DEPARTMENT OF MATHEMATICS

Name	Dr. X. ARUL SELVARAJ
Designation	ASSISTANT PROFESSOR
Qualification	M. Sc., M. Phill., Phd.,
Date of Birth & Age as on 31-05-2024	02-09-1978 & 45 years old
Working experience as on 31-05-2024	17 years 5 month 20 days
Research experience: Field of interest/ Area of specialization	12 years & Fuzzy Algebra, Topology, Graph Theory,/ Fuzzy Algebra
Research Scholars	Current Four students + one student awarded
Details of Papers/Books Published	17 International & 7 national papers
Details of participation in conferences/seminar/Symposium	13 National and 2 International
Details of conferences/ workshop/Seminars/Symposium organized	NIL
Awards and Achievements	**IMRF BEST SCIENTIST AWARD**
Administrative responsibilities in college	Class Tutor ,Project Guide, From May 2018 to July 19th 2022 worked as a **Head Of The Maths Department** and also member of **disciplinary and campus cleaning committee**. Then acting as council member of the college. I organised **annual sports** In the academic year 2018-2019 . (**Govt Arts College For**

	Women, Bargur.)
Membership in Academic/Professional bodies	
Residential/Communication address	54, Bagavanther Nagar, Pudukuppam, Cuddalore-607001
Other information, if any	1 OC and 4 RC are successfully finished. And Attended four times NM course from this college

List of Publications – National

1) X. Arul Selvaraj and J. Jayaraj, "Triangular Norm ($Î´,Î³$)-Fuzzy co-sets and Homomorphism .", *ICRTAMS 2020 Journal of Physics: Conference Series, IOP Publishing*, Volume 1724(2021) 012002, Number doi:10.1088/1742-6596/1724/1/012002, Feb 2021, pp. 1-7. 2021.

2) X. Arul Selvaraj and J. Jayaraj, "Homomorphism of t-norm ($Î´,Î³$)-Fuzzy groups.", *ICRTAMS 2020 Journal of Physics: Conference Series, IOP Publishing*, Volume 1724(2021) 012004, Number doi:10.1088/1742-6596/1724/1/012004, Feb 2021, pp. 1-8. 2021.

3) X. Arul Selvaraj and J. Jayaraj, "t-norm ($Î´,Î³$)-Fuzzy subgroup and their Properties.", *ICRTAMS 2020 Journal of Physics: Conference Series, IOP Publishing*, Volume 1724(2021) 012003, Number doi:10.1088/1742-6596/1724/1/012003, Feb 2021, pp. 1-9. 2021.

4) X. Arul Selvaraj , "(δ,γ)-Fuzzy Bi-Ideals Of a Near- Rings.", *AIP Conference Proceedings 2177, 020012 (2019)*, Volume https://doi.org/10.1063/1.5135187 Published Online, Number 020012, Dec 2019, pp. 1-5. 2019.

5) X. Arul Selvaraj , 2019. Page no-020011-1 to 020011-3., "On the Lattice of t–norm (δ,γ)-Fuzzy Ideals of a Lattice.", *AIP Conference Proceedings 2177, 020011 (2019)*, Volume https://doi.org/10.1063/1.5135186 Published Online:04 December 2019., Number 020011, Dec 2019, pp. 1-3. 2019.

6) X. Arul Selvaraj , D. Sivakumar, "(λ,μ) – Fuzzy Ideal of Strongly Regular Near – Rings and (λ,μ) – Fuzzy Quotient Near – Rings.", *Annamalai University Science Journal, India*, Volume Vol.47, Number 47, Nov 2014, pp. 1-6. 2014.

7) X. Arul Selvaraj , P. Dheena and D. Sivakumar, "t – Norm (λ,μ) – Fuzzy Ideal of Strongly Regular Near – Rings.", *Annamalai University Science Journal*, Volume 46, , Number PP. 123-126., Aug 2010, pp. 123-126. 2010

List of Publications - International

1) J. Jayaraj, X. Arul Selvaraj, S. Rexlin Jeyakumari, et al., "Some Fuzzy homomorphism theorem on rings.", *AIP Conference Proceedings 2364, 020011 (2021); https://doi.org/10.1063/5.0062910 Published Online*, Volume 2364, 020011 (2021), Number doi.org/10.1063/5.0062910, Sep 2021, pp. 1-7. 2021.

2) J. Jayaraj, X. Arul Selvaraj, I. Shiny Bridgett, S. Rexlin Jeyakumari, et al., "Optimization of fuzzy inventory model using Kuhn-Tucker technique and Lagrangean method.", *AIP Conference Proceedings 2364, 020013 (2021); https://doi.org/10.1063/5.0062913 Published Online*, Volume 2364, 020013 (2021), Number doi.org/10.1063/5.0062913, Sep 2021, pp. 1-7. 2021.

3) X. Arul Selvaraj , J. Jayaraj and S. Rexlin Jeyakumari, et all., "Triangular norm (Î´,Î³)-fuzzy interior-ideals of hemi rings and its properties.", *AIP Conference Proceedings 2364, 020014 (2021); https://doi.org/10.1063/5.0062917 Published Online*, Volume 2364, 020014 (2021), Number doi.org/10.1063/5.0062917, Sep 2021, pp. 1-10. 2021.

4) X. Arul Selvaraj and U. Balakrishna, "Z- open sets in nano topological spaces.", *AIP Conference Proceedings 2364, 020037 (2021); https://doi.org/10.1063/5.0062907 Published Online*, Volume 2364, 020037 (2021), Number doi.org/10.1063/5.0062907, Sep 2021, pp. 1-7. 2021.

