



Dr. Swarupa Roy, Ph.D.

Designation : Assistant Professor

Department : Department of Basic Sciences and Humanities
(JOINED THE INSTITUTE IN 2020)

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RESEARCH INTERESTS

- ✓ Operator Theory
- ✓ Complex Analysis
- ✓ Quantitative Finance

Academic Qualifications

- Ph.D. (Mathematics): Utkal University, Odisha, India.
- M. Phil. (Mathematics) : Utkal University, Odisha, India.
- M.Sc. (Mathematics) : Banaras Hindu University, Varanasi, India.
(Prof. B.B. Sinha Gold Medal)
- B.Sc. B.Ed. (4 years Integrated): Regional Institute of Education,
NCERT, Bhubaneswar, India.

Courses:

- Mathematical Methods in Quantitative Finance, MITx,
Massachusetts Institute of Technology, Sloan, USA.
- Foundations of Modern Finance I, MITx, Massachusetts Institute
of Technology, Sloan, USA.

Teaching Experience/Industrial Experience/Research Experience

Joined Silicon Institute of Technology as a faculty in Mathematics
on Nov 2020.

14 years teaching experience in academics.

4 years research experience.

JOURNAL

- “Toeplitz and Hankel operators on weighted Bergman spaces”, Ann. Acad. Rom. Sci., ISSN 2066-6594, Vol. 12, No. 1-2/2020.
- “Fredholm Toeplitz operators on the weighted Bergman spaces”, Ann. Acad. Rom. Sci., Ser. Math. Appl., 13 (2021), 178-194.
- “Toeplitz operators with bounded harmonic symbols”, Ann. Acad. Rom. Sci., Ser. Math. Appl., 14 (2022), 166-179.
- “On a class of unitary operators on weighted Bergman spaces”, FILOMAT, 37:7 (2023), 2013–2026.

Research paper presentation in Conferences:

- 22nd-24th April 2022, Presented research paper entitled “Toeplitz Operators with Bounded Harmonic Symbols”, International Conference: Computational Methods in Science and Engineering-2022, Department of Mathematics, BITS - Pilani, Hyderabad Campus.
- 26th-27th Mar 2022, Presented research paper entitled “On a class of unitary operators on weighted Bergman spaces” in an International Conference on “Analysis and Discrete Mathematics” & “49th Annual Conference of Odisha Mathematical Society (OMS)” organized by P.G. Department of Mathematics, Utkal University, Bhubaneswar.
- 4th-5th Feb 2020, Presented research paper entitled “Toeplitz and Hankel operators on weighted Bergman spaces” in International Conference on Advance Mathematical Analysis and its Applications on held in Berhampur University, Odisha.
- 28th Feb & 1st Mar 2019, Presented research paper on “Operators on weighted Bergman spaces” in the National Seminar on Recent Trends in Mathematical Analysis & Applications held in the P.G. Department of Mathematics, Utkal University.
- 11th March 2019, Presented research paper on “Berezin Transform on weighted L^2 space” in the National Seminar on Functional Analysis & its Applications organized in the P.G. Department of Mathematics, Utkal University.