

**Dr.S.Balamurugan, M.Sc., M.Phil., Ph.D.**

Assistant Professor-III, Department of Mathematics,

Velammal College of Engineering and Technology (Autonomous), Madurai.

e-mail Id: [bms@vcet.ac.in](mailto:bms@vcet.ac.in)

Blog Address:

---

**Educational Qualification:**

Ph.D. - Mathematics – Bharathidasan University - 2016

M. Phil. - Mathematics – Madurai Kamaraj University - 2005

M.Sc. - Mathematics – Madura College, Madurai – Madurai Kamaraj University - 1995

B.Sc. - Mathematics – S.V.N. College, Nagamalai – Madurai Kamaraj University - 1993

**Experience in Years: 17**

**Employment History:**

<b>Institution</b>	<b>Designation</b>	<b>Years of experience</b>
Velammal College of Engineering & Technology (Autonomous), Madurai (VCET)	Assistant Professor-III	16th July 2012-Till now : 9 years 6 months
Raja College of Engineering & Technology, Madurai (RCET)	Assistant Professor	5 th Sep 2006-12th July 2012 : 5 years 10 months
Seethaiammal Engineering College, Sivagangai (SEC)	Lecturer	14th Sep 2005-4 th Sep 2006 : 1 year
Syed Ammal Engineering College, Ramanathapuram (SAEC)	Lecturer	3 rd Jan 2005-10th Sep 2005 : 9 months
<b>Total</b>		<b>17 years 1 month</b>

**Interested Research Areas: Fuzzy Algebra, Algebra, Fuzzy Set Theory**

**Scholarships and Awards received: nil**

**Funded Research Projects: nil**

**Patent rights received: nil**

**Publications Details:**

**1. Patent Journal Publication Details: nil**

## 2. International Journal Publication Details:

1. "MCDM in IMFS by Normalized Geometric Similarity Measures", International Journal of Engineering Science And Computing (ISSN:2250-1371), Volume 6, IssueNo.7, July 2016, Impact Factor: 5.611
2. "Multi-anti fuzzy group and its Lower level Subgroups", Int. Journal of Engineering Research and Applications, Vol.3, Issue 6, pp.1498-1501 (Nov-Dec 2013), ISSN:2248-9622, Impact Factor: 5.011
3. "A Study on Intuitionistic Multi-Fuzzy Subgroups", Intl. Jour. of Applications of Fuzzy Sets and Artificial Intelligence, Vol. 4 , pp.153 – 172 (2014), ISSN: 2241-1240(E), Impact Factor: 4.979
4. "Some Characterization of Multi-anti fuzzy group", Research journal's Journal of Mathematics, Vol.1, Issue1, pp.1-25 (March 2014), ISSN:2349-5375, ImpactFactor:2.18
5. "Correspondence Theorem for Normal Multi-fuzzy Subgroups", SSRG International Journal of Mathematics Trends and Technology (IJMTT), ISSN: 2231-5373, pp.1-3 (2014), Impact Factor: 1.355
6. "MCDM by Normalized Euclidean Distance in Intuitionistic Multi-Fuzzy Sets", International Journal of Mathematics Trends and Technology (IJMTT), Volume-35, No.1, July 2016, pp.19-23, ISSN: 2231-5373, Impact Factor: 1.355
7. "Some Characterization of Normal Multi-fuzzy and Normal Multi-anti fuzzy Subgroup", IOSR Journal of Mathematics (IOSR-JM), Volume 10, Issue 1, Ver. IV, pp.116-122 (Feb.2014), e-ISSN:2278-5728, p-ISSN:2319-765X, Impact Factor: 1.312
8. "MCDM by Hausdroff Distance Similarity Measure in IMFS", Kari Research International Journal, Vol.1, No.1, October 2016, pp. 51-61, ISSN:2456-6136.
9. "Some Characterization of Multi-fuzzy group", International Journal of Innovative Research and Development, Vol.3, Issue 2, pp.243-257 (Feb.2014), ISSN:2278-0211(Online), Impact Factor: 0.678
10. "Multi-fuzzy group and its Level Subgroups", Gen. Math. Notes, Vol. 17, No. 1, pp.74-81 (July 2013), ISSN:2219-7184, Impact Factor: 0.543
11. "Some Characterization of Multi-fuzzy and Multi-anti fuzzy Subgroup", SVRM Science Journal, Volume1, Issue1, pp.36-46 (Oct-Dec 2013), E-ISSN: 2348-2923, Impact Factor: 0.343
12. "A Study on Multi-Fuzzy Cosets", International Journal of Engineering Associates (ISSN: 2320-0804) # 1 / Volume 5, Issue7, pp.1-7, July 2016.
13. "Properties of Multi-fuzzy Cosets under Homomorphism and Anti-homomorphism", International Journal of Engineering Associates ISSN (Online) : 2320-0804, Volume 05, Issue 08 (August 2016) of IJEA.
14. "Properties of Quotient Multi-fuzzy Subgroup under Homomorphism and Anti-homomorphism", International Journal of Engineering Associates ISSN (Online):2320-0804, Volume 5, Issue 08 (August 2016) of IJEA.
15. "Correspondence Theorem for Normal Multi-anti fuzzy Subgroups", Discovery, 21(68), pp.113-117 (July 2014).
16. "A Study on Intuitionistic Multi-Anti Fuzzy Subgroups", Applied Mathematics and Sciences: An International Journal (MathSJ), , ISSN:2349-6223, Vol.1, No.2, pp.35-52 (August 2014).
17. "Characterization of Quotient Multi-Fuzzy Subgroup", International Journal for Research in Applied Science and Engineering Technology (IJRASET), ISSN:2321-9653, pp.23-30, Special Issue, ICLIASSET2017 (December 2017), Impact Factor: 6.887

