CV: Dr. Atanu Manna

Email: *atanu.manna@iict.ac.in OR atanuiitkgp86@gmail.com*

Academic credentials

Schooling:
2001: Secondary examination under West Bengal Board of Secondary Education with *first division*
2003: Higher secondary examination under West Bengal Council of Higher Secondary Education with *first division*
Under Graduate degree:
2006: B. Sc. (Honours) from Vidyasagar University, Midnapore with *first class first*
Post Graduate degree:
2008: M. Sc. from Jadavpur University, Kolkata with *first class fifth*
Doctor of Philosophy:
2014: Ph. D. from IIT Kharagpur
Title of the thesis: On modular sequence spaces defined by using de la Vallée-Poussin means, generalized means and difference operator, Supervisor: Prof. P. D. Srivastava

Current position

Assistant Professor: Indian Institute of Carpet Technology (IICT), Chauri Road, Bhadohi-221401, Uttar Pradesh, India since 30th June 2014 to till date.
Additional responsibilities: Joint Registrar I/C; Warden, Nodal officer NIRF, NSP and AISHE; Coordinator of first year and induction program; Chairperson of Mechanical, Electrical and Physics labs; Guest Faculty recruitment i/c.
Awards received: Gold-centered silver medal (2007) for *first rank* at Vidyasagar University (VU); Gold medal with a certificate of merit (2007) for *first rank* at VU; National Merit Scholarship (2007), Second Best Paper Presentation (2013) from RS Day 2013, IIT Kharagpur; Visiting Scientist from ISI Kolkata (North-East centre Tezpur) (2016); Young Scientist Award (2020) from VDGOOD Professional Association.

Reviewing activities

Selected journals: Journal of Function Spaces; RACSAM; Bull. Malaysian. Math. Soc.
Professional bodies: Mathematical Reviews, AMS (Articles reviewed: 31); zbMATH, EMS (Articles reviewed: 09; Books reviewed: 02).
Memberships: American Mathematical Society (2017-): Annual (No. MNATXA); Indian Mathematical Society (2019-): Life (No. L/2019/131)

Research interests

Functional Analysis: 1) Geometry of Banach spaces 2) Theory of Inequalities 3) Operator Theory

Selected publications

Journals

1. ***S. Majee, A. Maji, and A. Manna,*** Numerical radius and Berezin number inequality, J. Math. Anal. Appl., 517, 126566, 2023 (https://arxiv.org/abs/2207.01007).
2. ***A. Maji, and A. Manna,*** On the improvements of Numerical radius inequalities, Preprint, 2022 (https://arxiv.org/abs/2207.01915).

3. *B. Das, and A. Manna,* On the improvements of Hardy and Copson inequalities, Preprint, 2022 (https://arxiv.org/abs/2209.02612).
4. *A. Manna*, New Hardy-type integral inequalities, Acta Sci. Math. (Szeged), 86 (3-4), 467-491, 2020
5. *A. Manna*, Weighted fractional integral inequalities of Hardy-type, Preprint, 2022.
6. *A. Manna*, Norm inequalities involving upper bounds of certain matrix operators in Orlicz-type sequence spaces, J. Anal., 27(3), 761-779, 2019
7. *A. Manna and P. D. Srivastava*, Property (k-*beta*) of Musielak-Orlicz and Musielak-Orlicz-Cesàro spaces, Revista de la Real Academia de Ciencias, Exactas, Fisicas y Naturales, Serie A, Matematicas, 113(2), 471-486, 2019
8. *A. Manna*, Factorized enhancement of Copson's inequality, Tamkang J. math., 49(3), 195-203, 2018.
9. *A. Manna and P. D. Srivastava*, Some geometric properties of Musielak-Orlicz sequence spaces generated by de la Vallée-Poussin means, Math. Inequal. Appl., 18(2), 687-705, 2015.
10. *A. Maji, A. Manna and P. D. Srivastava*, Some mth order difference sequence spaces of generalized means and compact operators, Annal. Funct. Anal. 6(1) (2015), 170-192.
11. *A. Manna*, Certain geometric structures of Lambda-sequence spaces, Adv. Oper. Theory, 3(2) (2018), 433-450.
12. *A.Manna and P. D. Srivastava*, Some geometric properties of generalized Cesaro-Musielak-Orlicz spaces equipped with the Amemiya norm, Acta Math. Vietnam. 41(1)(2016), 91-102.
13. *A.Manna, A. Maji and P. D. Srivastava*, Some paranormed difference sequence spaces derived by using generalized means, Kyungpook Math. J., 55(4) (2015), 909-931.
14. *A.Manna, A. Maji and P. D. Srivastava*, Difference sequence spaces derived by using generalized means, J. Egypt. Math. Soc., 23(2015), 127-133.
15. *A.Manna and P. D. Srivastava*, On (k-NUC) property in Musielak-Orlicz spaces defined by de la Vallee Poussin means and some countably modulared spaces, Dyn. Contin. Impuls. Syst. Ser. A Math. Anal., 21(2)(2014), 187-200.

Proceedings

1. *A. Manna*, Norm inequalities involving upper bounds for operators in Orlicz-Taylor sequence spaces, Springer Proceedings of ICMC 2018 (IIT BHU), Volume 253, Chapter 26, pp. 329-339, 2018.
2. *A. Manna and P. D. Srivastava,* Some geometric properties of generalized Cesaro-Musielak-Orlicz spaces, Springer Proceedings of ICMC 2013 (HIT, Haldia), Volume 91, Chapter 19, pp. 283-296, 2014.

