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|  | **Title** | **First Name** | **Last Name** | **Photograph** |
| **Name** |  Dr | Dhivviyanandam | Irudayaraj |  |
| **Designation** |  |
| **Educational Qualification** | M.Sc., Phd |
| **Date of Joining** |  |
| **Department** | Mathematics |
| **Address** |
| Local | North Bengal St.Xavier’s College, Rajganj-735134,Jalpaiguri(Dist), west Bengal |
| Permanent | - |
| **Phone Numbers** | PAN | AJIP12036D |
| Office | 8918736258 | CellPhone | 8918736258 |
| **Email** | Divyasj2020@gmail.com |
| **Fax** |  |
| **Teaching Experiences (Present & Previous)** | Gandhi Ashram School (2013-2014)St.Joseph School (2015-2016) |
| **Research Interests** | Graph Theory, Combinatorics, Number Theory, Abstract Algebra And Topology |
| **Research Guidance (PhD)** | Completed: “*A STUDY ON HERSCOVICI'S PEBBLING CONJECTURE”* Under the guidance of Dr. A. Lourdusamy(Jan, 2024) |

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| **Research Guidance (Master’s Theses)** | * **Awarded**. Master’s Thesis for M.sc (Mathematics) *on “****A COMPARATIVE STUDY OF FUZZY HILBERT SPACE AND QUANTUM HILBERT SPACE” St.Joseph College(Autonomous), Bangalore.***
 |
| **Awards** | Best Researcher Award by Nature Science Foundation, Coimbatore |
| **Professional Achievement** | * RESOURCE PERSON IN “Arul Anandar College” publications and patent rights.
* Resource person for varies schools for Staff orientation programs.
 |
| **ADMINISTRATIVE RESPONSIBILITIES** | * Head master of Gandhi Ashram School, Kalimpong
* Prefect Of St. Joseph School, Darjeeling
 |
| **SELECT LECTURES DELIVERED AT UGC REFRESHER COURSES/ICSSR RESEARCH METHODOLOGY COURSES** |

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| **ICSSR Research Methodology Course Lectures** |  |
| **UGC Refresher Course Lectures** | * ​
 |
| **SELECT PUBLICATIONS** |
| ***Some Major Research Articles In Journals*** | 1. 2022. Monophonic pebbling number and t-pebbling number of some graphs’, AKCE International Journal of Graphs and Combinatorics, 19:2, 108-111, DOI:10.1080/09728600.2022.2072789.(SCI, web of science, Scopus), IF:0.434.
2. 2022, ‘t-Pebbling and 2t-Pebbling property for the deleted independent edges of some graphs’, Advances and Applications in Mathematical Sciences, Volume 21, October 2022, pp 6651-6659.(Web of Science), IF:0.22.
3. 2022, ‘Monophonic pebbling number of some standard raphs’, South East Asian J. of Mathematics and Mathematical Sciences, ISSN 0972-7752.(Scopus), IF:0.15
4. 2024. Monophonic pebbling number of some families of cycles. Discrete Mathematics, Algorithms and Applications, 16(04), p.2350038.(Scopus, web of science), IF:1.2
5. 2024. NDC Pebbling Number for Some Class of Graphs. Journal of Combinatorial Mathematics and CombinatorialComputing, 119, pp.121-128.(Scopus), IF:0.156
6. 2023, ‘Monophonic Pebbling Number of Some Network related Graphs’, Journal of Applied mathematics and informatics (Accepted, Scopus, Web of Science),IF: 0.15.
7. 2023. ‘Pebbling Number and 2-Pebbling property for the Middle graphs of the graph obtained from fan graph by deleting f independent Edges’. Springer Book Series: Trends in Mathematics.(Scopus), IF:027.
8. 2023. ‘T- pebbling number and 2tpebbling property for book graphs’ AIP Conference Proceedings 2649, 030033. (Scopus, IF:0.189)
9. 2023. ‘Detour pebbling number on some commutative ring graphs’, Communications in Mathematics and Applications, ISSN 0975-8607 (Online), 0976-5905 (Print), Vol. 14, No. 1, PP 323-331, 2023 (Web of Science, IF:0.31).
