



Dr. (Mrs) Mandira Kar
Assistant Professor Mathematics,
St. Aloysius (Auto) College, Jabalpur
e-mail karmandira@gmail.com

TEACHING EXPERIENCE – 36 years

UG – 36 years

PG – 18 years

VISITING FACULTY -

- i. Faculty of Management Studies, COLLEGE OF MATERIAL MANAGEMENT, JABALPUR
- ii. G.S COLLEGE OF COMMERCE & ECONOMICS, JABALPUR
- iii. Govt. Project for SC/ST students in PARIKSHA POORVA PRASHIKSHAN KENDRA, JABALPUR
- iv. UGC scheme for coaching for NET exam in MH WOMEN (AUTO) COLLEGE OF HOME SCIENCE & SCIENCE, JABALPUR

**INTERNATIONAL/ NATIONAL/STATE/COLLEGIATE LEVEL:
CONFERENCE/SEMINAR/ WORKSHOP/ REFRESHER**

ATTENDED - Total 107

FACULTY DEVELOPMENT PROGRAMS ATTENDED - 23

AS DELEGATE – 84

INVITED AS A RESOURCE PERSON- 18

1. **National Seminar on** Applications of Mathematics in Science & Technology. 23- 24 Mar 2003
Organized by Govt. Model Sc. College (Autonomous) JBP M.P
2. **Teachers' Workshop on** Quest for Unity: Dialogue between Science and Religion 3-4 December, 2004., Organized by St. Aloysius' College JBP M.P in collaboration with Metanexus Institute Philadelphia, USA
3. **First National Congress** 5-6 Mar 2005 Organized by *Govt. Mankunvar Bai College of Arts and Commerce JBP M.P* Sponsored by Indian Philosophical Research Forum New Delhi
4. **National Seminar on** Modern Science and Spirituality 11- 12 May 2005. Organized by *St. Aloysius' College JBP M.P* in collaboration with Metanexus Institute Philadelphia, USA and IISR Pune.
5. **Faculty Development Program on** Computer skills 23-26 Sep 2005 Organized by *ICFAI University)*

6. **Faculty Development Program on Mentoring** 28 Jan 2006 Organized by *ICFAI University*
7. **National Conference** 27-28 Feb 2006, Organized by *Political Science Post Graduate and Research Department, RDVV, JBP, (M.P)*
8. **National Seminar on Ecology & Religion: Ecological Spirituality in Cross Cultural Perspective**, 4-5 March 2006. Organized by *St. Aloysius' College (Accredited A⁺ by NAAC), JBP (M.P) in collaboration with Metanexus Institute Philadelphia, USA*
9. **National Seminar on Analysis & Approximation** 12-13 April 2006 Organized by *Department of Mathematics R.D.V.V. JBP.*
10. **National Seminar on Quality Enhancement In Higher Education: Prospects And Challenges**, 23-24 June 2006 Organized by *St. Aloysius College (Accredited A⁺ by NAAC), College with Potential for Excellence by UGC, JBP, (M.P)* Sponsored by NAAC Bangalore
11. **National Seminar on Status of Indian Women**, 24-25 Nov 2006 Organized by *Govt. Kamala Nehru Girls College, Ranjhi, JBP (M.P)*, Sponsored by M.P Higher Education, Bhopal, (M.P)
12. **Invited National Seminar on Social Status of Women in India** 20 – 21 Jan 2007. Organized by *Govt. Kamala Nehru Girls College, Damoh, (M.P)* Sponsored by M.P Higher Education, Bhopal, (M.P)
13. **Invited National Seminar on Women Politics & Change in India**. 17, 18 and 19 Feb 2007. Organized by *Hitkarni Mahila Mahavidyalaya, (Accredited B by NAAC), Jabalpur, (M.P)* Sponsored by UGC, New Delhi
14. **National Conference on M.P. State with Golden Future**. 24-25-Feb. 2007 Organized by *Govt. Girls College, Khargone (M.P)* Sponsored by UGC, New Delhi
15. **National Seminar on Right to Information Act** -24-25 Feb.2007. Organized by *Govt. Girls College, Khargone (M.P)* Sponsored by UGC, New Delhi
16. **Ramanujam Annual Distinguished Lecture Series on Invariant Theory** 12-13 March 2007 Organized by *PDPM, IIITDM, JBP (M.P)*
17. **National Workshop on Effective Role of Information Technology for Innovative Teaching in Higher Education** 18- 20 March 2007 Organized by *St. Aloysius' College, JBP (M.P) (Accredited A⁺ by NAAC), College with Potential for Excellence by UGC*, Sponsored by UGC, New Delhi
18. **National Workshop on Teaching & Learning Physics through Mathematica**. 28- 31 March 2007. Organized by *St Aloysius' College, JBP (M.P) (Accredited A⁺ by NAAC), College with Potential for Excellence by UGC*, Sponsored by UGC, (CRO) Bhopal, (M.P)
19. **State level Workshop on Reaccreditation: Periodical Quality Assessment in Higher Education** 2- 3 November 2007 Organized by *Govt. Model Science (Autonomous) College JBP (M.P) Centre for Excellence for Science Education, Govt. of M.P. (Accredited A by NAAC), College with Potential for Excellence by UGC*
20. **National Seminar on Need for values in the Scientific & Technological Scenario** 3- 4 March.2008 Organized by *St. Aloysius' (Autonomous) College, JBP (M.P) (Accredited A⁺ by NAAC), College with Potential for Excellence by UGC*, Sponsored by IISR, Pune
21. **National Seminar on Contemporary Trends in life Sciences: Prospects and Challenges Ahead** 16- 17 Apr 2008. Organized by *St. Aloysius' (Autonomous) College, JBP (M.P) (Accredited A⁺ by NAAC), College with Potential for Excellence by UGC*. Sponsored by *MPCST, Bhopal* and Cosponsored by CPE Scheme UGC, New Delhi
22. **National Seminar on Quest for Quality: Use of Innovative Practices** 6-7 Feb 2009 Organized by *Govt. Model Science (Autonomous) College, JBP (M.P) Centre for Excellence for Science Education, Govt. of M.P. (Accredited A by NAAC), College with Potential for Excellence by UGC*
23. **National Workshop on Integration of Science and Spirituality to instill Values in Youth: Curriculum Development** 20-21 Feb 2009. Organized by *St. Aloysius' (Autonomous) College, JBP (M.P) (Accredited A⁺ by NAAC), College with Potential for Excellence by UGC*, Sponsored by IISR, Pune

