

FACULTY PROFILE



NAME: MRS. KAVITA SAKURE
DESIGNATION: ASSISTANT PROFESSOR
DEPARTMENT: MATHEMATICS
Institution: Govt. Digvijay Autonomous PG College, Rajnandgaon
e-mail address: kavitaage@gmail.com
kavitasakure@gdcr.ac.in
CONTACT NO.: 8817329005

OVERVIEW:

	Subject/Title for PhD	Year	From (University)
Graduation	B.Sc. (Computer Science)	2006	Pt. Ravishankar Shukla University, Raipur, Chhattisgarh
Post-Graduation	M.Sc. (Mathematics)	2008	Pt. Ravishankar Shukla University, Raipur, Chhattisgarh
M.Phil.	M.Phil. (Mathematics)	2009	Pt. Ravishankar Shukla University, Raipur, Chhattisgarh
Ph.D.	Mathematics Title: A Study of Convergence of Various Iterative Algorithms for Nonlinear Mappings	Pursuing (Thesis Submitted)	Hemchand Yadav University, Durg

TEACHING EXPERIENCE:

1. UG - 10 yrs
2. PG - 10 yrs

COURSES TAUGHT:

1. Fuzzy Sets and their Applications, M.Sc. Final (Mathematics)
2. Topology, M.Sc. Previous (Mathematics)
3. Analysis, B.Sc. Part III
4. Advanced Calculus, B.Sc. Part II
5. Vector Analysis and Geometry, B.Sc. Part I

ADDITIONAL RESPONSIBILITIES:

1. Nodal officer of Institutional Development Plan (IDP) of Govt. Digvijay Auto. P.G. College, Rajnandgaon
2. Member of Women Cell, Govt. Digvijay Autonomous PG College, Rajnandgaon
3. Member of Feedback Committee, Govt. Digvijay Autonomous PG College, Rajnandgaon

PUBLISHED PAPERS:

1. Sakure K., Dashputre S., Qualitative Behaviour of Solutions of Hybrid Fractional Integral Equation with Linear Perturbation of Second Kind in Banach Space, Malaya Journal of Matematik 6 (3) (2018), 506-513.
2. Sakure K., Existence of Solution of Nonlinear Volterra-Hammerstein-Fredholm Integral Equation in Banach Algebra, Asian Journal of Mathematics and Computer Research, 24 (2) (2018), 96-103.
3. Sakure K., Dashputre S., Nonlinear Functional Integral Equation : Existence, Global Attractivity and Positivity of Solutions, Malaya Journal of Matematik, 8(2) (2020), 389-396.
4. Dashputre S., Padmavati, Sakure K., On Approximation of Fixed Point in Busemann Space via Generalized Picard Normal S-iteration Process, Malaya Journal of Matematik 8(3) (2020), 1055-1062.
5. Dashputre S., Padmavati, Sakure K., Strong and (Δ) -Convergence Results for Generalized Nonexpansive Mapping in Hyperbolic Space, Communications in Mathematics and Applications, 11(3) (2020), 389-401.
6. Dashputre S., Padmavati, Sakure K., Fixed Point Approximation of Countably Infinite Family of Nonexpansive Mappings, South East Asian Journal of Mathematics and Mathematical Sciences, 17 (1) (2021), 361-382.
7. Dashputre S., Padmavati, Sakure K., Convergence Results for Proximal Point Algorithm in Complete CAT(0) Space for Multivalued Mappings, Journal of Indonesian Mathematical Society, 27 (1) (2021), 29-47.
8. Dashputre S., Padmavati, Sakure K., Inertial Picard Normal S-iteration Process, Nonlinear Functional Analysis and Applications, 26 (5) (2021), 995-1009.

9. Jong Kyu Kim, Samir Dashputre, Padmavati, Kavita Sakure, Generalized α -nonexpansive mappings in Hyperbolic Spaces, *Nonlinear Functional Analysis and Applications*, 27(3) (2022), 449-469.
10. Dashputre S., Sakure K., Dewangan K.K., Fixed Point Approximation of Modified k-iteration Method in CAT(k) space, *Journal of Mathematical Extension*, 17 (1) (2023), 1-13.

