

Parameter	Data
Faculty Name with Prefix	Dr. NIKHILESH METIYA
Designation (Assistant/ Associate/ SACT Professor)	Assistant professor Stage-II
Educational Qualification	M.Sc., Ph.D.
Contact official email (Mobile no. optional)	nikhileshm@smc.edu.in
Department	Mathematics
Field of Specialization/ Area of Interest	Advanced Functional Analysis and Advanced Topology
Teaching experience (in Years)	17 Yrs
Industrial experience (in years give details)	----
Papers/Books Published (Details as reference)	62
1. Binayak S. Choudhury, N. Metiya, Fixed points of weak contractions in cone metric spaces, Nonlinear Anal. 72 (2010), 1589 - 1593. 2. Binayak S. Choudhury, N. Metiya, The point of coincidence and common fixed point for a pair of mappings in cone metric spaces, Comput. Math.Appl. 60 (2010), 1686 - 1695. 3. Binayak S. Choudhury, P. Konar, B. E. Rhoades, N. Metiya, Fixed point theorems for generalized weakly contractive mappings, Nonlinear Anal.74 (2011), 2116 - 2126. 4. Binayak S. Choudhury, N. Metiya, A. Kundu, Coupled coincidence point theorems in ordered metric spaces, Ann. Univ. Ferrara 57 (2011), 1 - 16. 5. Binayak S. Choudhury, N. Metiya, Multivalued and singlevalued fixed point results in partially ordered metric spaces, Arab J. Math. Sci.17 (2011), 135 - 151. 6. Binayak S. Choudhury, N. Metiya, Fixed point theorems for almost contractions in partially ordered metric spaces, Ann. Univ. Ferrara 58 (2012), 21 - 36. 7. I. Bhaumik, K. Das, N. Metiya, Binayak S. Choudhury, A coincidence point result by using altering distance function, J. Math. Comput. Sci. 2 (2012), 61 - 72.	

8. Binayak S. Choudhury, N. Metiya, Coincidence point and fixed point theorems in ordered cone metric spaces, J. Adv. Math. Stud. 5 (2012), 20 - 31.
9. Binayak S. Choudhury, N. Metiya, Fixed point and common fixed point results in ordered cone metric spaces, An. St. Univ. Ovidius Constanta 20 (2012), 55 - 72.
10. Lokesh Kumar, T. Som, N. Metiya, Extension of Caristi's theorem to cone metric space, International Journal of Functional Analysis, Operator Theory and Applications 4 (2012), 97 - 107.
11. Binayak S. Choudhury, N. Metiya, P. Maity, Coincidence point results of multivalued weak C- contractions on metric spaces with a partial order, J. Nonlinear Sci. Appl. 6 (2013), 7 - 17.
12. Binayak S. Choudhury, N. Metiya, P. Das, A coupled common fixed point theorem for a family of mappings, Nonlinear Analysis: Modelling and Control 18 (2013), 14 - 26.
13. Binayak S. Choudhury, N. Metiya, Coincidence point theorems for a family of multivalued mappings in partially ordered metric spaces, Acta Universitatis Matthiae Belii, series Mathematics 21 (2013), 10 - 23.
14. Binayak S. Choudhury, Lokesh Kumar, T. Som, N. Metiya, The point of coincidence and common fixed point results in cone metric space, Advances in Fixed Point Theory 3 (2013), 77- 92.
15. Binayak S. Choudhury, N. Metiya, Mihai Postolache, A generalized weak contraction principle with applications to coupled coincidence point problems, Fixed Point Theory Appl. 2013 (2013) 152.
16. Sumit Chandok, Binayak S. Choudhury, Nikhilesh Metiya, Fixed point results in ordered metric spaces for rational type expressions with auxiliary functions, J. Egypt. Math. Soc. 23 (2015), 95 - 101.
17. Binayak S. Choudhury, N. Metiya, Fixed point results for mapping satisfying rational inequality in complex valued metric spaces, J. Adv. Math. Stud. 7 (2) (2014), 79 - 89.
18. Binayak S. Choudhury, Lokesh Kumar, T. Som, N. Metiya, A weak contraction principle in partially ordered cone metric space with three control functions, International Journal of Analysis and Applications 6 (2014), 18 - 27.
19. Binayak S. Choudhury, N. Metiya, P. Maity, Best proximity point results in complex valued metric spaces, International Journal of Analysis 2014 (2014), Article ID 827862, 6 pages.