5) X. Arul Selvaraj , J. Jayaraj, I. Shiny Brigett, and S. Rexlin Jeyakumari, et all., "Optimization of EOQ model without shortages under uncertainty.", *AIP Conference Proceedings 2364, 020012 (2021); https://doi.org/10.1063/5.0062915 Published Online*, Volume 2364, 020012 (2021), Number doi.org/10.1063/5.0062915, Sep 2021, pp. 1-9. 2021.

6) X. Arul Selvaraj and U. Balakrishna, "Minimal and maximal Z- Open sets in nano topological spaces.", *AIP Conference Proceedings 2364, 020010 (2021); https://doi.org/10.1063/5.0062906 Published*, Volume 2364, 020010 (2021), Number doi.org/10.1063/5.0062906, Sep 2021, pp. 1-5. 2021.

7) X. Arul Selvaraj and U. Balakrishna, "Z- Open Sets and Maps in Nano Bitopological Spaces .", *Journal of Physics: Conference Series(Scopus)*, Volume 2021 J. Phys: Conf. Ser.2070(2021) 012033, Number doi:10.1088/1742-6596/2070/1/ 012033, Nov 2021, pp. 1-9. 2021.

8) X. Arul Selvaraj , "Generalization of Near-Rings By (α,β)-Fuzzy Ideals.", *INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR) (An International Open Access Journal & UGC and ISSN Approved)*, Volume Vol.6, Number Issue -2.E-ISSN 2348-1269, P- ISSN 2349-5138 | Impact factor: 5.75 | UGC Approval Link.UGC Journal No 43602. , May 2019, pp. 771-792. 2019.

9) X. Arul Selvaraj , "Generalized $(\in_{((\alpha,\beta))},\in_{((\alpha,\beta))}\vee Q(\Delta,\Delta^I))$-Intuitionistic Fuzzy Ideals Of Near- Rings.", *INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR) (An International Open Access Journal & UGC and ISSN Approved)*, Volume Vol.6,

Number Issue -2.E-ISSN 2348-1269, P- ISSN 2349-5138 | Impact factor: 5.75 | UGC Approval Link.UGC Journal No 43602., May 2019, pp. 515-524. 2019.

10) X. Arul Selvaraj, "Generalized Interval Valued Fuzzy Ideals Of Near-Rings.", *INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR)(An International Open Access Journal & UGC and ISSN Approved)*, Volume Vol.6, E-ISSN 2348-1269, P- ISSN 2349-5138 | Impact factor: 5.75 | UGC Approval Link UGC Journal No 43602., Number Issue -2, May 2019, pp. 749-759. 2019.

11) X. Arul Selvaraj , "t–norm (δ,γ) -Anti Fuzzy subgroups and Their Properties.", *Mathematical Sciences International Research Journal* , Volume Volume 8. ISSN 2278-8697. , Number Issue-1, Jun 2019, pp. 27-33. 2019.

12) X. Arul Selvaraj , "t–norm (δ,γ)-Fuzzy Bi-Ideals Of a Near- Rings.", *Journal of Emerging Technologies and Innovative Research (JETIR) (An International Open Access Journal & UGC and ISSN Approved)*, Volume Vol.6, ISSN-2349-5162., Number Issue -3., Mar 2019, pp. 7-13. 2019.

13) X. Arul Selvaraj , "On the Lattice of (δ,γ)-Fuzzy Ideals of a Lattices.", *Journal of Emerging Technologies and Innovative Research (JETIR) (An International Open Access Journal & UGC and ISSN Approved)*, Volume Vol.6, ISSN-2349-5162., Number Issue -3., Mar 2019, pp. 13-18. 2019.

14) X. Arul Selvaraj , D. SivakumarPP. 131-139, "On direct Product of t-norm (λ,μ) – Fuzzy subrings and t – norm (λ,μ) – Fuzzy sub semi - rings.", *Annals of Fuzzy Mathematics and Informatics (AFMI), Korea.*, Volume Vo2, Number no.2, Oct 2011, pp. 131-139. 2011.

15) X. Arul Selvaraj , D. Sivakumar and B. Anitha, "On Direct Product of (λ,μ) – Fuzzy Near – Ring.", *International Mathematical Forum, Bulgaria*, Volume Vol.6, Number no.41, Nov 2011, pp. 2037-2044. 2011.

16) X. Arul Selvaraj, D. Sivakumar, "t – norm (λ,μ) – Fuzzy Quotient Near – Rings and t – norm (λ,μ) – Fuzzy Quasi - Ideal.", *International Mathematical Forum, Bulgaria*, Volume Vol.6, Number PP. 5-8., Nov 2011, pp. 5-8. 2011.

17) X. Arul Selvaraj , D. Sivakumar, "t – norm (λ,μ) – Fuzzy sub Near – Rings and t – norm (λ,μ) – Fuzzy Ideal of Near Rings.", *International al Journal of Algebra, Bulgaria*, Volume Vol.5, Number 5, Oct 2011, pp. 1-4. 2011.

List of Awards

Delivered an inspiring Talk : Asian Institute of Technology Conference Center, Bangkok, Thailand. [May 27th, 2019]

Has chaired/Sereved as a Repporteur   in the International Conferencein Thailand-2019 : Asian Institute of Technology Conference Center, Bangkok, Thailand[May 27-28, 2019]

Best Paper Award : Asian Institute of Technology Conference Center, Bangkok, Thailand[May 27-28, 2019]

IMRF BEST SCIENTIST AWARD : International Multidisciplinary Research Foundation Institute for Research & Education Thailand Academic Chapter [May 27th, 2019]