BOOK CHAPTERS:

1. Kavita Sakure, Existence of Solution of Nonlinear Functional Integral Equation via Measure of Non-compactness, *Theory and Applications of Mathematical Science*, Vol. 12, Chapter 8, 115-125 (2020), Book Publisher International, West Bengal, India.
<https://stm1.bookpi.org/index.php/tams-v2/article/view/1027>
ISBN 978-93-89816-38-9 (Print) ISBN 978-93-89816-39-6 (eBook)
DOI: [10.9734/bpi/tams/v2](https://doi.org/10.9734/bpi/tams/v2)
2. Samir Dashputre, Padmavati, Kavita Sakure, Iterative Construction of Fixed Point of Mean Nonexpansive Mappings in Hyperbolic Spaces, *Role of Applied Sciences in Social Implications, Volume D: Mathematics & Computer Science*, Chapter 7, Page 51-58 (2023), ISBN No. 78-81-959977-0-1 Publisher: Probecell Press, Bhilai, Chhattisgarh

MINOR RESEARCH PROJECTS (COMPLETED AND ONGOING):

1. Investigator of Minor Research Project entitled "Application of Fixed Point Theorems to Nonlinear Integral Equations" funded by Autonomous Cell, Govt. Digvijay Auto. P.G. College, Rajnandgaon. Session 2018-19 (Completed).
2. Co-investigator of Minor Research Project entitled "Approximation of Fixed Points in Hyperbolic Spaces" of Autonomous examination Cell, Govt. Digvijay Autonomous P.G. College, Rajnandgaon, Session 2022-23 (Ongoing).

INSTITUTIONS WORKED IN:

1. As Assistant Professor, Department of Mathematics, Govt. Digvijay Autonomous P.G. College, Rajnandgaon, Chhattisgarh (From August 2017 to Till Date)
2. As Assistant Professor, Department of Mathematics Govt. Nehru P.G. College, Dongargarh, Distt. Rajnandgaon, Chhattisgarh (From November 2012 to August 2017)

LINK OF YOUTUBE CHANNEL:

1. <http://www.youtube.com/@kavitaage>

Paper Presented in Seminar/ Conference:

National:

1. Fixed point approximation of generalized (α, β) -nonexpansive mappings in National conference on “New Trends in Applied Mathematics” during 11-12 October 2021 organized by Department of Mathematics, University Institute of Engineering and Technology, Chhatrapati Shahuji Maharaj University, Kanpur, U.P.
2. Fixed Point Approximation of Generalized α -nonexpansive Mappings in Hyperbolic Spaces in National Seminar on Modelling and Simulation (The Applied World of Mathematics) on 3 July 2021 organized by Department of Mathematics, Govt. Pt. Shyamcharan Shukla College, Dharsiwa, Raipur, Chhattisgarh, India
3. Convergence of proximal point algorithm, National Seminar on Recent Developments in Mathematics and its Application during 14 February 2020 organized by Govt. Dr. Baba Saheb Bhimrao Ambedkar P.G. College, Dongargaon, Chhattisgarh
4. Nonlinear Functional Integral Equation : Existence and Global Attractivity of the Solution in National Interdisciplinary Research Seminar cum Conference on Recent Trends and development in Science for Humanity during 13-14 Jan. 2019 at Govt. E.Raghvendra Rao P.G. Science College, Bilaspur, Chhattisgarh.
5. Extremal Solution of Nonlinear Integral Equation in National Seminar on Advanced Research in Physics : Its Role in Development of Society during 29 Jan. 2018 at Govt. Digvijay Auto. P.G. College, Rajnandgaon, Chhattisgarh.

International:

1. Iterative construction of fixed point of mean nonexpansive mappings in hyperbolic spaces in First International Conference on Role of Applied Sciences in Social Implications (IC-RASSI 2023) during 6-8 February 2023 organized by Faculty of Science, Govt. Digvijay Autonomous P.G. College, Rajnandgaon, Chhattisgarh, India
2. Approximating Fixed Point of a General Class of Nonexpansive Mappings in Hyperbolic Spaces in International Conference on Nonlinear Analysis and Applications (ICNAA) 2022 (Online) during 22-23 November 2022 organized by Department of Mathematics, Assam Don Bosco University, India in the collaboration with the Institute of Physics and Mathematics, Technological University of the Mexteca, Mexico and Department of Mathematics, Ramniranjan Jhunjhunwala College (Autonomous), Mumbai, India.
3. On convergence results for Picard Normal S-iteration Process with their Applications in International Conference on Dynamical Systems and Numerical Methods (ICDSNM-22) (Online) during 20-21 May 2022 organized by Department of Mathematics, Jamia Millia Islamia, New Delhi, India
4. Some Convergence theorems for generalized nonexpansive mappings in hyperbolic spaces in International Conference on Mathematical Analysis and Applications