20. H. K. Nashine, Binayak S. Choudhury, N. Metiya, Coupled coincidence point theorems in partially ordered metric spaces, *Thai J. Math.* 12 (3) (2014), 665 - 685.
21. Binayak S. Choudhury, A. Kundu, N. Metiya, Fixed point results for Ciric type weak contraction in metric spaces with applications to partial metric spaces, *Filomat* 28:7 (2014), 1505-1516.
22. B. S. Choudhury, N. Metiya, C. Bandyopadhyay, Fixed points of multivalued α -admissible mappings and stability of fixed point sets in metric spaces, *Rend. Circ. Mat. Palermo* 64 (2015), 43 - 55.
23. Binayak S. Choudhury, Pranati Maity, Nikhilesh Metiya, Best proximity point theorems with cyclic mappings in setvalued analysis, *Indian J. Math.* 57(1) (2015), 79 – 102.
24. Binayak S. Choudhury, Nikhilesh Metiya, Pulak Konar, Fixed point results in partially ordered complex valued metric spaces for rational type expressions, *Bangmod Int. J. Math. & Comp. Sci.* 1 (1) (2015), 55 – 62.
25. Binayak S. Choudhury, Nikhilesh Metiya, Pulak Konar, Fixed point results for rational type contraction in partially ordered complex valued metric spaces, *Bulletin of the International Mathematical Virtual Institute* 5 (2015), 73 – 80.
26. Binayak S. Choudhury, Nikhilesh Metiya, Pulak Konar, Common fixed point results in ordered metric spaces with three control functions, *Scientific Voyage* 1 (2) (2015), 12-22.
27. Binayak S. Choudhury, Nikhilesh Metiya, T. Som, C. Bandyopadhyay, Multivalued fixed point results and stability of fixed point sets in metric spaces, *Facta Universitatis (NIS) Ser. Math Inform.* 30 (4) (2015), 501–512.
28. Binayak S. Choudhury, Nikhilesh Metiya, Mihai Postolache, Pulak Konar, A discussion on best proximity point and coupled best proximity point in partially ordered metric spaces, *Fixed Point Theory Appl.* 2015 (2015) :170
29. Binayak S. Choudhury, Nikhilesh Metiya, Pulak Konar, Coincidence point results with mappings satisfying rational inequality in partially ordered complex valued metric spaces, *Math. Sci. Lett.* 5 (2) (2016), 161-168
30. Binayak S. Choudhury, Pranati Maity, Nikhilesh Metiya Best proximity point results in set-valued analysis, *Nonlinear Analysis: Modelling and Control* 21 (3) (2015), 293–305.
31. Binayak S Choudhury, Nikhilesh Metiya, Georgeta Maniu, Pulak Konar, Best proximity results: optimization by approximate solutions, *Fixed Point Theory Appl.* 2016 (2016) : 79

32. Binayak S. Choudhury, H. Kiziltunc, M. Kir, P. Saha, N. Metiya, A new extension of some well known fixed point theorems in partially ordered metric spaces, *Bangmod Int. J. Math. & Comp. Sci.* 2 (1) (2016), 44 – 57.
33. Binayak S. Choudhury, Nikhilesh Metiya, Pradip Debnath, End point results in metric spaces endowed with a graph, *Journal of Mathematics* 2016 (2016) Article ID 9130107
34. Binayak S. Choudhury, Nikhilesh Metiya, Pulak Konar, Existence and uniqueness of coupled best proximity point in partially ordered metric spaces, *Journal of Nonlinear Analysis and Optimization: Theory & Applications* 7(1) (2016), 145--153.
35. Binayak S. Choudhury, Nikhilesh Metiya , Best proximity results for proximal contractions in metric spaces endowed with a graph, *Cogent Mathematics* (2016) 3 : 1252455.
36. M. Kir, Binayak S. Choudhury, Nikhilesh Metiya, H. Kiziltunc, Existence of fixed point theorems in rectangular metric spaces, *Journal of Advanced Mathematical Studies* 10 (3)(2017), 425 - 434.
37. Binayak S. Choudhury, Nikhilesh Metiya, Sunirmal Kundu, Existence and stability results for coincidence points of nonlinear contractions, *Facta Universitatis (NIˆS) Ser. Math. Inform.* 32 (4) (2017) , 469 – 483.
38. Binayak S. Choudhury, Nikhilesh Metiya, Pradyut Das, On coupled periodic points, *INSIGHT Vol. 1X* (2017), 52 – 57.
39. Binayak S. Choudhury, Nikhilesh Metiya, Sunirmal Kundu, End point theorems of multivalued operators without continuity satisfying hybrid inequality under two different sets of conditions, *Rend. Circ. Mat. Palermo, II. Ser* 68 (2019), 65-81.
40. Binayak S. Choudhury, Nikhilesh Metiya, Debashis Khatua, Common fixed point results in metric spaces endowed with a graph, *Res. Fixed Point Theory Appl.* 2018, Article ID 201818, 8 pages.
41. Binayak S. Choudhury, Pranati Maity, Nikhilesh Metiya, Mihai Postolache, Approximating distance between sets by multivalued coupling with application to uniformly convex Banach spaces, *J. Inequal. Appl.* (2018) 2018 : 130
42. Binayak S. Choudhury, Pranati Maity, Nikhilesh Metiya, Mihai Postolache, simultaneous determination of distance between sets by multivalued kannan type coupling, *International Journal of Analysis and Applications* 16 (5) (2018), 712-732.
43. Binayak S. Choudhury, Nikhilesh Metiya, Pranati Maity, C. Bandyopadhyay, Fixed points of multivalued mappings satisfying hybrid rational Pata-type inequalities, *The Journal of Analysis* 27 (2019), 813–828.

