiah Mohd Ali, Noor Asma' Adny binti Mohd Adnan and Zainab binti Yahya, “Representations of Some Groups and Galois Stability”, Bulletin of the Malaysian Mathematical Sciences Society, (IF: 0.779). (Published Online: 19 November 2014). DOI: <http://link.springer.com/article/10.1007/s40840-014-0051-7>
  93. S. M. S. Omer, **N. H. Sarmin** and A. Erfanian. “The Orbit Graph of Finite p-Groups and Groups of Order pq.” Indian Journal of Science and Technology. 7(12): pg 2113-2117(Published Online: December 2014) (ISSN0974-5645). <http://www.indjst.org/index.php/indjst/article/view/31819/43738>
  94. S. Rashid , A. A. Nawawi, N. M. Mohd Ali and **N. H. Sarmin**, “The Schur Multiplier Of Pairs Of Groups Of Order  $p^2q$ ”, Mathematical Problems in Engineering, Vol. 2014, Article ID 459135, 4 pages, 2014. <http://www.hindawi.com/journals/mpe/2014/459135/>
  95. Wan Nor Farhana Wan Mohd Fauzi, Nor'ashiqin Mohd Idrus, Rohaidah Masri, Tan Yee Ting, **Nor Haniza Sarmin** and Hazzirah Izzati Mat Hassim. “The presentation of the nonabelian tensor square of a Bieberbach group of dimension five with dihedral point group”, *AIP Conf. Proc.*, Vol. 1635, 2014, pg 417-424. <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4903616>
  96. Rohaidah Masri, Hazzirah Izzati Mat Hassim, **Nor Haniza Sarmin**, Nor Muhainiah Mohd Ali & Nor'ashiqin Mohd Idrus. “The generalization of the Schur multipliers of Bieberbach groups”, *AIP Conf. Proc.*, Vol. 1635, 2014, pg 461-464. <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4903622>
  97. Fong, W. H., Gan, Y. S., **Sarmin, N. H.** and Turaev, S. Automata for Subgroups. *AIP Conference Proceedings*. 2014. 1602: 632-639. <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4882551>
  98. Hidayat Ullah Khan, **Nor Haniza Sarmin**, Asghar Khan and Faiz Muhammad Khan. “A New Pattern of Interval-Valued Fuzzy Interior Ideals in Semigroups”, Science International (Lahore). 26(2), 527-535, 2014. (ISSN: 1013-5316). <http://www.sci-int.com/pdf/413450777527-535---HIDAYAT%20ULLAH---MATH--MALYSIA-4-4-14-Composed%20Paid.pdf>
  99. Samad Rashid, Adnin Afifi Nawawi, Rosita Zainal, Nor Muhainiah Mohd Ali and **Nor Haniza Sarmin**, The Use of Groups, Algorithms and Programming (GAP) Software in Calculating the Commutator Subgroup and Center of Groups of Order  $p^3q$ , ScienceAsia, 2014(2014). (IF:0.344). DOI: <http://dx.doi.org/10.2306/scienceasia1513-1874.2014.40S.073>
- (2013)**
100. Fong, W. H., Gan, Y. S., **Sarmin, N. H.** and Turaev, S. Automata Diagram over Abelian Groups. *AIP Conference Proceedings*. 2013. 1522: 875-882. (ISBN:978-0-7354-1150-0, ISSN: 0094-243X). <http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4801221>