(ICOMAA 2022) (Online) during 28-29 June 2022 organized by Department of Mathematics, University of Kalyani, India

5. Multivalued generalized α - nonexpansive mappings in hyperbolic spaces in 27th International Conference of International Academy of Physical Sciences (CONIAPS XXVII) on “Functional and Numerical Analysis” during 26-28 October 2021 organized by SoS in Mathematics, Pt. Ravishankar Shukla University, Raipur, C.G.
6. Convergence results for generalized (α , β)-nonexpansive mappings”in Two Days International Conference on “Recent Trends in Modern Mathematics” during 23-24 September 2021 organized by Department of Mathematics, St. John’s College, Palayamkottai, Tirunelveli, Tamil Nadu
7. Inertial Picard Normal S-iteration Process in International e-conference on Nonlinear Analysis and its applications during 27-29 July 2020 organized by Department of Mathematics, Dayanand Science College, Latur, Maharashtra India.
8. Existence of Solution of Nonlinear Functional Integral Equation via Measure of Noncompactness and Petryshyn Fixed Point Theorem in International Conference on Mathematical Science and Application during 23-25 Feb. 2018 at Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh.
9. Existence of Extremal Solutions of Nonlinear Functional Integral Equation in International Conference on Analysis and its Application during 19-21 Nov. 2011 at Aligarh Muslim University, Aligarh, India.

ORIENTATION / REFRESHER COURSE ATTENDED:

1. Orientation Program: Theme “Quality of Higher Education” during 07 Jan. 2017 to 03 Feb. 2017 at HRDC, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh.
2. Summer Special Course: Theme “Innovation in Teaching and Research” during 20 May 2017 to 09 June 2017 at HRDC, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh.
3. Refresher Course on Mathematics during 16.03.2021 to 30.03.2021 Organized by Training and Learning Centre and Department of Mathematics under the aegis of Pandit Madan Mohan Malviya National Mission on Teacher and Teaching, Ramanujan College, University of Delhi, New Delhi

FDP ATTENDED:

1. Participated in Five Day Faculty Development Programme on “The Challenges and Opportunities for Women in Science, Technology, Engineering and Mathematics (STEM)” during 17-21 October 2022 organized by Department of Civil Engineering, K.S. School of Engineering and Management , Bengaluru.

2. Participated in National One week international e-faculty development programme on “ICT Tools for Effective Teaching Learning ” during 23-28 May 2022 organized by Amar Sewa Mandal’s Kamla Nehru Mahavidyalaya, Nagpur, Maharashtra
3. One week virtual National Faculty Development Program on “Scientific Documentation using LATEX” during 09.08.2021 to 14.08.2021 organized by Department of Engineering Mathematics and Humanities, Sagi Rama Krishna Engineering College (Autonomous), Bhimavaran, Andhra Pradesh, India
4. “Faculty Development Program for Teaching and Non-teaching Staff” during 6-13 January 2022 organized by Capacity Building Committee and Department of Mathematics, Govt. Digvijay Auto. P.G. College, Rajnandgaon.
5. Five Days National Level Faculty Development Program on “Modern methods for effective teaching and learning” during 17-21 August 2021 organized by Department of Mathematics, Rathinam College of Arts and Science, Coimbatore, Tamil Nadu
6. Participated in One week international e-faculty development programme on “Fixed Point Theory and its Applications” during 15-19 September 2020 organized by Department of Mathematics and Statistics, School of Basic Sciences, Manipal University, Jaipur
7. Participated in Faculty Development Programme during 04-13 March 2021 organized by Govt. Digvijay Auto. P.G. College, Rajnandgaon
8. Participated in One week international e-faculty development programme on “Fixed Point Theory and its Applications” during 15-19 September 2020 organized by Department of Mathematics and Statistics, School of Basic Sciences, Manipal University, Jaipur