44. Binayak S. Choudhury, Nikhilesh Metiya, Sunirmal Kundu, Fixed point sets of multivalued contractions and stability analysis, *Communications in Advanced Mathematical Sciences I* (2) (2018), 163-171.
45. Binayak S. Choudhury, N. Metiya, Multivalued coincidence point results in partially ordered metric spaces, *Thai J. Math.* 16 (3) (2018), 745 - 756.
46. Binayak S. Choudhury, D. Khatua, N. Metiya, P. Saha, End point results of generalized setvalued almost contractions in metric spaces endowed with a graph, *Bol. Soc. Mat. Mex.* 26 (2020), 211-222
47. Binayak S. Choudhury, Pulak Konar, Nikhilesh Metiya, Coupled coincidence point results with mappings satisfying rational inequality in partially ordered metric spaces, *J. Appl. Math. & Informatics* 37 (1-2) (2019), 1–11.
48. Binayak S. Choudhury, Zoran Kadelburg, Nikhilesh Metiya, Stojan Radenović, A survey of fixed point theorems under pata-type conditions, *Bull. Malays. Math. Sci. Soc.* 43 (2) (2020), 1289-1309.
49. Binayak S. Choudhury, Nikhilesh Metiya, Sunirmal Kundu, Debashis Khatua, Fixed points of multivalued mappings in metric spaces, *Surveys in Mathematics and its Applications* 14 (2019), 1--16.
50. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, Existence, data-dependence and stability of coupled fixed point sets of some multivalued operators, *Chaos, Solitons and Fractals* 133 (2020) 109678
51. Binayak S. Choudhury, Nikhilesh Metiya, A. Kundu, S. Kundu, Existence of tripled fixed points for Feng Liu type contraction, *Bull. Cal. Math. Soc.* **111** (6) (2019), 487--502.
52. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, Existence, error estimation, rate of convergence, Ulam-Hyers stability, well-posedness and limit shadowing property related to a fixed point problem, *Bol. Soc. Paran. Mat.* 40 (2022), 1--10.
53. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, Existence, uniqueness and well-posedness results for relation theoretic coupled fixed points problem using C - class function with some consequences and an application, *The Journal of Analysis* **29** (2021), 227–245.
54. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, P. Maity, Multivalued coupled fixed point results involving Mizoguchi-Takahashi function in metric spaces, *Pan-American Mathematical Journal*, 31 (1) (2021), 29 - 44.