24. **National Seminar on Women Empowerment in Modern Indian Society** 27-28 Feb 2009 Organized by *Chanchala Bai Patel Mahila Mahavidyalaya, JBP (M.P)* Sponsored by UGC, New Delhi
25. **Workshop on Disaster Risk Management** 25 Sept 2009 under *Urban Earthquake Vulnerability Reduction Program (UEVRP)* Sponsored by Govt. of India U.N.D.P. District Administration, JBP (M.P)
26. **Faculty Development Training Program on SPSS (Statistical Package for Social Sciences)** 29-Oct 2009 Organized by *St. Aloysius' (Autonomous) College, JBP (M.P) (Accredited A⁺ by NAAC), College with Potential for Excellence by UGC* Sponsored under the scheme of College with Potential for Excellence, UGC, New Delhi
27. **National Seminar on Nanotechnology: A Futuristic Application in all disciplines of Science** 12-13 Dec 2009 Organized by *Department of Chemistry & Biochemistry St. Aloysius' (Autonomous) College, JBP (M.P) (Accredited A⁺ by NAAC)*, Sponsored by UGC, (CRO) Bhopal, M.P
28. **Workshop on Contemporary Trends in Research Methodology** 02-06 Feb 2010 Organized by *ASC, Rani Durgawati Vishwavidyalaya, JBP M.P (Accredited B by NAAC)*, Sponsored by UGC, New Delhi
29. **Workshop on Literacy & Nation Building** 19 Feb 2010 Organized by *Resource Centre for Adult & Continuing Education (State Resource Centre), Bhopal,*
30. **National Seminar on Teaching Methods, Teaching Aids & Use of Modern Technology** 10-11 Nov., 2010 Organized by *Department of Education, Howbagh Women's college, JBP (M.P)* Sponsored by UGC, (CRO) Bhopal, (M.P)
31. **M.P Mahila Vigyan Sammelan** 2010 18-19 Dec 2010 Organized by *Shakti –Women wing of Mahakaushal Vigyan Parishad and Mata Gujri Mahila Mahavidyalaya JBP* supported by M.P Council of Science & Technology Bhopal, (M.P)
32. **Seminar & Industrial Meet on New Industrial Policy**, 2010, Govt. of M.P 19th Jan, 2011 Organized by *Department of Commerce St. Aloysius' (Autonomous) College, JBP (M.P) (Reaccredited A level by NAAC), College with Potential for Excellence by UGC* Sponsored by M.P.AKVN Limited, JBP, (M.P)
33. **National Conference on Mathematical Modeling and Computer Simulation-** (MMAS 2011) 25-27 March, 2011, Organized by *Department of Applied Mathematics, IIT, BHU, Varanasi* under Special Assistance Program, UGC
34. **National Workshop on Chemistry for Life (International Year of Chemistry Celebration)** 12-13 Sept 2011 Organized by *Mahakaushal Vigyan Parishad and Govt. Model Science (Autonomous) College JBP (M.P)* supported by M.P Council of Science & Technology Bhopal, (M.P)
35. **National Seminar on Effect of Environmental Factors on Personality Development** 9-10 Dec, 2011 Organized by *St. Aloysius' (Autonomous) College, JBP (M.P) (Reaccredited A level by NAAC: CGPA- 3.5/4), College with Potential for Excellence by UGC* Sponsored by UGC, (CRO), Bhopal, (M.P)
36. **National Conference on Advancement in Information, Communication and Technology-**(NCAICT 2011) 14-15 Oct 2011 Organized by *Department of Computer Science & Application, St. Aloysius' (Autonomous) College, JBP (M.P) (Reaccredited A level by NAAC), College with Potential for Excellence by UGC* (
37. **Invited as a Resource Person National Workshop** on Application of Differential Equations to Real World Problem 26-28 Feb 2012 Organized by *Indira Gandhi Home Science Girls College, Shahdol, (M.P)* Sponsored by UGC, (CRO), Bhopal, (M.P)
38. **Workshop on Bharitya Grameen Vikas** 28 Feb 2012 Organized by *Directorate of Field Publicity, JBP* Sponsored by Govt. of India, Ministry of Information & Broadcasting, and Directorate of Field Publicity Chhattisgarh & M.P (East) Region

39. **National Conference on** Mathematical Modeling and Computer Simulation- (MMAS 2012) 23-25 March,2012, Organized by *Department of Applied Mathematics, IIT, BHU, Varanasi* under Special Assistance Program, UGC
40. **International Conference on** Mathematical Modeling and Applied Soft Computing- (MMASC 2012) 11-13 July, 2012, Organized by *Department of Mathematics, Coimbatore Institute of Technology, Tamil Nadu*
41. **National Conference on** Right to Education: Challenges & Opportunities 31Aug-1 Sept 2012 Organized by *Department of Education, St. Aloysius'(Autonomous) College, JBP (M.P)* (Reaccredited A level by NAAC: CGPA- 3.5/4),College with Potential for Excellence by UGC Sponsored by UGC, Bhopal, (M.P) and ICSSR, New Delhi
42. **National Workshop on** Indian Mathematicians before and after Ramanujan (National Year of Mathematics Celebration) 14-15 Sept 2012 Organized by Mahakaushal Vigyan Parishad and *Govt. Model Science (Autonomous) College JBP (M.P)* supported by National Council for Science & Technology Communications, Govt. of India, New Delhi & M.P Council of Science & Technology Bhopal, (M.P)
43. **Invited as a Resource Person National Workshop on** Applications of Mathematics in Different Fields of Science 12-14 Oct 2012, Organized by *Department of Mathematics, Govt. Nagarjuna P.G College of Science, Raipur (C.G)*
44. **National Seminar on** Recent trends on Mathematical Science and Applications 4-5 Nov. 2012 Organized by *Department of Mathematics, Chhatrasal govt. P.G. College, Panna (M.P)* Sponsored by UGC, CRO, Bhopal, (M.P)
45. **Invited National Seminar on** Empowerment of Women through Gender Budgeting in India 30thNov-1st Dec 2012 Organized by *Department of Commerce Mata Gujri Mahila Mahavidyalaya (Autonomous) JBP* Sponsored by UGC, (CRO) Bhopal, (M.P)
46. **National Conference on** Recent Advances in Mathematics 12-14 Dec 2012, Organized by *Department of Mathematics R.D.V.V. JBP (M.P)*
47. **2nd International Conference on** Mathematical Science and Applications 16 Dec 2012 Organized by *Mind Reader Publications New Delhi*
48. **Invited as a Resource Person National Symposia on** History of Indian Mathematics 22-23 Dec 2012 Organized by *J.H. Govt. P.G. College Betul (M.P)* Sponsored by MPCOST Bhopal
49. **International Conference on** Mathematical Sciences 28-31 Dec 2012 Organized by *SSES Amt's Science College Nagpur* Sponsored by UGC,DST,CSIR,INSA
50. **National Seminar on** Punarjagran Andolan Mein Swami Vivekanada Ka Yogdaan Avam Vartaman Mein Iski Prasangikta 11-12 Jan2013 Organized by *Department of History Govt. Girls College, Ranjhi, JBP M.P,* Sponsored by UGC, (CRO) Bhopal, (M.P)
51. **National Seminar on** Swami Vivekanada Ke Shiksha Vishyak Vichar: Samagr Samajik Vikas Ke Sandarbh Mein Organized by *Maharishi Patanjali Sanskrit Sansthanam Bhopal avam Bharatiya Shiksha Sodh Sanasthan Lucknow*
52. **Invited as a Resource Person Guest lecture on** Mathematics for Biologists Organized by *Department of Zoology & Biotechnology, St. Aloysius'(Autonomous) College, JBP (M.P)* (Reaccredited A level by NAAC: CGPA- 3.5/4),College with Potential for Excellence by UGC
53. **National Conference on** Engineering and Applied Sciences 22-23 Mar 2013 Organized by *Jabalpur Engineering College, JBP (M.P)* Sponsored by DTE, Bhopal, (M.P)
54. **Invited as a Resource Person International Conference on** Recent Trends in Applied Sciences with Engineering Applications (RTASEA-2013) 26-28 April 2013 Organized by *Truba Institute of Engineering & Information Technology, Bhopal M.P. (India)*
55. **National Workshop on** Science Technology Communication 15-21 Sept. 2013 Organized by *Mahakaushal Vigyan Parishad and Govt. Model Science (Autonomous) College JBP (M.P)*

supported by National Council for Science & Technology Communications, Govt. of India, New Delhi & Department of Atomic Energy Govt. of India, New Delhi