SEMINAR/ WORKSHOP/ CONFERENCE/ WEBINAR ATTENDED

1. Participated Two Days International Conference on “Recent Trends in Mathematical and Computational Sciences” during 28-29 July 2022 organized by Department of Mathematics and Department of Statistics, Amity Institute of Applied Sciences, Amity University, Kolkata, West Bengal (Online).
2. Participated in International Webinar on “Mathematical Modeling of Biology and Medicine ” on 13 May 2022 organized by Department of Mathematics, Vidyasagar Metropolitan College, Kolkata, West Bengal, India
3. Participated International Webinar on “Mathematics of Computer Vision” on 28 April 2022 organized by Department of Mathematics and Humanities, Maharshi Markandeshwar (Deemed to be University), Mullana-Ambala, Haryana, India (Online).
4. Participated in On Week National Level Workshop on “New NAAC Accreditation Frame Work & Awareness (Special Reference to Seven Criteria)” during 7-15 June

2022 organized by IQAC of Govt. Digvijay Autonomous P.G. College, Rajnandgaon in collaboration with Arts and Science College, Nachangaon, Pulgaon.

5. Participated Seminar on “Indian Mathematician and their Contributions (ISIMC-2022)” during 21-22 December 2022 organized by Department of Mathematics, School of Physical Sciences, Central University of Karnataka, Kalaburagi, Karnataka. (Online)
6. Participated in Two Days State Level online Workshop on “The Use of ICT enabled Tools for Teaching, Learning and Evaluation in Higher Education Institutions” during 07-08 May 2022 sponsored by National Assessment and Accreditation Council (NAAC) organized by IQAC, Durgapur Govt. College, Durgapur, West Bengal
7. Participated in One Day State Level Workshop on “Curriculum Framework of Implementation of CBCS/LOCF under NEP 2020” on 09 July 2022 organized by Autonomous Examination Cell and IQAC of Govt. Digvijay Autonomous P.G. College, Rajnandgaon
8. Participated in One Day Workshop on “Research Paper Writing and Publication” on 20 October 2022 organized by Research Committee and IQAC of Govt. Digvijay Autonomous P.G. College, Rajnandgaon
9. 2nd International Conference on “Advances in Physical, Mathematical and Computational Science” during 23-24 July 2021 organized by St. Aloysius’s College (Autonomous), Jabalpur, M.P., India
10. International Webinar on “Probability Theory and Reliability Theory (IWPRT-2021)” on 20 November 2021 organized by Shri Shankaracharya Technical Campus, Bhilai, C.G.
11. National Webinar on “Research Possibilities and Applications in Vedic Mathematics” on 28 September 2021 organized by Department of Mathematics, Shri Raghvendra Singh Hazari Govt. Degree College, Damoh, M.P.
12. National Webinar on “Recent Trends in Maths” on 31.05.2021 organized by Govt. Nehru P.G. College, Dongargarh, C.G.
13. National Webinar on “Mathematical Modelling and Social Choice Theory” on 27 September 2021 organized by Department of Mathematics, Shri Shankaracharya Technical Campus, Bhilai, C.G.
14. Talk on “Ramanujan’s Life and Work : Glimpses” on 22 December 2021 organized by Department of Mathematics, Rajeev Gandhi Proudgyiki Vishwavidyalaya, Bhopal, M.P.
15. Workshop on “Linear Transformation and Canonical Form” on 27 November 2021 organized by Department of Applied Mathematics, Shri Shankaracharya Technical Campus, Bhilai, C.G.

16. Quiz on “Indian Mathematics” on 08.06.2021 organized by TMM College of Arts and Science, Kulathur, Tamil Nadu.
17. Indian Woman and Mathematics: Regional Conference on Research and Opportunities on 21.02.2021 organized by Department of Mathematics, Indian Institute of Technology, Bhubaneswar
18. Online International Conference on Advances in Physical, Mathematical and Computational Sciences during 12-13 June 2020 organized by St. Aloysius’s Autonomous College, Jabalpur, M.P., India
19. Ph. D. Course Work related Workshop during 15-24 June 2020 organized by Hemchandra Yadav University, Durg
20. Workshop on “Computer Training for College Staff (Teaching and Non-teaching)” during 07-14 Dec. 2018 at Govt. Digvijay Auto. P.G. College, Rajnandgaon.
21. National seminar on “Impact of Social Media on Society” during 06-07 February 2020 at Department of Sociology, Govt. Digvijay P.G. College Rajnandgaon, C. G.
22. State Level Workshop on “Regional Mathematical Olympiad” during 2 Oct. 2018 at Govt. V.Y.T. P.G. Autonomous College, Durg.
23. Workshop on “Computer Training for College Staff (Teaching and Non-teaching)” during 22-27 Dec. 2018 at Govt. Digvijay Auto. P.G. College, Rajnandgaon.