101. Rosita Zainal, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin** and Samad Rashid, "On the non-abelian tensor square of groups of order  $p^4$  where  $p$  is an odd prime", *ScienceAsia*, Vol. 39S, 2013, pp. 16-18. (IF: 0.344) DOI: [10.2306/scienceasia1513-1874.2013.39S.016](https://doi.org/10.2306/scienceasia1513-1874.2013.39S.016)
102. K. Moradipour, **N. H. Sarmin** and A. Erfanian, "Conjugacy Classes and Commutativity Degree of Metacyclic 2-Groups". *Comptes rendus de l'Académie bulgare des Sciences*. 66(10), pp. 1363-1372, September 2013. (IF: 0.211). [http://profdoc.um.ac.ir/pubs\\_files/p11040333.pdf](http://profdoc.um.ac.ir/pubs_files/p11040333.pdf)
103. Faiz Muhammad Khan, **Nor Haniza Sarmin** and Asghar Khan. "New Types of Generalized Fuzzy Bi  $\Gamma$  - Ideals In Ordered  $\Gamma$ -Semigroups". *Science International*. 25(3), 411-418, 2013. (ISSN: 1013-5316). <http://www.sci-int.com/searchresult.php?author=Faiz&title=3&year=2013&x=22&y=5>
104. S. Rashid, **N.H. Sarmin**, A. Erfanian, N.M. Mohd Ali & R. Zainal, "On the nonabelian tensor square and capability of groups of order  $8q$ ", *Indagationes Mathematicae-New Series*, 2013, Vol: 24, Issue: 3, 13 June 2013, ISSN: 0019-3577, pp.: 581-588. (DOI: 10.1016/j.indag.2013.03.005) (IF:0.206) (<http://www.sciencedirect.com/science/article/pii/S0019357713000293>).
105. K. Moradipour, **N. H. Sarmin** and A. Erfanian, "On graphs associated to conjugacy classes of some metacyclic 2-groups", *Journal of Basic and Applied Scientific Research*, 3(1): 898-902, 2013. [http://www.textroad.com/pdf/JBASR/J.%20Basic.%20Appl.%20Sci.%20Res..%203\(1\)898-902.%202013.pdf](http://www.textroad.com/pdf/JBASR/J.%20Basic.%20Appl.%20Sci.%20Res..%203(1)898-902.%202013.pdf)
106. F. N. Abd Manaf, **N. H. Sarmin**, A. Erfanian & B.Tolue, "The Relative n-th Commutativity Degree of 2-Generator p-Groups of Nilpotency Class Two", *Ars Combinatoria*, 109, 65-70, April 2013. ISSN: 0381-7032. (IF: 0.278). <http://dblp.uni-trier.de/db/journals/arscom/arscom109.html#ManafSET13>
107. K. Moradipour, **N. H. Sarmin** and A. Erfanian, "Finite groups with the same commuting probability", *Research Journal of Applied Sciences, Engineering and Technology*. 5(13): 3525-3528, April 2013. ISSN: 2040-7459. <http://maxwellsci.com/print/rjaset/v5-3525-3528.pdf>
108. A.M. Basri, **N.H. Sarmin**, N.M. Mohd Ali, J.R. Beuerle, "On Some Metacyclic p-Groups and Their Nonabelian Tensor Square", *Indian Journal of Science and Technology*. Vol 6, Issue: 2, February 2013, pp: 67-70. <http://www.indjst.org/archive/Feb-13/11-2569-feb13.nipdf>
109. B. Davvaz, A. Khan, **N. H. Sarmin** and H. Khan, "More general forms of interval valued fuzzy filters of ordered semigroups", *International Journal of Fuzzy Systems*, Vol. 15, Issue:2, June 2013, pp: 110-126. (IF= 1.509). [http://www.ijfs.org.tw/ePublication/2013\\_paper\\_2/ijfs-13-2-r-2-20130630143534\\_v1.pdf](http://www.ijfs.org.tw/ePublication/2013_paper_2/ijfs-13-2-r-2-20130630143534_v1.pdf)
110. Asghar Khan, Bijan Davvaz, **Nor Haniza Sarmin** and Hidayatullah Khan, "Redefined intuitionistic fuzzy bi-ideals of ordered semigroups" *Journal of Inequalities and Applications*, Vol. 2013, Issue 1, pp. 397. (IF: 0.822) DOI:10.1186/1029-242X-2013-397. <http://www.journalofinequalitiesandapplications.com/content/2013/1/397>
111. S. M. S. Omer, **N. H. Sarmin** and A. Erfanian. "The Probability That an Element of a Group Fixes a Set and Its Graph Related to Conjugacy Classes". *Journal of Basic and Applied Scientific Research*, Vol. 3, No.10, October 2013. <http://www.textroad.com/Old%20Version/pdf/JBASR/J.%20Basic.%20Appl.%20Sci.%20Res..%203%2810%29369-380.%202013.pdf>
112. Asghar Khan, **Nor Haniza Sarmin**, Faiz Muhammad Khan & Bijan Davvaz, "A Study of Fuzzy Soft Interior Ideals of Ordered Semigroups", *Iranian Journal of Science & Technology, Transaction A: Science*, Vol. 37, No. 3, pp. 237-249, 2013. (IF : 0.2). [http://ijsts.shirazu.ac.ir/article\\_1601\\_142.html](http://ijsts.shirazu.ac.ir/article_1601_142.html)