10. 2024. ‘Monophonic cover pebbling number of standard and algebraic Graphs ’, Communications in Mathematics and Applications, ISSN 0975-8607 (Online), 0976-5905 (Print), Vol. 15, No. 2, 2024 (Web of Science, IF:0.31).
11. 2024. ‘Monophonic cover pebbling number(MCPN) of Middle graph of standard Graphs’, Indian Journal of Natural Sciences, Vol.15/Issue 83/Apr/2024, ISSN:0976-0997 (Web of Science, IF:2.456).
12. 2023, ‘Non-split Domination Cover Pebbling Number for Some Class of Middle Graphs’Book: Mathematical Sciences and Applications, Edition:1/2024 ISBN:9781003451808DOI: 10.1201/9781003451808-4 (Scopus).
13. 2023 ‘Herscovici Pebbling Conjecture For The Middle Graph Of Fan Graphs’ Indian institution of industrial Engineering, ISSN 0970-2555(UGC care list 1).
14. 2023. ‘Monophonic cover pebbling of path related graphs’ Industrial Engineering Journal, Volume-52, Issue 4, No.2, April ISSN 0970-2555, Page 167-170(UGC Care List- I)
15. 2023 ‘Detour pebbling number of star related graphs’ Indian institution of industrial Engineering, ISSN 0970-2555(UGC care list 1).
16. 2023, ‘Non-split Domination Cover Pebbling Number for Some Class of Middle Graphs’. arXiv preprint arXiv:2305.04463.
17. 2024. Restricted SDC Edge Cover Pebbling Number. ArXiv. /abs/2406.02259.3
18. 2024. Detour Monophonic Vertex Cover Pebbling Number (DMVCPN) of Some Standard Graphs. ArXiv. /abs/2406.01009.
19. 2022. ‘Pebbling Number Of Unit Graphs And Co-Prime Graphs’, A Conference Proceedings of Recent Trends in Modern Mathematics (Volume II), pp:16-23, ISBN : 978-93-5578-172-7.
20. 2022, ‘Herscovici’s pebbling conjecture for $F\_{n}^{-f}×F\_{m}^{-f}$ ’, Conference proceedings of SXC- Centenary year-International Conference on Recent Developments in pure and applied mathematics, Volume I, pp 256-261.
21. 2022, ‘Monophonic Pebbling Number of Some Algebraic Graphs’, Sciencia Acta Xaveriana, an International Science Journal, ISSN 0976-1152, March 2022, Vol 13. No1, pp 01-07.
22. 2021, ‘Detour Pebbling number of Unit graphs and co-prime graphs’, Sciencia Acta Xaveriana, an International Science Journal, ISSN 0976-1152, March 2022, Vol 12. No1, pp 09-14.
23. 2021, ‘The Detour Pebbling Number of Some Join Graphs and Product of Graphs’, Sciencia Acta Xaveriana, Vol.12 No. 2, pp. 73-77, ISSN. 0976-1152.
24. 2021, ‘On Pebbling Number of Unit Graphs and Co-Prime Graphs’, Sciencia Acta Xaveriana, Vol. 12 No. 2, pp.33-38, ISSN. 0976-1152.
25. 2021, ‘The pebbling number for the Shadow graph of even cycles’ Conference Proceedings of Recent Trends in Modern Mathematics (Volume II), ISBN: 978-93-5578-172-7, pp 38-42.
26. 2022, ,‘On Detour t-Pebbling Number’, Sciencia Acta Xaveriana, Vol. 13 No. 1 pp. 17-23, ISSN.0976-1152.
27. 2022, ,‘Monophonic Pebbling on Zero Divisor Graph’ Research and reflection on education, Special issue, Vol. 20 No. 3A, ISSN 0974-648X(P), pp 153-157, October 2022.
28. 2023, ‘ Domination cover pebbling number of some algebraic graphs’, Conference proceedings of Recent Trends in pure and applied Mathematics, ISBN:978-81-965805-3-7, pp.54-58.