TRAINING PROGRAM:

1. Participated in the Training Programme on “Nonlinear Analysis with Applications to Optimization and Game Theory” during 16-19 Nov. 2011 at Aligarh Muslim University, Aligarh, India.

ONLINE CERTIFICATE COURSE:

1. Latex 101x: Latex for Students, Engineers and Scientists during 24.09.2019 to 02.12.2019 (Ten weeks) organized by IIT, Bombay.

PROGRAM ORGANIZED:

1. Course coordinator of Value Added Certificate Course “Scientific Document Preparation using LATEX” during 1 September 2022 to 20 September 2022 organized by Department of Mathematics, Govt. Digvijay Auto. P.G. College, Rajnandgaon
2. Organizing Secretary of “National Mathematics Day 2022” sponsored by Chhattisgarh Council of Science and Technology, Raipur and National Council of Science and Technology Communication (NCSTC), DST, Govt. of India, New Delhi.
3. Organizing Secretary of National Webinar “Advances in Pure and Applied Mathematics” during 17-18 September 2021 organized by Department of Mathematics, Govt. Digvijay Auto. P.G. College, Rajnandgaon

4. Course Coordinator of Value Added Course “Scientific Document Preparation Using LATEX” organized during 20 October 2021 to 24 November 2021 by Department of Mathematics, Govt. Digvijay Auto. P.G. College, Rajnandgaon
5. Committee member of Three Days Workshop on “Designing Destiny (Through Heartfulness Meditation)” during 12-14 Augst 2021 organized Autonomous Examination Cell, Govt. Digvijay Auto. P.G. College, Rajnandgaon
6. Co-convenor of Celebration of National Mathematics Day 2018 sponsored by Chhattisgarh Council of Science and Technology, Raipur and National Council for Science and Technology Communication (NCSTC), DST, Govt. of India, New Delhi.

INVITED TALK:

1. Delivered Lecture on Value Added Course on Writing Research Paper in LATEX during 31 October 2022 to 12 November 2022 organized by Department of Mathematics, Govt. V.Y.T. Auto. P.G. College, Durg in collaboration with Govt. PG Madhav Science College, Ujjain (M.P.), Institute for Excellence in Higher Education, Bhopal (M.P.), Bhilai Institute of Technology, Durg (C.G.) and Bastar University, Jagdalpur (C.G.).
2. Delivered Lecture on Compactness and Continuity with Applications in Topological Spaces on 03 March 2023 organized by Department of Mathematics, Shaheed Durwasa Nishad Govt. College, Arjunda, Distt. Balod, Chhattisgarh
3. National e-certificate course on “Writing research Paper in LATEX” during 12-24 July 2021 organized by Govt. V.Y.T. P.G. College, Durg
4. “Continuity and Differentiability of functions of one and multi variables” during 27 July 2021 organized by Govt. Nehru P.G. College, Dongargarh, Distt. Rajnandgaon
5. Delivered Lecture on Limit, Continuity and organized by Department of Mathematics, Shaheed Durwasa Nishad Govt. College, Arjunda, Distt. Balod, Chhattisgarh

EDITOR:

1. Book entitled “Role of Applied Sciences in Social Implications”, Volume D: Mathematics & Computer Science, Chapter 7, Page 51-58, ISBN No. 78-81-959977-0-1 Publisher: Probecell Press, Bhilai, Chhattisgarh

REVIEWER:

1. Applied Mathematics and Applications (Elsevier Journal), <https://www.elsevier.com/locate/amc>
2. Asian Research Journal of Mathematics, ISSN: 2456-477X <http://dx.doi.org/10.9734/arjom>
3. American Journal of Applied Mathematics. ISSN Print: 2330-0043, ISSN Online: 2330-006X <https://www.sciencepublishinggroup.com/j/ajam>

MEMBER OF PROFESSIONAL BODIES:

1. **Indian Mathematical Society, Pune, with Membership ID L/2017/89.**
2. **Rosalind Membership of London Journal Press, UK with Membership ID#JN01715.**

