

JOURNAL OF SCIENTIFIC ENQUIRY



Volume 3 Issue 1

June, 2023



Sidho-Kanho-Birsha University, Purulia

JOURNAL OF SCIENTIFIC ENQUIRY

VOLUME 3

ISSUE 1

2023



Journal of Scientific Enquiry

Volume 3 • Issue 1

Publication Year: 2023

ISSN: 2583-2352

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713104, West Bengal, India

Preface to the Journal of Scientific Enquiry (JSE), Third Volume, First Issue 2023

It is my pleasure to introduce this third volume of the Journal of Scientific Enquiry, containing a few selected articles. I welcome you to the Vol. 3 Issue 1 of Journal of Scientific Enquiry (JSE). You will recall that in earlier volumes I made our commitment to publish high quality, impactful articles. This time JSE publishes fourteen peer-reviewed scientific articles of significance in all areas of Science research work.

Bandyopadhyay et al. introduced the idea of generalized relative $L^*[t](\alpha, \beta)$ -order and generalized relative $L^*[t](\alpha, \beta)$ -type of an entire function with respect to another entire function and studied some growth properties of entire functions on the basis of their generalized relative $L^*[t](\alpha, \beta)$ -order and generalized relative $L^*[t](\alpha, \beta)$ -type.

Dey et al. derived the bi-complex analogue of the existence theorem of fixed points of order one of entire functions and discussed some lemmas and proved the existence of an entire function $f(z)$ in C_2 which has the given fixed points $a_1, a_2 \dots$ with given multipliers $b_1, b_2 \dots$ respectively.

Mahata et al. tried to extend an EOQ model to consider the optimum production quantity of the EPQ model that is not only dependent on the inventory policy but also on firms' credit policy. They have nicely incorporated all concepts of a discounted cash-flows (DCF) approach, trade credit and the quantity production inventory to generalize the EOQ model in their article.

Kamaruzzaman et al. investigated photonic crystal fiber (PCF) with different mesh systems. The degrees of freedom (DoF) are also studied to optimize mesh density and computational efficiency. They have established that the optimization of mesh density is very important to propose an effective PCF and electronic devices and its effect on the deviation of the numerical outcome.

Dr. Gupta inspects the existing literature on the impact of neuro feedback training on midbrain activity and symptoms of ADHD in young children. He/she organized the survey with an overview of ADHD and its current treatment approaches, including medication and behavioral interventions and then it delves into neurofeedback and how it works, focusing on targeting midbrain activity as a potential modality for ADHD treatment.

Chatterjee et al. offered the current status and diversity of water birds, who use this man-made water body as a feeding and foraging ground, which are found in the Jogmaya Sarovar and Ranjandih of Purulia district.

Paramanik et al. presented a systematic inventory of parasitic angiosperm diversity of Purulia district. The flowering and fruiting time, host range and nature of parasitism have been recorded during the entire study.

Mahato et al. emphasized their study on secondary metabolites and fatty acids of the plant. Their analyses support the presence of saturated fatty acids in the range of C14 to C26 and C18 and C20 as unsaturated fatty acids.

Dr. Sinha's review work deals with three mixtures of organic manure i.e., Kunapajala, Panchagavya, (the liquid biofertilizer) and Panchamula from the ancient literature and their formulations and nutritional analyses, which improve the soil health and fertility, improve growth and development of crop plants and help to produce organic food free from unnecessary health hazards.

Dr. Karmakar described some of the possible ways to cover a surface (flat, curved and closed) by some of the regular polygons.

Dr. Choubey delivered an overview of the current state of the bioplastics industry, including its brief history, the types of bioplastics that are available, their properties, production processes, and end-of-life considerations. Also, this review work aimed to explore the advantages and disadvantages of bioplastics compared to traditional plastics, and will consider the future prospects of this rapidly evolving industry.

Parnajyoti Karmakar tried to familiarize chemistry students to the interesting history and chemistry of Prussian blue and Turnbull's blue.

A well-known Computational Intelligence tool called Artificial Neural Networks (ANNs) is used by **Pradip Ghanty** to predict AD from MCI samples. For their prediction they have selected two variants of ANNs - multilayer perceptron (MLP) and radial basis function (RBF) network.

I hope that our readers will find articles/reviews presented in this volume of JSE interesting and informative. With new opportunities and challenges, we will continue to strive to make JSE more useful to the research community. I would like to acknowledge the support of readers, authors and referees contributing to the success and make the publication of this journal possible.

Please help us grow by citing the relevant articles that you read in JSE.

We look forward to receiving your contributions in the near future.

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