56. **18th Annual cum 3rd International Conference of GAMS on** Mathematical, Computational and Integrative Sciences 22-26 Sept 2013 Organized by *Department of Mathematics & Computer Applications, MANIT, Bhopal*
57. **Guest lecture on** Elementary Ideas of Matrices 22 Oct.2013 Organized by Department of *Zoology & Biotechnology, St. Aloysius '(Autonomous) College, JBP (M.P)* (Reaccredited A level by NAAC: CGPA- 3.5/4), College with Potential for Excellence by UGC
58. **National Workshop on** *Ladkiyon Ke Liye Ek Din* 23-25 Oct 2013 Organized by *Department of Hindi Howbagh Women's College, JBP (M.P)* Sponsored by UGC,(CRO), Bhopal, (M.P)
59. **National Conference on** Pure & Applied Mathematics 4-5 Jan 2014 Organized by *Department of Mathematics Mata Gujri Mahila (Auto)Mahavidyalaya JBP* Sponsored by UGC, Bhopal, (M.P).X+
60. **National Conference on** Right to Information as a Tool to Empower the Citizen 31Jan-1Feb 2014 Organized by *P.G Department of Political Science, St. Aloysius '(Autonomous) College, JBP (M.P)* Sponsored by UGC
61. **Obtained Grade "A" in Special Summer Schools (RC/OP) on** Teaching, Testing and Research in Higher Education 23 June – 07 July 2014 Organized by *U.G.C. ASC, Rani Durgawati Vishwavidyalaya, JBP, (M.P.)*
62. **International Conference on** Exploring Trends and Practices in Information Technology and Management 5-6 Jan 2015 Organized by *St. Aloysius '(Autonomous) College, JBP (M.P)* Sponsored by UGC, CRO, Bhopal and MPCST, Bhopal (M.P.)
63. **Invited National Workshop on** Numerical Mathematics 27-28 Jan 2015 Organized by *Mata Gujri Mahila (Auto)Mahavidyalaya JBP* Sponsored by UGC, CRO, Bhopal, (M.P)
64. **National Conference on** *Rastriya Ekta Savardhan mein Sant Ravidas ke Vicharo ki Prasingikta* 27-28 Feb 2015 Organized by *Department of Hindi, St. Aloysius '(Autonomous) College, JBP (M.P)* Sponsored by UGC, CRO, Bhopal, (M.P) & ISSR New Delhi
65. **National Seminar on** Bharat mein Kala Sanskriti- Sanskritik chetr mein agrani mahilayein- ek Punravlokan Women Week 2015 Organized by *INTAC* Supported by Police IG, Women Cell, Jabalpur Commissioner Office, Jabalpur
66. **International Conference on** Advances in Mathematical Sciences 19-21 Mar 2015 Organized by *GSSDGS Khalsa College, Patiala, India & IMRF.*
67. **Invited as a Resource Person National Conference on** Advancement in Science & Technology for Sustainable Future 15-16 May 2015 Organized by *Department of Mathematics & Mechanical Engineering, Technocrats Institute of Technology & Science in Association with The Institution of Engineers* Sponsored by M.P. Council of Science & Technology, Jabalpur
68. **Workshop on** Human Values Development Programme (HVDP) 16-17 June 2015 Organized by All India Association for Christian Higher Education & St. Aloysius College (Auto), Jabalpur, M.P.
69. **Invited as a Resource Person National Conference on** Recenk, It trends in Mathematics and its Applications (NCRTMA-2015) 12-13 Sept. 2015 Organized by *Mungasaji Maharaj Mahavidyalaya Darwha, Yavatmal Dist. Maharashtra.* Sponsored by UGC, WRO Pune
70. **1st International Conference on** Engineering and Technology (ICET 2015) 29-30 Dec 2015 Organized by Mind Reader Publications New Delhi and IJMSA
71. **Invited as a Resource Person National Seminar on** Emerging Trends in Mathematics and its Applications 6 Feb 2016 Organized by *Mata Gujri Mahila (Auto)Mahavidyalaya JBP* Sponsored by MAPCOST, Bhopal
72. **National Conference on** Role of Academic Audit in Enhancing the Quality of Higher Education in India 21-22 Oct 2016 Organized by *St. Aloysius '(Autonomous) College, JBP (M.P)* Sponsored by ICSSR

73. **National Seminar on New Dimensions in Corporate Social Responsibility** 20-21 Jan 2017
Organized by *St. Aloysius' (Autonomous) College, JBP (M.P)* Sponsored by UGC, CRO Bhopal
74. **Training Programme on Project Based Learning & Need of Academic Audit in Enhancing the Quality of Higher Education** 27-28 Jan 2017 Organized by *St. Aloysius' (Autonomous) College, JBP (M.P)* Sponsored by United Board
75. **5th International Conference on Advances in Science, Society, Culture, Humanities and Technology** 2017 (IC- ASSCHT-2017) 11-13 March 2017 Organised by *D.N. Jain College, JBP (M.P)* in collaboration with *South Asia Management Association* Sponsored by MAPCOST, Bhopal
76. **National Seminar on Spiritual Intelligence and Mental Health: A New Paradigm in Teacher Education** 24-25 March 2017 Organized by *St. Aloysius' (Autonomous) College, JBP (M.P)* Sponsored by UGC, CRO Bhopal
77. **Invited as a Resource Person and Chairperson International Science Congress Thailand 2017- ISCTH 2017** 02-03 Oct. 2017 Organized by *Asian Institute of Technology, Bangkok, Thailand and International Multidisciplinary Research Foundation, Thailand Chapter*
78. **International Science Congress Thailand 2017- ISCTH 2017 Post conference Workshop** 04-06 Oct. 2017 Organized by *Asian Institute of Technology, Bangkok, Thailand and International Multidisciplinary Research Foundation, Thailand Chapter*
79. **Convener and Chairperson of IIIrd Technical Session National Training Programme on 'The Art of Mathematical Modeling as Teaching Pedagogy'** 9-10 Feb. 2018. Organized by *SAC, Jabalpur* Sponsored by United Board for Christian Higher Education in Asia.
80. **National Seminar on e-learning and MOOCs in Higher Education** 17th March 2018 Organized by *Guru Angad Dev Teaching Learning Centre of MHRD, SGTB Khalsa College, University of Delhi in collaboration with St. Aloysius College (Auto), Jabalpur*
81. **Advisory Board Member National Workshop on 'Vedic Mathematics'** 12-05-18 Organized by *Dept. of Mathematics & Physics, Sri Guru Tegh Bahadur Khalsa College* Sponsored by MPCST
82. **2nd International Conference on Emerging Trends in Science, Engineering and Technology (ICETSET-2018)** held on 29-30 Sept. 2018 Organized by *Mahratta Chamber of Commerce, Industries and Agriculture, Pune, India.*
83. **Advisory Board Member & Chairperson Workshop on 'Revised Assessment and Accreditation Framework for Higher Education Institutions in India'** 15th-16th Dec. 2018. Organized by *SAC, Jabalpur and sponsored by United Board for Christian Higher Education in Asia.*
84. **International Conference on Advances in Mathematics, Computers and Physical Sciences Dubai 2019** 18-19 Jan. 2019 Organized by, *IMRF Institute of Education and Research Dubai Chapter and Sant Baba Bhag Singh University, Punjab, India*
85. **Invited as a Resource Person and Chairperson International Conference on Advances in Mathematics, Computers and Physical Sciences Dubai 2019** 18-19 Jan. 2019 Organized by *IMRF Institute of Education and Research Dubai Chapter and Sant Baba Bhag Singh University, Punjab, India*
86. **Chief Organizing Secretary National Seminar on 'Envisioning a Healthy India: Healthy, Hygiene, Mother and Child'** 21-23 Feb. 2019 Organized by *St. Aloysius' (Autonomous) College, JBP (M.P)* Sponsored by UGC
87. **Advisory Board Member National Seminar on Parallel Computing and Optimization Techniques** 23-24 Feb 2019 Organized by *Govt. Home Science College, Jabalpur*