55. Binayak S. Choudhury, Nikhilesh Metiya, D. Khatua, Manuel de la Sen, Fixed point study of generalized rational type multivalued contractive mappings on metric spaces with a graph, *Axioms* 10 (2021): 31.
56. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, Existence, well-posedness of coupled fixed points and application to nonlinear integral equations, *CUBO*, 23(1) (2021), 171-190.
57. Binayak S. Choudhury, T. Gnana Bhaskar, Nikhilesh Metiya, S. Kundu, Existence and stability of coupled fixed point sets for multi-valued mappings, *Fixed point Theory* 22 (2) (2021), 571-586.
58. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, P. Chakraborty, Existence, uniqueness, Ulam-Hyers-Rassias stability, well-posedness and data dependence property related to a fixed point problem in γ -complete metric spaces with application to integral equations, *Nonlinear Analysis: Modelling and Control* 27 (1) (2022), 121-141
59. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, A multivalued fixed point result with associated data dependence and stability study, *Probl. Anal. Issues Anal.* 11(29), No 1 (2022), 45-57.
60. Binayak S. Choudhury, Nikhilesh Metiya (2021) Basic Fixed Point Theorems in Metric Spaces. In: P. Debnath, N. Konwar, S. Radenović. (eds) *Metric Fixed Point Theory. Forum for Interdisciplinary Mathematics*. Springer, Singapore.
https://doi.org/10.1007/978-981-16-4896-0_1
61. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, Coupled fixed point sets with data dependence and stability, *Surveys in Mathematics and its Applications*, 17 (2022), 205-223.
62. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, A. Kundu, Existence of coincidence points for Feng-Liu type multivalued contractions with a singlevalued mapping, *Proyecciones Journal of Mathematics* 41 (3) (2022), 537--551.
63. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, End point of multivalued cyclic admissible mappings, *Thai Journal of Mathematics* 20(3) (2022), 1399-1410.
<https://thaijmath2.in.cmu.ac.th/index.php/thaijmath/article/view/1407>
64. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, D. Khatua, A setvalued coupled coincidence point theorem with data dependence and weak stability results, *Asian-European Journal of Mathematics* 16(4) (2023), 2350068 (17 pages).
<https://doi.org/10.1142/S1793557123500687>
65. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, D. Khatua, Existence, data dependence and stability of fixed points of multivalued maps in incomplete metric spaces, *Annales Mathematicae Silesianae* 37 (1) (2023), 32--48. <https://doi.org/10.2478/amsil-2022-0020>

66. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, A unified fixed point result along with error estimation and propagation in the fixed point iteration, *La Matematica* 2 (2023), 243-257. <https://doi.org/10.1007/s44007-023-00045-2>
67. Binayak S. Choudhury, Nikhilesh Metiya, P. Chakraborty, S. Kundu, Multivalued Mizoguchi-Takahashi type rational contraction in relational metric spaces, *Surveys in Mathematics and its Applications* 18 (2023), 59--72. <https://www.utgjiu.ro/math/sma>
68. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, P. Maity, Coupled Fixed Points for Multivalued Feng–Liu-Type Contractions with Application to Nonlinear Integral Equation, In: Som, T., Ghosh, D., Castillo, O., Petrusel, A., Sahu, D. (eds) *Applied Analysis, Optimization and Soft Computing. ICNAAO 2021. Springer Proceedings in Mathematics & Statistics*, 419 (2023), 21--30. Springer, Singapore. https://doi.org/10.1007/978-981-99-0597-3_3 [Book Chapter]
69. Binayak S. Choudhury, Nikhilesh Metiya, T. Som, S. Kundu, Existence and stability results for fixed points of multivalued F contractions and application to Volterra type non homogeneous integral equation of second kind, *Annals of the University of Craiova, Mathematics and Computer Science Series* 50 (1) (2023), 1--15. <https://doi.org/10.52846/ami.v50i1.1597>
70. Binayak S. Choudhury, Nikhilesh Metiya, S. Kundu, A. Kundu, Common fixed point result form ultivalued mappings with applications to systems of integral and functional equations, *Annals of the University of Craiova, Mathematics and Computer Science Series* 50 (1) (2023), 42--52. <https://doi.org/10.52846/ami.v50i1.1604>

Attended Seminar/webinar/workshop/
paper presented

25

1. **Participated**, Winter School Training Programme on “Improvement of Teaching Methodology” organized by NITTR, Kolkata during January 5-10, 2009.
2. **Participated**, Quality Improvement Programme, (Short Term Course) on “Entrepreneurship Development for Faculties” organized by IIT, Kharagpur from 26th March to 11th April, 2009

