February 2023 Editorial

Exploring New Frontiers in Technology, Mathematics, and Environmental Science

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We are delighted to present the February 2023 issue of the Journal of Innovative Student Research (JISR). The Journal of Innovative Student Research (JISR) is a unique and significant platform dedicated to promoting and showcasing the research work of young, talented, and aspiring scientists. The journal serves as a launchpad for students to share their innovative ideas, engage with the scientific community, and contribute to the development of new knowledge in various fields. This month's issue features four exceptional research papers that demonstrate the passion, creativity, and intelligence of the next generation of scientific leaders.

In the field of sports analytics, Anirudh Iyengar's paper, "Cost-Effective Baseball Analytical Tool Developed Using Computer Vision and Python," showcases a novel application of machine learning techniques to enhance the analysis of baseball games. Iyengar's work demonstrates the power of computer vision and Python programming in making sports analytics more accessible and affordable for teams and enthusiasts alike.

Shifting to the realm of mathematical modeling, Justin Huang investigates the impact of parameters on the dynamic stability of mathematical population models in his paper, "How do Parameters Affect the Dynamic Stability of a Mathematical Population Model?" Huang's meticulous exploration offers valuable insights into the role of parameters in population dynamics, with potential applications in ecology, epidemiology, and beyond.

Addressing the critical issue of food safety, Anshuman Mohanty's "Investigating the Effects of Sundry Disinfection agents on the Germination of Glycine Max" presents a comprehensive study of different disinfection agents on soybean germination. Mohanty's research highlights the importance of understanding the potential effects of various disinfectants on crop growth and yield, contributing to the broader goal of sustainable agriculture and food security.

Lastly, in a quest to find environmentally friendly alternatives to traditional plastics, Daniel Jiang examines the "Variations of Carbohydrates in Biodegradable

Plastics." Jiang's work demonstrates the potential of using different carbohydrates to create biodegradable plastics, emphasizing the importance of ongoing research in this area to reduce our reliance on petroleum-based plastics and mitigate their environmental impact.

We hope you enjoy reading these fascinating papers and appreciate the innovative spirit that drives these young researchers to push the boundaries of their fields. Their work is a testament to the future of scientific discovery, and we are excited to share their contributions with you.