88. **Advisory Board Member National Seminar cum Workshop on Numerical Methods and its Applications** 29-30 March 2019 Organized by *Department of Mathematics, Gyan Ganga College of Technology*
Sponsored by MPCST
89. **International Conference on Mathematical Engineering Applications for Sustainable Development-2019** 16-18 August 2019 Organized jointly by IIM Australia and IMRF Malaysia Chapter at University of Malaysia, Kuala Lumpur, Malaysia
90. **National Seminar on Accreditation, Ranking and Quality: A Paradigm Shift for Strategic Enhancement in Higher Education** 8-9 Nov 2019 Organized by IQAC, St. Aloysius'(Autonomous) College, JBP (M.P)
Sponsored by NAAC
91. **National Seminar on Central Role of Mathematics in Physical Sciences** 16-17 Nov 2019 Organized by Dept. of Mathematics & Computer Science, Govt. Science (Model & Autonomous) College, JBP M.P
92. **International Conference on Engineering, Mathematical and Computational Intelligence (ICEMCI19)** 21-23 Dec 2019 Organized by Jabalpur Engineering College, JBP with Walchand College of Engineering and FATER Academy of India, Sponsored by TEQIP III
93. **Seven days Online International FDP on Mathematical Modeling for Data analytics & Engineering** 29 June-5 July 2020 Organized by Kumaragura College of Technology, Coimbatore
94. **Seven days National e-FDP on New Narrative of NAAC** 1-7 August 2020 Organized by RR Institute of Advanced Studies, Bangalore
95. **Seven days FDP on Developing Teaching Techniques & Research Skills** 15-22 Feb 2021
Organized by Govt. Mahakoushal Arts & Commerce, Jabalpur
96. **Seven days Refresher Course on Implementation of NEP 2020 in Higher Education** 17-23 March 2021 Organized by Bundelkhand University, Jhansi
97. **Online certificate Course on Soft Skills** 27 July- 4 August 2020 Organized by Pioneer Kumaraswamy College, Nagercoil, Tamil Nadu
- Many **Online National Workshops/FDP/e-Conferences/ Webinars/Quizzes** b/w May 2020 & June 2021
98. **Two Week Online FDP on Developing Online Courses for Swayam** 21 June-5 July 2021 Organized by Uttarakhand Open University, Haldwani & CEMCA, New Delhi
99. **Seven Days International Virtual FDP on Global Vision for Academic Excellence** 5-11 July 2021
Organized by School of Social Work, Roshani Nityaya
100. **Six days (36 Contact hours) Online FDP on Best Practices in Development of E-Content** 12-17 July 2021 Organized by Govt. of M.P. Dept. of Higher Education
101. **Research Study on Academic Leadership Roles** July-Nov. 2021 Organized by National Institute of Technical Teachers' Training and Research, Bhopal
102. **International FDP on Mathematical Modelling of Biosystems with Special Focus on Epidemiology** 22-27 Aug. 2022 Organized by Mizoram University
103. **Five Day National Online FDP on Effective Pedagogy for Science** 29 Nov.- 3 Dec. 2022 Organized by Departments of Physics and Mathematics, JMJ College for Women (Autonomous), Tenali.
104. **Convener and Resource Person National Webinar on History and Recent Trends in Mathematics** 22 Dec. 2022 Organized by Department of Mathematics, Patna Women's (Autonomous) College Patna and St. Aloysius'(Autonomous) College, JBP (M.P)

105. **National Seminar on National Education Policy 2020: A Powerful Tool to Re-Establish Bharat as Viswa Guru** 27-28 Jan. 2023 Organized by St. Aloysius'(Autonomous) College, JBP (M.P) Sponsored by ICSSR
106. **International Conference on Role of Science Education and Technology in Making India Self Reliant and Globally Competent (ICR-SET 2023)** 3-4 March 2023 Organized by St. Aloysius Institute of Technology, JBP (M.P)
107. **Seven Days FDP on ICT Tools for Teaching Learning Process and Higher Educational Institutes** 27 Feb.- 6 March 2023 Organized by Govt. Mahakoshal Arts & Commerce (Autonomous Lead) College, JBP (M.P) under MPHEQIP & World Bank Project

PAPERS PRESENTED – Total 88

AS DELEGATE – 70

INVITED TALK - 18

First National Congress 5-6 Mar 2005 Govt. Mankunvar Bai College of Arts and Commerce JBP M.P Sponsored by Indian Philosophical Research Forum New Delhi

1. Paper titled: Value System in a Pluralistic Society

National Conference 27-28 Feb 2006, Organized by Political Science Post graduate and Research Department, RDVV JBP.

2. Paper titled: Globalization and Changing Dimensions of Education

National Seminar on Ecology & Religion: Ecological Spirituality in Cross Cultural Perspective, 4- 5 March 2006. Organized by St. Aloysius' College JBP M.P in collaboration with Metanexus Institute Philadelphia, USA

3. Paper titled: Flora and Traditional Medicinal Sciences

National Seminar on Quality Enhancement in Higher Education: Prospects and Challenges, 23-24 June 2006 Organized by St. Aloysius College, JBP Sponsored by NAAC Bangalore

4. Papers titled: Gats and its Implication

5. Gender Equity: A Challenge for Higher Education

National Seminar on Status of Indian Women, 24-25 Nov 2006 Organized by Govt. Girls College, Ranjhi, JBP M.P, Sponsored by M.P Higher Education, Bhopal

**6. Papers titled: Empowerment of women and family life in the Indian context:
An honest reflection**

7. Gender Inequity in the Education Sector-The Need of the Hour

National Seminar on Social Status of Women in India 20 – 21 Jan 2007. Organized by Govt. Kamala Nehru Girls College, Damoh Sponsored by M.P Higher Education, Bhopal

8. Invited Talk Titled: Winds of change in the life of Indian women.

National Seminar on Women Politics & Change in India 17, 18 and 19 Feb 2007. Organized by Hitkarni Girls College, Jabalpur M.P Sponsored by UGC, New Delhi

9. Invited Talk Titled: Legal Provision to combat Violence- An Emphasis On

Domestic Violence

National Conference on M.P. State with Golden Future. 24-25-Feb. 2007 Organized by Govt. Girls College, Khargone M.P Sponsored by UGC, New Delhi

10. Paper Titled: M.P. State with a Golden Future in Developments Perspectives

National Seminar on Right To Information Act -24-25 Feb.2007. Organized by Govt. Girls College, Khargone M.P Sponsored by UGC, New Delhi

11. Paper Titled: RTI Act 2005-An Ideological Apparatus In Reducing The Gap between the Have & the Have-nots

National Workshop on Effective Role of Information Technology For Innovative Teaching in Higher Education 18-20 March 2007. Organized by St. Aloysius' College, JBP. Sponsored by UGC, New Delhi

12. Papers Titled: Impact of I.T for Innovative Teaching in Higher Education

13. Virtually Yours in Mathematics: Famous Mathematicians

State level Workshop on Reaccreditation: Periodical Quality Assessment in Higher Education 2- 3 November 2007 Organized by Govt. Model Science College (Autonomous) JBP M.P

14. Paper Titled: Need for Quality Assessment in Higher Educational Institutions-Quest for Excellence

National Seminar on Need for values in the Scientific & Technological Scenario 3- 4 2008 March, Organized by St. Aloysius' College, (Autonomous) JBP M.P. Sponsored by IISR, Pune

15. Paper/Poster Titled: Corporate Social Responsibility One Step Towards an Equitable Society

National Seminar on Quest for Quality: Use of Innovative Practices 6-7Feb 2009 Organized by Govt. Model Science College (Autonomous) JBP M.P

16. Paper Titled: Teaching Competency and Measuring Index

National Workshop on Integration of Science and Spirituality to instill Values in Youth: Curriculum Development 20-21 Feb 2009. Organized by St. Aloysius' College JBP M.P Sponsored by IISR, Pune

17. Poster/Paper Titled: Discover The Power Of Gratitude To Unleash Unlimited Abundance and Happiness in Your Life

National Seminar on Women Empowerment in Modern Indian Society 27-28 Feb 2009 Organized by Chanchal Bai Patel Mahila Mahavidyalaya, JBP (M.P) Sponsored by UGC, New Delhi

18. Paper Titled: Legal Measures to combat Violence on Women- Thereby Facilitating Women Empowerment

Workshop on Literacy & Nation Building 19 Feb 2010 Organized by Resource Centre for Adult & Continuing Education (State Resource Centre), Bhopal, (M.P)

19. Paper Titled: Education For All-A Renewed Commitment towards INDIA VISION 2020

National Seminar on Teaching Methods, Teaching Aids& Use of Modern Technology 10-11 Dec, 2010 Organized by Department of Education, Howbogh Women's College, JBP (M.P) Sponsored by UGC, Bhopal, (M.P)

20. Paper Titled: Evaluating & Improving Teaching in Higher Education

M.P Mahila Vigyan Sammelan 2010 18-19 Dec 2010 Shakti –Women wing of Mahakaushal Vigyan Parishad and Mata Gujri Mahila Mahavidyalaya

21. Paper Titled: Economics made easy through Calculus

National Conference on Mathematical Modeling and Computer Simulation 25-27 March,2011, Organized by Department of Applied Mathematics, IIIT, BHU, Varanasi Under Special Assistance Program, UGC

22. Paper Titled: I-Open Sets in Ideal Bitopological Spaces

National Workshop on Chemistry for Life (International Year of Chemistry Celebration) 12-13 Sept 2011 Organized by Mahakaushal Vigyan Parishad and Govt. Model Science (Autonomous) College JBP (M.P) supported by M.P Council of Science & Technology Bhopal, (M.P)