**(2012)**

113. Asghar Khan, Young Bae Jun, **Nor Haniza Sarmin**, Faiz Muhammad Khan, "Ordered Semigroups Characterized by  $(\epsilon, \epsilon\nu\kappa)$ -Fuzzy Generalized Bi-ideals", *Neural Computing & Applications*, 2012, Vol.

- 21, 121-132. DOI: 10.1007/s00521-011-0731-2. (IF: 1.168).  
<http://link.springer.com/article/10.1007%2Fs00521-011-0731-2?LI=true#page-1>
114. Faiz Muhammad Khan, **Nor Haniza Sarmin** & Asghar Khan, "New Types of Fuzzy Bi-Ideals In Ordered Semigroups", Neural Computing and Applications, Vol. 21, No 1, (ISSN: 0941-0643), pp 295-305, 2012. (IF: 1.168).  
<http://www.springerlink.com/content/7417u16618m34117>  
<http://link.springer.com/article/10.1007%2Fs00521-012-0843-3?LI=true#page-1>
115. Hossein Mousa Jafarabadi, **Nor Haniza Sarmin**, Mohammad Reza Molaei, "Completely Simple and Regular Semi Hypergroups", Bulletin of the Malaysian Mathematical Sciences Society ,Vol 35 No 2, (ISSN: 0126-6705), pp 335-343 (IF:0.779).  
<http://www.emis.ams.org/journals/BMMSS/pdf/v35n2/v35n2p10.pdf>
116. Khan A., **Sarmin N.H.**, Khan F.M., Davvaz B. "Regular AG-groupoids characterized by  $(\epsilon, \epsilon v q_k)$ -fuzzy ideals", Iranian Journal Of Science And Technology, Transaction A: Science, ISSN: 1028-6276, Vol. 36, issues 2 (2012), pp. 97-113. (IF:0.2) [http://www.shirazu.ac.ir/EN/files/extract\\_file.php?file\\_id=1621](http://www.shirazu.ac.ir/EN/files/extract_file.php?file_id=1621)
117. S. Salleh, Loh Ser Lee & **N. H. Sarmin**, "Partitioning Technique For Transforming Perfect Binary Trees into Single-Row Networks", Japan Journal Of Industrial And Applied Mathematics, 29(2):317-330, June 2012. (IF: 0.263) <http://link.springer.com/article/10.1007/s13160-012-0071-3?null#page-1>
118. K. Moradipour, **N. H. Sarmin** and A. Erfanian, "Conjugacy Classes and Commuting Probability in Finite Metacyclic p-Groups", Science Asia, Vol. 38, No 1, (ISSN: 1513-1874), pp 113-117, 1 March 2012 (IF: 0.344) [http://profdoc.um.ac.ir/pubs\\_files/p11027691.pdf](http://profdoc.um.ac.ir/pubs_files/p11027691.pdf) .