18. "Characterization of (alpha, beta)-Lower level normal subgroups of Intuitionistic multi-anti fuzzy Normal Subgroup", International Journal of Fuzzy Systems and Advanced Applications (North Atlantic University Union-NAUN), ISSN: 2313-0512, Vol.5, 2018, pp.7-16.
19. "Characterization of Quotient Multi-Anti Fuzzy Subgroup", Journal of Engineering Mathematics & Statistics (National Journal), Vol.5, Issue 1, (June 2021), pp.85-96.

### 3. International Conference Presentation Details:

1. Presented a paper entitled "Multi-Fuzzy Cosets" in the CSIR Sponsored **International Conference** on Mathematical Computation and Modelling, 06<sup>th</sup> January 2014 at The Madura College (Autonomous), Madurai, (ISBN:978-81-928113-3-8/Vergal publication, pp.17-21).
2. Presented a Paper entitled "Characterization of Quotient Multi-fuzzy Subgroup", in the **International Conference** on Mathematical Impacts in Science and Technology-17 on 17<sup>th</sup> - 18<sup>th</sup> November 2017 at Bannari Amman Institute of Technology, Sathyamangalam, Erode.

### 4. National Conference Presentation Details:

1. Presented a paper entitled "Multi-Fuzzy Group and its Level Subgroups" in UGC Sponsored **National Seminar** on Discrete Mathematics and its Applications, 09<sup>th</sup> March 2013 at PG & Research Department of Mathematics, Jamal Mohamed College (Autonomous), Tiruchirappalli.
2. Presented a paper entitled "Correspondence Theorem for Normal Multi-Anti Fuzzy Subgroups", in the **National Conference** on Mathematical Modelling and Applications-NCMMA2014, 28<sup>th</sup> March 2014 at SSM Institute of Engineering and Technology, Dindigul.
3. Presented a paper entitled "Correspondence Theorem for Normal Multi-Fuzzy Subgroups", in **National Conference** on Fuzzy Algebra sponsored by UGC-SERO, Hyderabad, 11<sup>th</sup> April 2014 at Govt. Arts College, Paramakudi, (ISSN:2231-5373).
4. Presented a paper entitled "Multi-Criteria Decision Making by Normalized Geometric Measure in Intuitionistic Multi-fuzzy Sets", in **National Conference** on Mathematical Modelling sponsored by UGC, (NCOMM-2014), 25<sup>th</sup>-26<sup>th</sup> September 2014, at C.P.A. College, Bodinayakanur. pp.1-6, (ISBN:9789380657448).
5. Presented a paper entitled "Multi-Criteria Decision Making by Normalized Hamming Distance Measure in Intuitionistic Multi-Fuzzy Sets", in **National Conference** on Analysis and Applied Mathematics (NCAAM 2014), Sponsored by DRDO, November 27-28, 2014 at National Institute of Technology, Trichirappalli, pp.64-68, (ISBN:9789384743062).

### 5. Google Scholar report:

<https://scholar.google.co.in/citations?user=ctsLOv0AAAAJ&hl=en>

#### Cited by

	All	Since 2016
<b><u>Citations</u></b>	<b>60</b>	<b>50</b>
<b><u>h-index</u></b>	<b>4</b>	<b>4</b>
<b><u>i10-index</u></b>	<b>1</b>	<b>1</b>