23. Paper Titled: Application of Group Theory & Symmetry in Chemistry

National Seminar on Effect of Environmental Factors on Personality Development 9-10 Dec, 2011 Organized by St. Aloysius'(Autonomous) College, JBP (M.P) (Reaccredited A level by NAAC CGPA-3.5/4),College with Potential for Excellence by UGC Sponsored by UGC,(CRO), Bhopal, (M.P)

24. Paper Titled: Parenthood: A Privilege

National Workshop on Application of Differential Equations to Real World Problem 26-28 Feb 2012 Organized by Indira Gandhi Home Science Girls College, Shahdol, (M.P) Sponsored by UGC,(CRO), Bhopal, (M.P)

25. Invited Talk Titled: Differential Equations at Work

National Conference on Mathematical Modeling and Computer Simulation 23-25 March,2012, Organized by Department of Applied Mathematics, IIIT, BHU, Varanasi under Special Assistance Program, UGC

26. Paper Titled: qsI - Irresolute Functions in Ideal Bitopological Spaces

International Conference on Mathematical Modeling and Applied Soft Computing- (MMASC 2012) 11-13 July, 2012, Organized by Department of Mathematics, Coimbatore Institute of Technology, Tamil Nadu

27. Paper Titled: Quasi Pre Local Functions in Ideal Bitopological Spaces

National Conference on Right to Education: Challenges & Opportunities 31Aug-1 Sept 2012 Organized by Department of Education, St. Aloysius'(Autonomous) College, JBP (M.P) (Reaccredited A level by NAAC: CGPA- 3.5/4),College with Potential for Excellence by UGC Sponsored by UGC, Bhopal, (M.P) and ICSSR, New Delhi

28. Paper Titled: Fostering Mathematical Habits of Mind through Right to Education

National Workshop on Indian Mathematics Before & After Ramanujan 14-15 Sept. 2012 Organized by Mahakaushal Vigyan Parishad and Govt. Model Science (Autonomous) College JBP (M.P) Supported by National Council for Science & Technology Communications, Delhi & M.P Council of Science & Technology Bhopal

29. Paper Titled: Growth of Mathematics Before & After Ramanujan

National Workshop on Application of Mathematics in Different fields of Science 12-14 Oct 12
Organized by Department of Maths, Govt. NPG college of Science, Raipur (C.G) Sponsored by
UGC,(CRO), Bhopal, (M.P) & CG Council of Science & technology, Raipur

30. Invited Talk Titled Teaching Applications of Mathematics

National Seminar on Recent trends on Mathematical Science and Applications 4-5 Nov. 2012
Organized by Department of Mathematics, Chhatrasal govt. P.G. College, Panna (M.P) Sponsored by
UGC, CRO, Bhopal, (M.P)

31. Paper Titled: Fuzzy topology & its Applications

National Seminar on Empowerment of Women through Gender Budgeting in India 30thNov-1st Dec
2012 Organized by Department of Commerce Mata Gujri Mahila Mahavidyalaya (Autonomous) JBP
Sponsored by UGC, (CRO) Bhopal, (M.P)

32. Invited Talk Titled: Efforts made by Govt. of India Towards Gender Equity

33. Paper Titled: Mathematics of Gender Budgeting; A catalyst for Gender Equality & Women Empowerment

National Conference on Recent Advances in Mathematics 12-14 Dec 2012 Organized by Department
of Mathematics R.D.V.V. JBP.

34. Paper Titled: Quasi semi local function in Ideal Bitopological Spaces

2nd International Conference on Mathematical Science and Applications 16 Dec 2012 Organized by
Mind Reader Publications New Delhi

35. Paper Titled: (i-j)-Open Sets in Ideal Bitopological Spaces

National Symposia on History of Indian Mathematics 22-23 Dec 2012 Organized by J.H. Govt. P.G.
College Betul (M.P) Sponsored by MPCOST Bhopal

36. Invited Talk: “Constructible numbers”

International Conference on Mathematical Sciences 28-31 Dec 2012 Organized by SSES Amt’s
Science College Nagpur Sponsored by UGC,DST,CSIR,INSA

37. Paper Titled: Vedic Mathematics An Alternative Approach Mathematics

38. Contra qsI Continuous Functional in Ideal Bitopological Spaces

National Seminar on Punarjagran Andolan Mein Swami Vivekanada Ka Yogdaan Avam Vartaman
Mein Iski Prasangikta 11-12 Jan2013 Organized by Department of History Govt. Girls College,
Ranjhi, JBP M.P, Sponsored by UGC, (CRO) Bhopal, (M.P)

39. Paper Titled: Swami Vivekananda – The Spiritual Freedom Fighter

National Seminar on Swami Vivekanada Ke Shiksha Vishyak Vichar: Samagr Samajik Vikas Ke
Sandarbh Mein Organized by Maharishi Patanjali Sanskrit Sansthanam Bhopal avam Bharatiya Shiksha
Sodh Sanasthan Lucknow

40. Paper Titled: Swami Vivekananda- The Architect of Free India

Guest lecture on Mathematics for Biologists Organized by Department of Zoology & Biotechnology,
St. Aloysius’ (Autonomous) College, JBP (M.P)

41. Invited Talk: Bio Mathematics – A Special Reference to Matrices

National Conference on Engineering and Applied Sciences 22-23 Mar 2013 Organized by Jabalpur Engineering College, JBP (M.P) Sponsored by DTE, Bhopal, (M.P)

42. Paper Titled: Contra $q\alpha I$ - Continuous function

International Conference on Recent Trends in Applied Sciences with Engineering Application 26-28 April 2013 Organized by Truba Institute Of Engineering & Information Technology Bhopal, (M.P)

43. Invited Talk: Contra qpI - Continuous Functions in Ideal Bitopological Spaces

18th Annual cum 3rd International Conference of GAMS on Mathematical, Computational and Integrative Sciences 22-26 Sept 2013 Organized by Department of Mathematics & Computer Applications, MANIT, Bhopal

44. Paper Titled: Connectedness in Ideal Bitopological Spaces

National Workshop on Ladkiyon Ke Liye Ek Din 23-25 Oct 2013 Organized by Department of Hindi Howbagh Women's College, JBP (M.P) Sponsored by UGC,(CRO), Bhopal, (M.P)

45. Paper Titled: Recognize the Power in a Woman -A Paradigm shift

National Conference on Pure & Applied Mathematics 4-5 Jan 2014 Organized by Department of Mathematics Mata Gujri Mahila (Auto)Mahavidyalaya JBP Sponsored by UGC, Bhopal, (M.P)

46. Paper Titled: On qI - Irresolute Mappings

National Conference on Right to Information as a Tool to Empower the Citizen 31Jan-1Feb 2014 Organized by P.G Department of Political Science, St. Aloysius'(Autonomous) College, JBP (M.P) Sponsored by UGC

47. Paper Titled: Right to Information – The Way Forward

International Conference on Exploring Trends and Practices in Information Technology and Management 5-6 Jan 2015 Organized by St. Aloysius'(Autonomous) College, JBP (M.P) Sponsored by UGC, CRO, Bhopal and MPCST, Bhopal (M.P.)

48. Papers Titled: Use of Mathematics in Identifying Market Segments And Target Customers

49. Some Irresolute Functions in Ideal Bitopological Spaces

National Workshop on Numerical Mathematics 27-28 Jan 2015 Organized by *Mata Gujri Mahila (Auto)Mahavidyalaya JBP* Sponsored by UGC, CRO, Bhopal, (M.P)

50. Invited Talk: Computational Mathematics

National Conference on Rastriya Ekta Savardhan mein Sant Ravidas ke Vicharo ki Prasingikta 27-28 Feb 2015 Organized by *Department of Hindi, St. Aloysius'(Autonomous) College, JBP (M.P)* Sponsored by UGC, CRO, Bhopal, (M.P) & ISSR New Delhi

51. Paper Titled: Sant Ravidas Vaani- Jivan Darshan Ke Vividh Aayam

National Seminar on Bharat mein Kala Sanskriti- Sanskritik chetr mein agrani Mahilayein- ek Punravlokan Women Week 2015 Organized by *INTAC* Supported by Police IG, Women Cell, Jabalpur Commissioner Office, Jabalpur

52. Paper Titled: Indian women in the field of Mathematics

International Conference on Advances in Mathematical Sciences 19-21 Mar 2015 Organized by GSSDGS Khalsa College, Patiala, India & IMRF.