**(2011)**

119. Hossein Mousa Jafarabadi, **Nor Haniza Sarmin**, Mohammad Reza Molaei, "Simple Semi Hypergroups", Australian Journal of Basic and Applied Sciences, 5(4) (2011), 51-55.  
<http://www.ajbasweb.com/ajbas/2011/51-55.pdf>
120. **Nor Haniza Sarmin**, Fariba Karimi & Fong Wan Heng, "Some Sufficient Conditions for Persistent Splicing Systems", Australian Journal of Basic and Applied Sciences, Vol. 5, No. 1, (2011), pp 20-24. (ISSN 1991-8178). <http://eprints.utm.my/24278/>
121. S. Rashid, **N.H. Sarmin**, A. Erfanian and N.M. Mohd Ali, "The Nonabelian Tensor Square of Symplectic Groups and Projective Symplectic Groups", Scientific Research and Essays (SRE), 6(24) (2011), 5261-5264 (IF: 0.324) [http://profdoc.um.ac.ir/pubs\\_files/p11026360.pdf](http://profdoc.um.ac.ir/pubs_files/p11026360.pdf)
122. Luise-Charlotte Kappe, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin**, "On the Capability of Finitely Generated Nontorsion Groups of Nilpotency Class Two", Glasgow Mathematics Journal, 53(2)(2011), 411-417. (ISSN:0017-0895)(IF : 0.629)  
<http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8223371>
123. S. Rashid, **N.H. Sarmin**, A. Erfanian and N.M. Mohd Ali, "On Capable Groups of Order  $p^2q$ ", Arch. Math. (IF: 0.373), 97(4), pp 299-306. <http://link.springer.com/content/pdf/10.1007%2Fs00013-011-0304-8>

**(2009)**

124. Salleh, S, **Sarmin, N.H.**, "Dynamic Single-Row Routing Technique for Channel Assignments", Sixth International Conference on Information Technology: New Generations, 2009 (ITNG'09), 27-19 April 2009, pp 41-46. <http://eprints.utm.my/13502/>

**(2008)**

125. Zuwairie Ibrahim, **Nor Haniza Sarmin**, Muhammad Faiz Mohamed Saaid, Marzuki Khalid & John A. Rose, "Fuzzy C-Means Clustering for DNA Computing Readout Method Implemented on Light Cycler System", International Conference on Instrumentation, Control & Information Technology (SICE 2008), Chofu, Japan, 20-22 August 2008.  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4654741>



126. Muhammad Faiz Mohamed Saaid, **Nor Haniza Sarmin**, Zuwairie Ibrahim & Marzuki Khalid, “Fuzzy C-Means Clustering for DNA Computing Readout Method Implemented on DNA Engine Opticon 2 System”, Fourth Kuala Lumpur International Conference on Biomedical Engineering, Kuala Lumpur, Malaysia, 25-28 June 2008. [http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=4725846](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=4725846)

**(1999 – 2007)**

127. Luise-Charlotte Kappe, **Nor Haniza Sarmin**, Matthew Visscher, “Two-generator 2-groups of Class 2 and Their Nonabelian Tensor Squares”, Glasgow Mathematics Journal, **41**(1999), 417-430. (IF : 0.629) [http://journals.cambridge.org/download.php?file=%2FGMJ%2FGMJ41\\_03%2FS0017089599000014a.pdf&code=df149c9ea666b002ae713db408d36660](http://journals.cambridge.org/download.php?file=%2FGMJ%2FGMJ41_03%2FS0017089599000014a.pdf&code=df149c9ea666b002ae713db408d36660)

