



# Sarojini Naidu College for Women

(Govt. Sponsored)

30 Jessore Road, Kolkata - 700 028

Phone : 2559-2583, 2529-1985

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## Report on the Seminar cum Exhibition on Mathematical Creative Photography

Organised by:

Department of English

In collaboration with:

Internal Quality Assurance Cell

Sarojini Naidu College for Women

17<sup>th</sup> August, 2022 – 12:30 pm

**Speaker: Prof. Biswatosh Sengupta**

Mathematical creative photography is a unique form of photography that incorporates mathematical concepts and techniques into the art of taking pictures. It involves using mathematical principles, such as geometry, symmetry, patterns, and fractals, to create visually appealing and abstract images. This style of photography often results in images that are intricate, symmetrical, and full of repeating patterns.

*Urmila Pal*

Principal  
Sarojini Naidu College  
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In mathematical creative photography, the photographer takes a mathematical concept and applies it to the composition and design of the image. This can involve using specialized software, camera settings, and lens filters to manipulate light and form. The goal of mathematical creative photography is to explore the relationship between mathematical concepts and the natural world, to create abstract images with a mathematical theme, or simply to experiment with new and unusual ways of seeing the world through a lens.

The use of mathematical concepts in photography is not new, but the recent advancements in technology have made it easier and more accessible for photographers to explore this style. With the help of computer programs, photographers can manipulate and adjust their images in real-time, allowing them to experiment and refine their work until they achieve the desired result. Additionally, the widespread availability of software and tools has allowed mathematical creative photography to become more popular and accessible to a wider audience.

Overall, mathematical creative photography is a unique and fascinating genre that combines the principles of mathematics with the art of photography. It provides photographers with a new and innovative way to see and interpret the world around them, and to create images that are both visually appealing and conceptually rich.

The Department of English in collaboration with IQAC of the college organized a Lecture and Exhibition on Mathematical Creative Photography, with the objective of promoting interdisciplinary knowledge and introducing new ways of appreciating art and culture.

The program was inaugurated by Smt. Archita Bandopadhyay, Department of English, the senior most faculty of the college.

The Welcome address was then delivered by Dr. Urmila Ukil, Principal, Sarojini Naidu college for Women.

The Speaker and Artist was then introduced by Dr. Jaydeep Rishi, Associate Professor, Department of English.

In his speech Prof. Biswatosh Sengupta said:

"Art and Mathematics both play very important roles in human existence. From the dawn of civilization, men have tried to express their feelings and sentiments through various artistic media. In my case, the medium has been photography, which I have been pursuing for the last sixty years.

'Mathematical Photography' is a term I have formulated to a creative process which

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amalgamates both, mathematics and photography; i.e., the process uses mathematical tools to create artistic photographs. Here both the journey and the destination are fascinating as the process makes use of intuition, imagination and mathematical knowledge for artistic pursuit.

My canvases in this exhibition are completely different from conventional Pictorial Photography and are centred on my experiments that started back in 2005, but gathered a more academic hue during the pandemic days. The outcome is a result of my computer-based experiments using mathematical tools and photographs mostly taken during my last visit to Greece, Italy and France and some Daz3 models. I generated various Mathematical forms and curves using different formulas and MATLAB, and combined those with camera shots. An article on the subject titled "Mathematical Photography - A Creative Pursuit" was published in November 2020 issue of FIAP News.

My works include Voronoi, Fractals, 3D, mathematical form and curve using formulas, TSP (Travel Salesman Problem), Stippling's, etc. using various software. These works may not be accepted in conventional photographic Salons, but if it touches the sensitive mind of the viewers, I would consider my endeavour to be successful."

The program ended with Vote of Thanks by Smt. Suparna Bhattacharyya, Associate Professor, Department of English, Sarojini Naidu College for Women.

The exhibition was extended by a day as per the request of the present audience.

*Urmila Nal*  
Principal  
Sarojini Naidu College  
for Women  
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