53. Paper Titled: Contra qI - Continuous Functions in Ideal Bitopological Spaces

National Conference on Advancement in Science & Technology for Sustainable Future 15-16 May 2015 Organized by Department of Mathematics & Mechanical Engineering, Technocrats Institute of Technology & Science in association with The Institution of Engineers Sponsored by MP council of Science & Technology

54. Invited Talk: A Note on Vedic Mathematics

55. Invited Talk: Matrices permeates Biology

National Conference on Recent trends in Mathematics and its Applications 12-13 Sept. 2015 Organized by Mungasaji Maharaj Mahavidyalaya Darwha, Yavatmal Dist. Maharashtra. Sponsored by UGC, WRO Pune

56. Invited Talk: Recent trends in Mathematics and its Applications

1st International Conference on Engineering and Technology (ICET 2015) 29-30 Dec 2015 Organized by Mind Reader Publications New Delhi and IJMSA

57. Paper Titled: “Disconnectedness in Ideal Bitopological Spaces”

National Seminar on Emerging Trends in Mathematics and its Applications 6 Feb 2016 Organized by Mata Gujri Mahila (Auto) Mahavidyalaya JBP Sponsored by MAPCOST, Bhopal

58. Invited Talk: “Mathematical Biology”

National Conference on Role of Academic Audit in Enhancing the Quality of Higher Education in India 21-22 Oct 2016 Organized by *St. Aloysius’ (Autonomous) College, JBP (M.P)* Sponsored by ICSSR

59. Paper Titled: “Academic Audit: the Need of the Hour”

National Seminar on New Dimensions in Corporate Social Responsibility 20-21 Jan 2017 Organized by *St. Aloysius’ (Autonomous) College, JBP (M.P)* Sponsored by UGC, CRO Bhopal

60. Paper Titled: “CSR Initiatives for Inclusive Development: A Case Study of Jhabua Power Ltd., M.P.”

5th International Conference on Advances in Science, Society, Culture, Humanities and Technology 2017 (IC- ASSCHT-2017) 11-13 March 2017 Organised by *D.N. Jain College, JBP (M.P)* in collaboration with *South Asia Management Association* Sponsored by MAPCOST, Bhopal

61. Paper Titled: “ qI - Connectedness in Ideal Bitopological Spaces”

62. “Operations Research- A Tool for Entrepreneurship”

63. “Proactive Measures to Combat Violence against Women- a Step towards a just Society”

National Seminar on Spiritual Intelligence and Mental Health: A New Paradigm in Teacher Education 24-25 March 2017 Organized by *St. Aloysius’ (Autonomous) College, JBP (M.P)* Sponsored by UGC, CRO Bhopal

64. Paper Titled: Work-Life Balance: The Wisdom Path

International Science Congress Thailand 2017- ISCTH 2017 02-03 Oct. 2017 Organized by Asian Institute of Technology, Bangkok, Thailand and International Multidisciplinary Research Foundation, Thailand Chapter

65. Invited Talk: Use of Mathematics to stimulate the Biological World

66. Paper Titled: qpI - Connectedness in Ideal Bitopological Spaces

2nd International Conference on Emerging Trends in Science, Engineering and Technology held on 29-30 Sept. 2018 Organized by Maharashtra Chamber of Commerce, Industries and Agriculture, Pune, India. **(She is the recipient of the Best/Most Outstanding Paper Award)**

67. Paper Titled: qI -Connectedness in Ideal Bitopological Spaces

International Conference on ‘Advances in Mathematics, Computers and Physical Sciences Dubai 2019’ 18-19 Jan. 2019 Organized by, IMRF Institute of Education and Research Dubai Chapter and Sant Baba Bhag Singh University, Punjab, India. **(She is the recipient of the Best/Most Outstanding Paper Award)**

68. Invited/Keynote Talk: Trigger The Mathematics Within

69. Paper Titled: qaI -Connectedness in Ideal Bitopological Spaces

National Seminar on ‘Envisioning a Healthy India: Healthy, Hygiene, Mother and Child’ 21-23 Feb. 2019 Organized by *St. Aloysius’ (Autonomous) College, JBP (M.P)* Sponsored by UGC

70. Paper Titled: Cleanliness: A Lifetime Mission

National Seminar on ‘Parallel Computing and Optimization Techniques’ 23-24 Feb 2019 Organized by *Govt. Home Science College, Jabalpur*

71. Paper Titled: Assessment of Complete Sanitation under Swachh Bharat Abhiyaan (Gramin)- A Mathematical Case Study

International Conference on ‘Mathematical Engineering Applications for Sustainable Development-2019’ 16-18 August 2019 Organized jointly by IIM Australia and IMRF Malaysia Chapter at University of Malaysia, Kuala Lumpur, Malaysia

72. Virtual Presentation: Paper Titled: Quasi α - Local Functions in Ideal Bitopological Space

National Seminar on Accreditation, Ranking and Quality: A Paradigm Shift for Strategic Enhancement in Higher Education 8-9 Nov 2019 Organized by IQAC, *St. Aloysius’ (Autonomous) College, JBP (M.P)* Sponsored by NAAC

73. Paper Titled: A Roadmap to NAAC Assessment and Accreditation: A Special Emphasis on Criterion V

National Seminar on Central Role of Mathematics in Physical Sciences 16-17 Nov 2019 Organized by Dept. of Mathematics & Computer Science, *Govt. Science (Model & Autonomous) College, JBP M.P*

74. Invited Talk: I - Continuous Functions in Ideal Bitopological Spaces

MPPG Science E-Content - Organized by Govt. of M.P. Dept. of Higher Education (MOOC - 1 module) MPPG Higher Education Portal (<https://www.youtube.com/watch?v=GkDML3FURj8>) 19 Nov.2020

75. Online Video Lecture: Phases of Operations Research

International Conference on Engineering, Mathematical and Computational Intelligence (ICEMCI19) 21-23 Dec 2019 Organized by Jabalpur Engineering College, JBP with Walchand College of Engineering and FATER Academy of India, Sponsored by TEQIP III

76. Paper Titled: Quasi Semi Pre-Local functions in Ideal Bitopological Spaces

National Webinar on Applications of Mathematics 22 June 2021 Organized by Govt. Auto. P.G. College Chhindwara (M.P.) Sponsored by M.P. HEQIP and World Bank Project

77. Paper Titled: Bio-Mathematics

International Conference on Mathematics, Statistics, Computers & Information Sciences 2021 9-10 July 2021 Organized by RED Talks, International Research Division, India

78. Invited/Plenary Talk: Matrix Models in Biological Applications

MPPG Science E-Content - Organized by Govt. of M.P. Dept. of Higher Education (MOOC- 2 modules) MPPG Higher Education Portal Nov 2021

79. Online Video Lecture: Propositions and Truth table, Negation, Conjunction & Disjunction

80. Implication & Bi-implication

Celebration of National Mathematics Day Organized by Dept. of Mathematics & Computers, Govt. M. H. College of Home Science & Science for Women 22 Dec. 2021

81. Paper Titled: Applications of Mathematics

MPPG Science E-Content - Organized by Govt. of M.P. Dept. of Higher Education (MOOC- 1 module) MPPG Higher Education Portal

https://www.eshiksha.mp.gov.in/mpdhe/pluginfile.php/49527/mod_resource/content/1/MPHE%20-%20%20-%20II%20Yr%20S2-MATH1T%5BModule%201.1%20%28A%29%5D-%20Dr.%20Mandira%20Kar%20Algebra.pdf Nov. 2022

82. Online Video Lectures: A Brief Biography of Brahmagupta

83. A brief historical background of the Algebra in context to India and Indian heritage and culture

National Webinar on History and Recent Trends in Mathematics 22 Dec. 2022 Organized by Department of Mathematics, Patna Women's (Autonomous) College Patna and St. Aloysius'(Autonomous) College, JBP (M.P)

84. Invited Talk: Mathematical Legacy of India

National Seminar on National Education Policy 2020: A Powerful Tool to Re-Establish Bharat as Viswa Guru 27-28 Jan. 2023 Organized by St. Aloysius'(Autonomous) College, JBP (M.P) Sponsored by ICSSR