29. 2023. Exploring ant diversity with fuzzy logic and python.
30. 2023. Assessing avian biodiversity in Swamithoppu saltpan with the fuzzy matrix approach.
31. 2023, Fuzzy combined effect time quantity dependent data matrix for predicting phytal fauna distribution and diversity.
 |
| ***Select Chapter’s in******Edited Volume*** | * 2023, ‘Non-split Domination Cover Pebbling Number for Some Class of Middle Graphs’Book: Mathematical Sciences and Applications, Edition:1/2024 ISBN:9781003451808DOI: 10.1201/9781003451808-4 (Scopus).
* 2023. ‘Pebbling Number and 2-Pebbling property for the Middle graphs of the graph obtained from fan graph by deleting f independent Edges’. Springer Book Series: Trends in Mathematics.(Scopus), IF:027.
 |
| **Book Monograph/ Edited Book** | **BOOKS AUTHORED*** ​

**BOOKS EDITED****RESEARCH MONOGRAPHS** |
| **Project** | * ​
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| **Book Reviews** | **BOOK REVIEWS*** ​
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| **PAPER PRESENTED IN SEMINARS/****CONFERENCES** | **Seminars, Conferences, Symposium,Workshop, etc. attended**:**Number of Seminars and Conferences attended: 27**1. Participated in “Contemporary Research in Graph Theory” organized by IQAC and the Department of Mathematics and Statistics, Shri Shankarlal Sundarbai Shasun Jain College for Women, Chennai on 3. 3. 2021.
2. Participated in “Recent Trends in Graph Theory” organized by PG and Research Department of Mathematics, Jayaraj Annapackiam College for Women (Autonomous), Periyakulam on 16. 3.2021.
3. Participated in “Emerging Trends In Algebra” organized by PG and Research Department of Mathematics, Jayaraj Annapackiam College for Women (Autonomous), Periyakulam on 17. 3. 2021.
4. Participated in “Graphs and its impact on Real Word” organized by PG and Research Department of Mathematics, Pasumpon Muthuramalinga Thevar College, Usilampatti on 20. 3. 2021.
5. Participated in “Exploring New Avenues Of Research In Graph Theory: Degree and Distance-Based Measures in Graphs” organized by the Department of Mathematics, Sathyabama Institute of Science and Technology(Deemed to be University), on 27 August 2021.
6. Participated in “Recent Trends In Graph Theory” organized By Pg & Research Department Of Mathematics, St.Xavier’s College (Autonomous), Palayamkottai, held on July 12 and 13, 2021.
7. Participated in “Graphs from Algebraic Structures and its Applications” organized by the Department of Mathematics (Aided), Sadakathullah Appa College (Autonomous), Tirunelveli on June 22, 2021.
8. Participated in “International Conference On Recent Advancements In Mathematics (Icram - 2021)” Organized by the PG and Research Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur on 9th and 10th April 2021.
9. Participated in “Identification of Fake and Predatory Journals” 26 - September – 2021 Organised by - Department of Mass Communication & Journalism, St. Joseph’s College Darjeeling, West Bengal, India.
10. Participated in “Exploring New Avenues Of Research In Graph Theory : Degree and Distance Based Measures in Graphs” organized by the Department of Mathematicson 27 August 2021, Sathyabama Institute of Science and Technology(Deemed to be University).
11. Participated in “Recent Trends in Morden Mathematics” organized by PG And Research Department of Mathematics on 23-24 September 2021, St John’s College, Palayamkottai.
12. Participated in “Cultivation of Research Excellence to Enhance Innovations and Professional Development” Organised by the Department of Physics, Panimalar Engineering College, Chennai, Tamil Nadu 600123 during 01-02 November 2021.
13. Participated in “Recent Advances in Pure and Applied Mathematics” organized by the PG and Research Department of Mathematics, Jayaraj Annapackiam College for Women(Autonomous), Periyakulam on 27.01.2022.