3. **Paper Presented**, International Conference (CONIAPS-XIV) on “Physical Sciences Interface with Humanity” organized by S. V. National Institute of Technology, Surat during December 22-24, 2011
4. **Paper Presented**, One Day State Level Seminar on “Some Basic Aspects in UG Level Mathematics” organized by Amta Ramsaday College, Amta, Howrah on January 19, 2012
5. **Paper Presented**, National Conference on “Mathematical Modeling and Computer Simulation” organized by Department of Applied Mathematics (IT), IIT, (Banaras Hindu University), Varanasi-221005 during March 23-25, 2012
6. **Participated**, Two-Day Workshop on “Funding Opportunity and Success Stories of Capturing Grants” organized by Techno India Group on July 11-12, 2014.
7. **Participated**, National Level Seminar on “Environmental Management” organized by Department of Commerce, Sovarani Memorial College, Jagatballavpur, Howrah in association with Joypur Panchanan Roy College, Joypur-Fakirdas, Amta-II, Howrah on January 27, 2017.
8. **Participated**, One Day State Level Seminar on “ICT Enabled Higher Education” organized by IQAC, Sovarani Memorial College, Jagatballavpur, Howrah on April 6, 2018.
9. **Participated**, One Day Workshop on “Promotion under Career Advancement Scheme (CAS)” organized by IQAC, Prasanta Chandra Mahalanobis Mahavidyalaya, Kolkata-700108 on June 29, 2019.
10. **Participated**, State Level Webinar on "Administrative Affairs Thrusting upon Promotion of College Teachers / Librarians under CAS", IQAC, City College, Kolkata-700009, West Bengal, on July 11th, 2020
11. **Participated**, A One Day Webinar on “A Critique of Natural Rights and Human Rights: in the light of J. Bentham, E. Burke and T. Paine” organized by Departments of Philosophy, Sovarani Memorial College and Kabi Joydeb Mahavidyalaya on July 15, 2020
12. **Participated**, International Webinar on “Algebra and Topology” organized by Department of Mathematics, Prabhu Jagatbandhu College, Andul, Howrah on July 19-20, 2020
13. **Participated**, National Webinar on "Exploring the Environmental Crisis and Pandemic Health Care in Nightingale Bicentennial“ organized by IQAC, Sister Nibedita Govt. General Degree College for Girls, Kolkata-700027 on July 22, 2020

14. **Participated**, National Webinar on " Self Realization In Different Indian Philosophical Thought & Antiquity of Art of Writing In Ancient India " organized by Dept. of Sanskrit, Dhruba Chand Halder College, South 24 Paraganas and Sovarani Memorial College, Howrah on July 29, 2020
15. **Participated**, One Day State Level Webnir on " Discovering the Fasinating World of Nano-Science" organized by Department of Physics, Krishnagar Govt. College, Nadia on August 3, 2020
16. **Participated**, Webinar on "Graphical Demonstration as Teaching Aid in Connection with the Syllabus of B. Sc Mathematics (Hons.) under CBCS System" organized by Department of Mathematics, Asutosh College, Kolkata on August 8, 2020
17. **Participated**, National Webinar on "Applications of Mathematics" organized by Department of Mathematics, Seth Anandram Jaipuria College, Kolkata on August 11, 2020
18. **Participated**, A Two-day International Webinar on "Algebra, Analysis & Topology" organized by Department of Mathematics, Bankura University & Bankura Mathematical Society, Bankura University on August 13-14, 2020
19. **Participated**, One Day State level Webinar on "Real Life Mathematics" organized by Department of Mathematics, Ananda Mohan College, Kolkata on August 17, 2020
20. **Participated**, One Day State Level Webnir on " Discovering the Fasinating World of Physics" organized by Department of Physics, Krishnagar Govt. College, Nadia on August 21, 2020
21. **Participated**, Two-Day National Webinar on "Mathematics and its Applications in Science"
organized by Department of Mathematics, Abhedananda Mahavidyalaya, Sainthia, Birbhum on September 14-15, 2020
22. **Participated**, National Level Webinar on "Recent Trends in Applied Mathematics" organized by Department of Mathematics, Ramananda College, Bishnupur, Bankura on September 16, 2020
23. **Organizing Committee Member**, A Three-Day International E-Workshop on "The Foundations of College Mathematics" organized by Department of Mathematics, Sovarani Memorial College, Jagatballavpur, Howrah-711408 & Saldiha College, Saldiha, Bankura - 722173 during September 21-23, 2020

24. **Participated**, One-Day National Level Webinar on “Everyday Yoga:Theory and Practice” organized by IQAC, Acharya Jagadish Chandra Bose College, Kolkata - 700020 on June 21, 2021

25. **Participated**, One-Day State Level Webinar on “Academic and Administrative Responsibilities of College Teachers Thrusting Upon Their Promotion under CAS” organized by IQAC, Acharya Jagadish Chandra Bose College, Kolkata - 700020 on June 25, 2021

Project Works/ Thesis Guidance

02

1. Name of The Scholar : Dr. Sunirmal Kundu

Title of The Thesis : Results on Multivalued Fixed Point and Related Topics in Metric Spaces

Year of Award : 2021

2. Name of The Scholar : Dr. Debashis Khatua

Title of The Thesis : Study of Certain Problems in Metric Fixed Point Theory

Year of Award : 2021

Collaborative Programs/ Membership

Other Notable Activities

WEB address (if any)

Passport photograph (max 1mb jpg format)