85. Paper Titled: Mathematical Legacy to the World from India in context to NEP 2020

International Conference on Role of Science Education and Technology in Making India Self Reliant and Globally Competent (ICR-SET 2023) 3-4 March 2023 Organized by St. Aloysius Institute of Technology, JBP (M.P)

86. Papers Titled: Mathematical Heritage and India's Contributions

87. **Optimization Models with Real-World Perspective**
88. **Quasi Semi Pre-Functions in Ideal Bitopological Spaces**

PUBLICATIONS - 41

1. **Paper titled: "Value System in a Pluralistic Society"** **2005**
Published in **PARMITA** Annual research Journal of the Darshan Parishad (M.P Chhattisgarh)
2. **Paper titled: "Flora and Traditional Medicinal Sciences"** **July 2007**
Published in **SARTHI** Aloysian Journal of Science and Religion
3. **Paper Titled: "Impact of I.T for Innovative Teaching in Higher Education"** **Nov.2007**
Published in **NINAD** A biannual multidisciplinary Aloysian Journal (Vol. IV)
4. **Paper titled: "Gender Equity- A Challenge for Higher Education"** **2008**
Published in a **BOOK** Titled Quality Education: Prospects and Challenge
5. **Paper Titled: "Teaching Competency and Measuring Index"** **Feb.2009**
Published in **SOUVENIR** of **National Seminar** on Quest for Quality: Use of Innovative Practices
6. **Paper Titled: "Education For All: A Renewed Commitment towards India Vision 2020"**
Published in a **BOOK** Titled Literacy: Time to act for nation building (A compendium of Research papers) **2009-10**
7. **Paper Titled: "Evaluating & Improving Teaching in Higher Education"** **Nov. 2010**
Published in **SOUVENIR** Howbagh Women's College, JBP (M.P)
8. **Paper Titled: "RTI Act 2005- An Ideological Apparatus In Reducing The Gap between the Have & the Have-nots"** **Dec. 2010**
Published in **NINAD** A biannual multidisciplinary Aloysian Journal (Vol. VI)
9. **Paper Titled: "Quasi Semi Local Functions in Ideal Bitopological Spaces"** **Jan-June 2012**
Published in **AJAMMS - American Journal of Applied Mathematics and Mathematical Sciences** Volume 1, No. 1, Pg.31– 36
10. **Paper Titled: "Pair wise Open Sets in Ideal Bitopological Spaces"** **May 2012**
Published in **IJMSA - International Journal of Mathematical Sciences & Applications** Vol. 2, No. 2 pp 839-842
11. **Paper Titled: "Quasi Pre Local Functions in Ideal Bitopological Space"** **July 2012**
Published in **PROCEEDINGS** of **International Conference** on Mathematical Modeling and Applied Soft Computing
12. **Paper Titled: "qpI- Irresolute Functions in Ideal Bitopological Spaces"** **Sep-Oct. 2012**
Published in **IOSR-JM - IOSR Journal of Mathematics** Volume 3, Issue 2, Pg 22-24
13. **Paper Titled: "On qI- Irresolute Mappings"** **2012**
Published in **IJMA - International Journal of Mathematical Archive-** 3(11)
14. **Paper Titled: "qsI- Irresolute Functions in Ideal Bitopological Spaces"** **2012**
Published in **JIAM - The Journal of the Indian Academy of Mathematics** Vol. 34 No. 2 pp 615-620
15. **Paper Titled: Teaching Applications of Mathematics** **Oct. 2012**
Published in **Souvenir** of **National Workshop** on Application of Mathematics in Different fields of Science pp 27-28
16. **Paper Titled: "Constructible numbers"** **Dec. 2012**

Published in **VEDANG - Journal on National Symposia on History of Mathematics**
(A compendium of Research papers)

17. **Paper Titled: "Vedic Mathematics - A compendium of Sutras"** **May 2013**
Published in **MTM - Mathematical Theory and Modeling** Vol.3, No.6
18. **Paper Titled: "Contra $qp\mathcal{I}$ - Continuous Functions in Ideal Bitopological Spaces"** **2013**
Published in **MTM - Mathematical Theory and Modeling** Vol.3, No.9
19. **Paper Titled: "Legal Measures to Combat Violence against Women- Thereby Facilitating Women Empowerment"** **2013**
Published in a **BOOK** Titled **Gender Violence**
20. **Paper Titled: "Mathematics of Gender Budgeting 'A catalyst for Gender Equity and Women Empowerment'"**
Published in a **BOOK** Titled **Empowerment of Women through Gender Budgeting** **2013**
21. **Paper Titled: "Connectedness in Ideal Bitopological Spaces"** **2014**
Published in **IJERA-** International Journal of Engineering Research and Applications Vol.4, Issue 1, Version 3 pp 165-167
22. **Paper Titled: "Contra $qs\mathcal{I}$ - continuous functions in Ideal Bitopological Spaces"** **Feb.2014**
Published in International Journal of Science and Research Vol. 3(2)
23. **Paper Titled: "Spiritual Teachings of Swami Vivekananda"**
Published in a **Book** Titled **Swami Vivekananda And Global Education** Vedanta Publications Lucknow Chapter XII pp 117-132 **2014**
24. **Paper Titled: "The Ramakrishna Movement"** **2014**
Published in **NINAD** Special Issue on **Swami Vivekananda in the Present Context** Vol. XII,
25. **Paper Titled: " \mathcal{I} - Continuous functions in Ideal Bitopological Spaces" *** **2014**
Published in American Journal of Engineering Research, Vol.3 (3)
* Publisher Country United States
26. **Paper titled: "Extremally Disconnectedness in Ideal Bitopological spaces" **** **July 2014**
Published in General Math Notes, Vol. 23(1), pp. 68-78
** Publisher Country Jordan
27. **Paper Titled: "Contra $q\mathcal{I}$ - Continuous Functions in Ideal Bitopological Spaces"** **2015**
Published in Mathematical Sciences International Research Journal, Vol.4 Issue 1 ISSN 2278-8697 pp 287-289
28. **Paper Titled: "Bio Mathematics – A Special Reference to Matrices"** **2015**
Published in **MTM - Mathematical Theory and Modeling** Vol.5, No.10
29. **Paper Titled: "Quasi α - Local Functions in Ideal Bitopological Spaces"** **2015**
International Journal of Science and Research Vol 4,issue 12 pp 649-653
30. **Paper Titled: "On $qa\mathcal{I}$ -Irresolute Mappings"** **2016**
Published in American Journal of Mathematics and Sciences Vol. 5, Issue 1; ISSN 2250-3102 pp1-4
31. **Paper Titled: "Use of Mathematics to Stimulate the Biological World"** **2017**
Published in Proceedings/Handbook of the International Science Congress Thailand 2017- ISCTH 2017 ISBN 978-93-86435-17-0 pp.24-25
32. **Paper Titled: " $qp\mathcal{I}$ -Connectedness in Ideal Bitopological Spaces"** **2018**
Published in Mathematical Sciences International Research Journal, Vol. 7 Spl. Issue 4 pp. 134-137

(ISSN: 2278-8697)