14. Participated in “ICT Tools For Smart Teaching and Learning” conducted by the PG &Research Department of Mathematics, St. Xavier’s College(Autonomous), Palayamkottai from 31.03.2022 to 01.04.2022.
15. Participated in, Meeting of Jesuits In Science and Technology Forum of South Asia, “Science As An Instrument Of Our Mission” organised by St. Joseph’s College, Bengaluru on 5th and 6th March 2022.
16. Participated in “Introduction to R Programming” held on 03-05 Feb 2022, organized by Department of Mathematics, Kai. Rasika Mahavidyalaya, Deoni.
17. Participated in “Advanced Latex” conducted by Division of Mathematics, School of Advanced Sciences (SAS), June 27-29, 2022 at Vellore Institute of Technology, Chennai.
18. Participated in “Current Scenario in Modern Mathematics” organized by PG & Research Department of Mathematics, Aditanar College of Arts and Science, Tiruchendur on 4th February 2022.
19. Participated in “Mathematical Science & Applications” conducted between 9-11 March 2022, by Department of Mathematics, St Joseph’s College (Autonomous), Tiruchirappalli.
20. Participated in “Recent Advances of Pure and Applied Mathematics with Industrial Applications” held on 11 April 2022 and organized by Department of Mathematics, Arul Anandar College(Autonomous), Karumathur. India.
21. Participated in “Recent Strategies in Mathematics And Statistics” organized by the department of Mathematics, Stella Maris College in Collaboration with department of Mathematics, Indian Institute of Technology Madras from 19 to 21 May 2022.
22. Participated in “Recent Trends in Applied Mathematics (ICRTAM 2022)” organized by the Department of Mathematics, Loyola College, Chennai on March 3 & 4, 2022.
23. Participated in “Combinatorial Methods in Graph Theory” organised by the Department of Mathematics, Amrita Vishwa Vidyapeetham, Coimbatore, on 14th-16th July, 2022.
24. Participated in “The International Conference on Recent Trends in Applied Mathematics (ICRTAM 2023)” organized by the Department of Mathematics, Loyola College, Chennai on Feb 24 & 25, 2023.
25. Participated in “Mathematical Science and Applications (ICMSA 2023)” organized by the Department of Mathematics, Dr. Bhimrao Ambedkar university, Agra on March 24- 26, 2023.
26. Participated in “Modelling, Simulation and Optimization of Energy Systems (MSOES 2023)” held at Canadian University Dubai, UAE during June 17-18.2023 organized by Canadian University Dubai, UAE.
27. Participated in “Artificial Intelligence, Cybersecurity & Mathematical Modelling(AICMM 2023)” organized by the department of Mathematics, Computer Science and Computer Applications, Loyola College of Arts & Science, Namakkal, Tamil Nadu on Oct 27-29, 2023.

**List of Paper Presentation**:**Number of Paper presented in Conferences : 16**1. Paper title: **Pebbling number of Unit graphs and Co-prime graphs** presented in Two Day Conference on “Recent Trends in Morden Mathematics” organized by PG And Research Department of Mathematics on 23-24 September 2021, St John’s College, Palayamkottai.
2. Paper Title: **Monophonic pebbling number and t- pebbling number of some Graph** presented in the second international conference on “Recent Trends in Applied and Computational Mathematics”, organized by School of Applied Sciences, Department of Mathematics on 8-9 October 2021, Reva University, Bangaluru, India.
3. . Paper Title: **Pebbling and t-Pebbling Number of** $F\_{n}^{-f}$presented in 5th International Conference on “Recent Advances in Mathematical Sciences and its Applications” organized by Department of Mathematics, December 02-04, 2021, Jaypee Institute of Information Technology, Noida, India
4. Paper Title: **The Pebbling Number and t-Pebbling Number of Some Complete Graphs Using Complete Product and Corona Product in** “The International Virtual Conference on Current Scenario in Modern Mathematics (ICCSMM-2022)” organized by PG & Research Department of Mathematics, Aditanar College of Arts and Science, Tiruchendur on 4th February 2022.