**SCOPUS****(2016)**

1. Adnin Afifi Nawati, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin** & Samad Rashid, “The Schur Multiplier of Pairs of Nonabelian Groups of order  $p^n$ ”, Jurnal Teknologi (Science & Engineering), 78(3-2): 39 – 43, 2016.
2. Muhanizah Abdul Hamid, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin**, Ahmad Erfanian and Fadila Normahia Abd Manaf, “The Squared Commutativity Degree of Dihedral Groups”, Jurnal Teknologi (Science & Engineering), 78(3-2): 45 – 49, 2016.
3. Noarida Abd Rhani, Nor Muhainiah Mohd Ali and **Nor Haniza Sarmin**, “A Generalization on The  $n^{\text{th}}$  Commutativity Degree of Alternating Groups of Degree 4 and 5”, Jurnal Teknologi (Science & Engineering), 78(3-2): 51 – 55, 2016.
4. Hidayatullah Khan, **Nor Haniza Sarmin**, Asghar Khan & Faiz Muhammad Khan, “Bi-ideals of ordered semigroup based on the interval-valued fuzzy points”, Jurnal Teknologi, 78(2): 179 – 191, 2016.
5. Siti Afiqah Mohammad, **Nor Haniza Sarmin** and Hazzirah Izzati Mat Hassim, “Polycyclic Presentations of the Torsion Free Space Groups with Quaternion Point Group of Order Eight”, Jurnal Teknologi, 77(33): 151 – 156, 2016.
6. Mustafa Anis El-Sanfaz, **Nor Haniza Sarmin** and Sanaa Mohamed Saleh Omer, “The Orbit Graph of Metacyclic 2-Groups of Negative Type”, International Journal of Pure and Applied Mathematics, 109(2): 235-243, 2016.
7. Loh Ser Lee, Gan Chin Kim, Cheong Tau Han, Shaharuddin Salleh, **Nor Haniza Sarmin**, “An Overview on Network Diagrams: Graph-based Representation”, Journal of Telecommunication, Electronic and Computer Engineering, 8(2): 83 – 86, 2016.
8. Hidayat Ullah Khan, Asghar Khan, **Nor Haniza Sarmin**, “Cartesian Product of Interval-valued Fuzzy Ideals in Ordered Semigroup”, Journal of Prime Research in Mathematics, 12(1), 120 – 129, 2016.
9. Tan Yee Ting, Nor’Ashiqin Mohd Idrus, Rohaidah Masri, Wan Nor Farhana Wan Mohd Fauzia, **Nor Haniza Sarmin**, Hazzirah Izzati Mat Hassim. “The nonabelian tensor square of a Bieberbach group with symmetric point group of order six”, Jurnal Teknologi, 78(1), 189 – 193, 2016.

**(2015)**

10. Maryam Jahandideh, **Nor Haniza Sarmin** and Sanaa Mohamed Saleh Omer. “The Topological Indices of Non-Commuting Graph of A Finite Group”, International Journal of Pure and Applied Mathematics, (2015), 105 (1): 27-38.
11. Maryam Jahandideh, Mohamad Reza Darafsheh, **Nor Haniza Sarmin** and Sanaa Mohamed Saleh Omer. “Conditions on the Edges and Vertices of Non-Commuting Graph”, Jurnal Teknologi (Science and

- Engineering), (2015), 74(1): 73-76. ISSN: 2180-3722.  
<http://www.jurnalteknologi.utm.my/index.php/jurnalteknologi/article/view/1964/3077>
12. M. J. Khan, A. Khan and **N. H. Sarmin**, "Generalized fuzzy filters in ordered ternary semigroups", ASEAN J. Sci. Technol. Dev., 31(2): 62-82. 2015.  
[http://irep.iium.edu.my/42573/1/Contents\\_AJSTD\\_31\(2\)\\_2014.pdf#page=20](http://irep.iium.edu.my/42573/1/Contents_AJSTD_31(2)_2014.pdf#page=20)
  13. Mustafa Anis El-Sanfaz, **Nor Haniza Sarmin** and Sanaa Mohamed Saleh Omer. "On the Probability that a Group Element Fixes a Set and its Generalized Conjugacy Class Graph". International Journal of Mathematical Analysis, 9(4), 2015, pg. 161-167. DOI: <http://dx.doi.org/10.12988/ijma.2015.411336>.  
<http://www.m-hikari.com/ijma/ijma-2015/ijma-1-4-2015/sarminIJMA1-4-2015.pdf>
  14. Hidayatullah Khan, **Nor Haniza Sarmin**, Asghar Khan & Faiz Muhammad Khan, "Bi-ideals of ordered semigroup based on the interval-valued fuzzy points", Jurnal Teknologi, 78(2): 179 – 191, 2015.
  15. Muhammad Azrin Ahmad, **Nor Haniza Sarmin**, Fong Wan Heng and Yuhani Yusof, "A Comparison of Second Order and Non-Second Order Limit Language Generated by Yusof-Goode Splicing System". Jurnal Teknologi (Sciences & Engineering), 72(1): 27-31, 2015.  
<http://www.jurnalteknologi.utm.my/index.php/jurnalteknologi/article/view/3062>
  16. **Nor Haniza Sarmin**, Ibrahim Gambo and Sanaa Mohamed Saleh Omer, "The Conjugacy Classes of Metabelian Groups of Order At Most 24", Jurnal Teknologi (Sciences & Engineering), 77(1): 139-143, 2015.