33. **Paper Titled: “ $q\mathcal{I}$ -Connectedness in Ideal Bitopological Spaces”** **Aug. 2018**
Published in Journal of Emerging Technologies and Innovative Research, Vol. 5, Issue 8
(e-ISSN: 2349- 5162) pp. 788-791. (ISSN-2349-5162)
34. **Paper Titled: “ $q\mathcal{I}$ -Connectedness in Ideal Bitopological Spaces”** **Sept. 2018**
Published in (IJMTE) International Journal of Management, Technology and Engineering, Vol.
8, Issue IX pp. 234-239. (ISSN NO: 2249-7455)
35. **Paper Titled: “Trigger The Mathematics Within”** **Jan. 2019**
Published in Proceedings/Handbook of the International Multidisciplinary Academic Conference Dubai,
UAE, IMAC DUBAI 2019 pp.21-22. (ISBN 978-93-86435-67-5)
36. **Paper Titled: “A Roadmap to NAAC Assessment & Accreditation: Emphasis on Criterion V’** **2020**
Published in a **BOOK** Titled Quality Education pp. 227-237 (ISBN 978-93-88316-91-0)
37. **Paper Titled: “Usage of Mathematics as a Pedagogic Tool in Teaching Economics: A Case Study”** **2020**
Published in a **BOOK** Titled Interdisciplinary Approach in Education and Industrial Requirements
pp.13-25 (ISBN: 978-81-947377-0-4)
38. **Paper Titled: “Online Education: Opportunity Post Covid 19”** **2020**
Published in a **BOOK** Titled Pandemics 2020 Opportunities & Challenges pp. 61-65.
(ISBN: 978-81-945302-6-8) <https://online.fliphtml5.com/jhnr/uznl/#p=1>
39. **Paper Titled: “Bloom’s Digital Taxonomy & Online Education”** **2021**
Published in a **BOOK** Role of Resources and Mind Mastering Strategies pp. 127-130
(ISBN 978-93-91267-24-)
40. **Paper Titled: $q\mathcal{I}$ - Connectedness in Ideal Bitopological Spaces”** **2021**
Published in Mathematical Sciences International Research Journal Vol.10 Issue 2 pp. 47-5
Vol.10 Issue 2 (ISSN: 2278- 8697) <https://www.imrfjournals.com/msirj102>
41. **Paper Titled: Quasi Semi-Pre Local Functions in Ideal Bitopological Spaces** **2023**
Published in Mathematical Sciences International Research Journal, Vol. 12 Issue 1 pp. 40-45
(ISSN: 2278-8697) <https://www.imrfjournals.com/msirj102>

HIGHLIGHTS

PhD- Successfully Complete (PhD Notification- 16th March 2016)

Also **Pre- PhD Course Work-** Successfully Complete

MINOR RESEARCH PROJECT:

Completed Minor Research Project titled Ideal Bitopological Space, UGC, CRO, Bhopal worth Rs. 1,80,000
(2012-14)

REVIEWER & ASSISTANT EDITOR of (ISSN 2278-0769) *Global Research Journal on Mathematics and Science Education* Published by **The Center for Mathematics Education and Research, India** since 2012

REVIEWER of International Journal of Mathematical Research- IJMR, and Asian Research Journal of Mathematics

Reviewed Research Papers

1. Reviewed Research Article titled 'The Importance of Computers with MATLAB Software in the Teaching & Learning of Geometry in Space'
2. Reviewed Research Article titled 'Bayesian Regression Method with Gaussian And Binomial Links For The Analysis Of Nigerian Children Nutritional Status (Stunting)'
3. Reviewed Research Article titled 'gr-connectedness in topological spaces'

OTHER ASSIGNMENTS

1. Invited Faculty for UGC Scheme for Coaching for NET Exam in MH Women Autonomous College of Home Science & Science, Jabalpur
2. Life Member- Indian Mathematical Society
3. Life Member- All India Researchers Association
4. Life Member- Mahakoushal Vigyan Parishad
5. Life Member- International Education Research Centre
6. Member-IQAC, St. Aloysius College, Jabalpur.
7. Member- Board of Studies (Mathematics)- Maharishi Mahesh Yogi Vedic Vishwavidyalaya
8. Member- Board of Studies, Mathematics Department, SAC
9. Member- Board of Studies, Department of Mathematics & Computer Science, MH College of Home Science and Science (Autonomous), Jabalpur.
10. Assistant Superintendent- Exams, St. Aloysius College, Jabalpur.
11. Coordinator, Women's Cell, St. Aloysius College, Jabalpur.
12. Nodal Officer- Electoral Literacy Club, St. Aloysius College, Jabalpur

AWARDS

• Awards to students under guidance of Dr. Mandira Kar:

1. Ms. Kiran Kumari (M.Sc. IV Semester- Mathematics) is the recipient of the **Youngest Scientist with Zeal Award** for presenting jointly a research paper 'Operations Research - A Tool for Entrepreneurship' under the **guidance** of Dr. Mandira Kar. The award was presented to her at the 5th International Conference on Advances in Science, Society, Culture, Humanities and Technology 2017 on March 13th 2017.
2. Ms. Sanjiwani Pandey and Ms. Shubhasini Mishra (M.Sc. IV Semester- Mathematics) is the recipient of the **Best Paper in Mathematics Award** for presenting jointly a research paper 'Assessment of Complete Sanitation under Swachh Bharat Abhiyaan (Gramin) - A Mathematical Case Study' under the **guidance** of Dr. Mandira Kar. The award was presented to them at the National Seminar on Parallel Computing and Optimization Techniques 23-24 Feb 2019

• Awards to Dr. Mandira Kar:

1. She is the **recipient** of the **International Multidisciplinary Research Foundation Achievers Award**. *'In recognition of the consistent superior performance in Mathematics and upon the recommendations of the committee on IMRF Academic Awards'*. The award was presented by IMRF Thailand Chapter on the eve of IMRF's 58th International Gathering- ISCTH 2017 at Asian Institute of Technology, Bangkok, Thailand on Oct. 02nd 2017.

2. She **received** a **Memento** and a shawl as a token of gratitude from St. Aloysius College Alumni Association, Jabalpur on Teacher's Day 2018.
3. She is the **recipient** of the **Best Paper Award**. The award was presented by Mahratta Chamber of Commerce, Industries and Agriculture Pune in the 2nd International Conference on Emerging Trends in Science, Engineering and Technology on Sept. 29th 2018.
4. She is the **recipient** of the **Distinguished Women Scientist Award in Mathematics**. The award was presented by International Multidisciplinary Research Foundation Dubai Academic Chapter and Sant Baba Bhag Singh University, Punjab, India at the International Multidisciplinary Academic Conference, Dubai on Jan.18th-19th 2019
5. She is the **recipient** of the **Best Paper Award**. The award was presented by IMRF Institute of Education and Research Dubai Chapter and Sant Baba Bhag Singh University, Punjab, India at the International Conference on Advances in Mathematics, Computers and Physical Sciences Dubai 2019 on Jan.18th-19th 2019
6. She **received** a **Memento** and a shawl as a token of gratitude from IMRF Institute of Education and Research Dubai Chapter and Sant Baba Bhag Singh University, Punjab, India for delivering a Keynote Talk at the International Conference on Advances in Mathematics, Computers and Physical Sciences Dubai 2019 on Jan.18th-19th 2019
7. She is the **recipient** of the **Innovative Researcher & Dedicated Excellent Educationalist Award- Mathematics**. Received online from The Society of Innovative Educationalist & Scientific Research Professional, Chennai in The Innovative Global Scientific Researchers Educationalist-Professionals & Journalist Awards & Fellowship Honors Convocation 2020-21 *'To your outstanding extra ordinary skills & performance, merits, highest qualification. Innovative knowledge, development in scientific research & thesis, dissertation, projects, advancement in educational-professional initiatives, excellent exposure, practice, activities, paper publication, active participation for seminar & workshop, top credential & experience, educational-professional membership, contribution, continued dedicated services, high profile, scientific research journal editorial board member, sustained accomplishment, achievement, etc.,'*

Organizing Conferences/Workshops:

1. She was **Convenor** - **National Training Programme** on 'The Art of Mathematical Modeling as Teaching Pedagogy' on 09 - 10 Feb. 2018. The training programme was sponsored by United Board for Christian Higher Education in Asia.
2. She was the **Chief Organizing Secretary** - **National Seminar** on 'Envisioning a Healthy India: Health, Hygiene, Mother and Child' 21-23 Feb. 2019 Organized by St. Aloysius'(Autonomous) College, JBP (M.P) Sponsored by UGC
3. She was **Coordinator** - **National Online Certificate Course** on 'Research Documentation through Latex' on 17-25 August 2020)
4. She was **Convenor** - **One Week Training Programme** on 'Vedic Mathematics' 13-19 July 2021
5. She was **Coordinator**- Online International Conference- 'Advances in Physical Mathematical & Computational Sciences' SAC, JBP, M.P. 12-13 June 2020
6. She was **Coordinator** - 2nd Online International Conference on 'Advances in Physical Mathematical Computational Sciences' 23-24 July 2021

7. She was the **Chief Organizing Secretary**- 3rd Online International Conference on ‘Advances in Physical Mathematical & Computational Sciences’ 24-25 June 2022
8. She was **Convenor** - National Webinar on ‘History and Recent Trends in Mathematics’ 22 Dec. 2022