Seminar/Conferences/Symposium attended

1. *International Conference of 'Current Trends in Abstract and Applied Analysis' Ukraine, May 12-15, 2022*
   Title of the talk: A short direct proof of sharp Lp-inequality for Hausdorff operators in one dimension.
2. *International Conference of Young Mathematicians, Institute of Mathematics, NAS Ukraine, June 3-5, 2021*
   Title of the talk: Walker's approach to some Hardy-type integral inequalities
3. *Faculty Development Programme, UGC-HRDC, BHU, February 26 – March 25, 2021*
   Title of the talk: Mathematics of Vedic Era - History and Applications
4. *Symposium on Geometry of Banach Spaces, IIT Hyderabad, December 1-2, 2019*
   Title of the talk: Geometric properties of certain modular spaces
5. *85th Annual Conference of Indian Mathematical Society, IIT Kharagpur, November 22-25, 2019*
   Title of the talk: New fractional integral inequalities
6. *4th International Conference on Mathematics and Computing, IIT (BHU), January 9-11, 2018*
   Title of the talk: Norm inequalities involving upper bounds of matrix operators in Orlicz-Taylor sequence spaces
7. *International Conference on Nonlinear Dynamics, Analysis and Optimization, Jadavpur University, Kolkata, December 9-11, 2015*
   Title of the talk: A Study on the James constant of Orlicz sequence spaces defined by de la Vallee-Poussin means

8. ***1st International Conference on Mathematics and Computing, HIT (Haldia), December 26-29, 2013***
   <u>Title of the talk:</u> Some geometric properties of generalized Cesaro-Musielak-Orlicz sequence spaces
9. ***Research Scholar Day, IIT Kharagpur, February 18-19, 2013***
   <u>Title of the talk:</u> Some difference sequence spaces generated by de la Vallee-Poussin means
10. ***National Conference on Recent Trends in Mathematical Sciences and its Applications, MITS, Jaipur, 2012***
    <u>Title of the talk:</u> On vector valued sequence spaces generated by second order sequential modulus
11. ***Research Scholar Day, IIT Kharagpur, December 22-23, 2011***
    <u>Title of the talk:</u> On modular spaces of certain type (V, \lambda) strongly summable sequence spaces
12. ***National Meet of Research Scholars in Mathematical Sciences, IIT Kharagpur, October 12-15, 2011***
    <u>Title of the talk:</u> Size of the modular difference sequence spaces in terms of porosity.
13. ***Research Scholar Day, IIT Kharagpur, November 20, 2010***
    <u>Title of the talk:</u> On some vector valued modular sequence spaces

Seminar organized as a coordinator

1. ***National Mathematics Day***, IICT Bhadohi, December 22, 2018

Workshop attended

1. ***Advanced Functional Analysis and Applications***, IIT Hyderabad and NISER Bhubaneswar, December 16-24, 2020
2. ***Matrix Analysis and its Applications***, NIT Jalandhar, September 23-27, 2020
3. ***NBA Accreditation & Outcome Based Education***, UPID, AKTU Noida campus, January 29-30, 2020
4. ***FDP on Human Values and Professional Ethics***, ITM Gorakhpur, AICTE & AKTU, Lucknow, June 13-20, 2019
5. ***FDP on Human Values and Professional Ethics***, IIT Kanpur, AICTE & AKTU, Lucknow, July 7-15, 2016
6. ***FDP on Entrepreneurship Development***, BHU, January 1-12, 2014
7. ***Advanced Instructional School on Functional Analysis***, ISI Kolkata, July 4-23, 2011
8. ***Advanced Instructional School on Functional Analysis***, ISI Delhi, December 6-22, 2010

Workshop organized as a coordinator

1. ***Induction Program*** (4 nos.) for newly entrants of the year 2017-18, 2018-19, 2019-20 & 2020-21.

Teaching experiences (UG) since June 30, 2014 at IICT

Subjects taught: Calculus, Multivariate Calculus, Matrices, Linear Algebra, Vector Calculus, Sequence & Series, ODE with constant and variable coefficients, Series Solutions and Special Functions, Laplace Transform, Fourier series, PDE and its applications, Complex Analysis, Numerical Techniques, Statistical Techniques, Fourier and Z-transforms.

Subjects interested: Functional Analysis and its applications (PG), Applied Statistics(PG), Real Analysis (PG), Complex Analysis (PG), Inequalities and Applications (PG), Sequence Spaces (PG), Theory of Operators (PG).

UG-projects supervised at IICT

Six (nos.) UG projects thesis guided in 2017-18(1); 2018-19(1); 2019-20(1); 2020-21(2); 2021-22 (1).

PG-thesis evaluated as an external examiner

1. M.Sc. Mathematics dissertations (1 no.), Ramkrishna Mission Vidyamandira, Belur, 2021.

Ph.D degree supervision

1. Mr. Bikram Das (Mob No. 8609523826), Research Scholar, Joined 2021 under AKTU, Lucknow, Topic: Classical inequalities, Sequence spaces, Broad areas: Functional Analysis & Operator Theory.

References

1. Prof. P. D. Srivastava, Former Professor & Head Mathematics, IIT Kharagpur, Currently: Visiting Professor, Head Mathematics, and DoFA(I/C), IIT Bhilai. Email: pds@iitbhilai.ac.in
2. Prof. Somesh Kumar, Professor of Mathematics, IIT Kharagpur. Email: smsh@maths.iitkgp.ac.in

Note: CV last updated on 09-11-2022.