**(2014)**

17. Fariba Karimi, Sherzod Turaev, **Nor Haniza Sarmin** and Fong Wan Heng. "Fuzzy Splicing Systems", Computational Collective Intelligence. Technologies and Applications (Lecture Notes in Computer Science), 2014, 8733: 20 – 29. ISSN: 0302-9743. [http://link.springer.com/chapter/10.1007%2F978-3-319-11289-3\\_3](http://link.springer.com/chapter/10.1007%2F978-3-319-11289-3_3)
18. Sanaa Mohamed Saleh Omer and **Nor Haniza Sarmin**. "The Centralizer Graph of Finite Non-abelian Groups", Global Journal of Pure and Applied Mathematics, (2014), 10(4): 529-534. ISSN: 0973-1768.  
<http://www.ripublication.com/Volume/gjpamv10n4.htm>
19. Mustafa Anis El-sanfraz, **Nor Haniza Sarmin** and Sanaa Mohamed Saleh Omer. "The Probability That an Element of Metacyclic 2-Groups of Postive Type Fixes a Set", Jurnal Teknologi (Science and Engineering), (2014), 71(1): 7-10.  
<http://www.jurnalteknologi.utm.my/index.php/jurnalteknologi/article/view/2899>
20. Sanaa Mohamed Saleh Omer, Nor Haniza Sarmin and Ahmad Erfanian. "Applications of Graphs Related to the Probability that an Element of Finite Metacyclic 2-Group", International Journal of Mathematics Analysis, (2014), 8(39):1937-1944. <http://www.m-hikari.com/ijma/ijma-2014/ijma-37-40-2014/omerIJMA37-40-2014.pdf>
21. Mathuri Selvarajoo, Fong Wan Heng, **Nor Haniza Sarmin**, Sherzod Turaev, "Some Properties Of Probabilistic One-Sided Sticker Systems", Advances in Environmental Biology, (2014), 8(3) Special: 717-724. <http://www.aensiweb.com/old/aeb/2014/717-724.pdf>
22. Nor'ashiqin Mohd Idrus, **Nor Haniza Sarmin**, Hazzirah Izzati Mat Hassim and Rohaidah Masri. "On the Abelianization of a Torsion Free Crystallographic Group", Jurnal Teknologi (Sciences & Engineering), 70(1): pg 81-84, 2014. (ISSN 2180-3722).  
<http://www.jurnalteknologi.utm.my/index.php/jurnalteknologi/article/view/2424>
23. Siti Norziahidayu Amzee Zamri, **Nor Haniza Sarmin**, Noor Aishikin Adam and Atikah Mohd Sani, "Modelling of Tudung Saji Weaving Using Elements in Group Theory", Jurnal Teknologi (Sciences & Engineering) Special Issue in Science and Technology, 70(5): pg 59-64, 2014. (ISSN 2180-3722).  
<http://www.jurnalteknologi.utm.my/index.php/jurnalteknologi/article/view/3516>