5. Paper Title: **Monophonic Pebbling Number of some standard graphs** presented in the International Conference on “Mathematical Science & Applications” conducted between 9-11 March 2022, by Department of Mathematics, St Joseph’s College(Autonomous), Tiruchirappalli,
6. Paper Title: **Herscovici’s Conjecture for The Deleted Independent Edges of Some Graphs** is presented in the international Conference on “Recent Strategies in Mathematics And Statistics”, organized by the department of Mathematics, Stella Maris College in Collaboration with department of Mathematics, Indian Institute of Technology Madras from 19 to 21 May 2022.
7. Paper Title: t**- Pebbling number and** 2t**-pebbling property for the deleted independent edges of some graphs** presented a paper in the International Conference on “Recent Trends in Applied Mathematics (ICRTAM 2022)” organized by the Department of Mathematics, Loyola College, Chennai on March 3 & 4, 2022.
8. Paper Title: **Pebbling Number and 2-Pebbling property for the Middle Graphs of the graph obtained from fan graph by deleting f independent Edges**, in the International Conference on “Recent Developments in Mathematics (ICRDM 2022)”, organized by Canadian University Dubai, UAE, on August 24-26, 2022 Online/Hybrid.
9. Paper Title: **Herscovici’s pebbling conjecture for** $F\_{n}^{-f}×F\_{m}^{-f}$in the SXC Centenary year- international conference on recent developments in pure and applied mathematics, organized by Pg & Research department of mathematics, St.Xavier’s College(Autonomous), Palayamkottai, on 19-21 July 2022.
10. Paper Title: **Monophonic Pebbling Number of Some Network related Graphs** in the International conference on “essence of mathematics and Engineering Applications(ICEMA-2022)” organized by the Department of Mathematics , Koneru Lakshmaiah Education Foundation, Guntur, India, on 9th & 10th December 2022.
11. Paper Title: **Monophonic Pebbling Number of Some Families of Cycle** in the Second International Conference on “Mathematical analysis and Computing(ICMAC-2022)” organized by the Department of Mathematics, SSN College of Engineering, Chennai, Tamilnadu, India, on 22-23 December 2022.
12. Paper Title: **Detour monophonic pebbling number of family of Windmill graphs** in the “National Symposium on Mathematics and Applications organized” by Indian Institute of technology, Madras, on 22nd December 2022 at the Department of Mathematics, IIT Madras.
13. Paper Title: **Herscovici’s pebbling conjecture for the middle graph of fans** in the International Conference on Recent Trends in Applied Mathematics (ICRTAM 2023) organized by the Department of Mathematics, Loyola College, Chennai on Feb 24 & 25, 2023.
14. Paper Title: **Non-split Domination Cover Pebbling Number For Some Class of Middle Graphs** in the International Conference on “Mathematical Science and Applications (ICMSA 2023)” organized by the Department of Mathematics, Dr. Bhimrao Ambedkar university, Agra on March 24 - 26, 2023.
15. Paper Title: **Split domination cover pebbling number of some class of middle graphs** in the international Conference on “Modelling, Simulation and Optimization of Energy Systems (MSOES 2023)” held at Canadian University Dubai, UAE during June17-18.2023 organized by Canadian University Dubai, UAE.
16. Paper Title: **Herscovici Conjecture on Chain Silicate Graphs** in the international Conference on “Artificial Intelligence, Cybersecurity & Mathematical Modelling (AICMM 2023)” organized by the department of Mathematics, Computer Science and Computer Applications, Loyola College of Arts & Science, Namakkal, Tamil Nadu on Oct 27-29, 2023.
 |
|  | 1. **​Select International Seminars/Conferences**
2. **​Select National/Regional/State Level Seminars and Conferences**
 |
| **RESOURCE PERSONSHIP / KEYNOTE ADDRESS****IN SEMINARS/ WORKSHOPS** |  |
|  |  |
| **Invited Lectures (UGC and University Invitations)** |  |
| **UGC REFRESHER COURSES ATTENDED** |
|  |  |
| **MEMBERSHIP OF PROFESSIONAL AND ACADEMIC BODIES** |
|  |  |