24. Mustafa Anis El-sanfaz, **Nor Haniza Sarmin** and SanaaMohamed Saleh Omer. "The Probability That an Element of the Dihedral Groups Fixes a Set", International Journal of Applied Mathematics & Statistic (IJAMAS), (2014), 52(1): 1-6. <http://www.ceser.in/ceserp/index.php/ijamas/issue/view/107>
25. Nurhidaya Mohamad Jan, FongWan Heng, **Nor Haniza Sarmin**, Sherzod Turaev. "Languages of Watson-Crick Petri Net", Jurnal Teknologi (Sciences & Engineering) Special Issue in Science and Technology, 70(5): pg 97-101, 2014. (ISSN 2180-3722). <http://www.jurnalteknologi.utm.my/index.php/jurnalteknologi/article/view/3521>
26. Mustafa Anis El-sanfaz, **Nor Haniza Sarmin** and SanaaMohamed Saleh Omer. "The Probability That an Element of Metacyclic 2-Groups Fixes a Set", World Applied Science Journal, (2014), 32(3): 459-464. [www.idosi.org/wasj/wasj32\(3\)14/17.pdf](http://www.idosi.org/wasj/wasj32(3)14/17.pdf)
27. Muhammad Azrin Ahmad, **Nor Haniza Sarmin**, Fong Wan Heng and Yuhani Yusof. "A New Relation of Second Order Limit Language in Simple and Semi-Simple Splicing System", Jurnal Teknologi (Sciences & Engineering) Special Issue in Science & Technology. 71(5): pg 13-15, 2015. (ISSN 2180-3722). <http://dx.doi.org/10.11113/jt.v71.3845>
28. Siti Afiqah Mohammad, **Nor Haniza Sarmin**, Nor Muhainiah Mohd Ali and Hazzirah Izzati Mat Hassim. "A Homological Invariant of a Bieberbach Group with Dihedral Extension", Jurnal Teknologi (Sciences & Engineering) Special Issue in Science & Technology. 71(5): pg 9-11, 2015. (ISSN 2180-3722). <http://dx.doi.org/10.11113/jt.v71.3844>
29. Rosita Zainal, Nor Muhainiah Mohd Ali, **Nor Haniza Sarmin** and Samad Rashid. "The Homological Functors of Some Abelian Groups of Prime Power Order", Jurnal Teknologi (Sciences & Engineering) Special Issue in Science & Technology. 71(5): pg 5-7, 2015. (ISSN 2180-3722). <http://dx.doi.org/10.11113/jt.v71.3843>
30. Muhammad Azrin Ahmad, **Nor Haniza Sarmin**, Fong Wan Heng and Yuhani Yusof. "A Comparison of Second Order Limit Language and Non-Second Order Limit Language in Yusof-Goode Splicing System", Jurnal Teknologi (Sciences & Engineering), 72: 85-88, 2015. <http://www.jurnalteknologi.utm.my/index.php/jurnalteknologi/article/view/3062>

## EXAMINER

### External

1. V. Shanmugapriya, PhD Thesis, Bharathidasan University, India, 2018.
2. Mohammad Aasim Khan, PhD Thesis, Aligarh Muslim University, Aligarh, India, 2017.
3. Nadia Faiq Mohammed, Phd Thesis/Viva, UPM, 2017.
4. Nurul Liyana Mohamad Zulkifli, PhD Thesis, IIUM, 2017.
5. Rima Yousef Ahmad Alhusban, PhD Thesis, UKM, 2017.
6. Abdallah Mohammad Fadel Alhusban, PhD Thesis/Viva, UKM, 2016.
7. P. Senthil Kumar, PhD/Examiner, Bharathidasan University, Tiruchirappalli, Tamil Nadu, 2016.
8. Alsharari Fahad Mohammed S, PhD/Viva, UKM, January 11, 2016.
9. Pradeep Iwasan, PhD/Viva, USM, June 23, 2015.
10. Doaa Mustafa Suleiman Alsharo, PhD/Viva, USM, February 14, 2014.
11. Ganeshree A/P Selvachandran, PhD/Viva, UKM, March 29, 2013.
12. Karema Saleh Ali Abdulmula, PhD/Viva, UKM, October 29, 2012.
13. Kalthom Mahmood M Alaswad, PhD/Viva, UKM, February 24, 2012.
14. Shuker M. Kholil, PhD Thesis/Viva, UsM, May 4, 2012.
15. Dr Rokiah @ Rozita Binti Ahmad, to Associate Professor UKM, May 26, 2011.
16. Amin Hamoud Ahmad Saif, PhD Thesis/Viva, UKM, Dec 9, 2009.
17. Sri Gemawati, PhD Thesis/Viva, UKM, 2009.
18. Tay Choo Chuan, PhD Thesis/Viva, UKM on March 28, 2008.



19. Dr Abdul Ghafur, to Associate Professor UKM, February 17, 2007.
20. Dr Abdul Ghafur, to Associate Professor UKM, February 17, 2006.
21. Adel Mohamad Al-odhari, PhD Thesis/Viva, UKM on October 7, 2005.

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