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Message from Principal

The 9th volume of the flagship journal of the Asutosh College Teachers' Council is now poised for publication. Initiated in 2016, the centenary year of our institution, and appropriately named *The Centurion*, this peer-reviewed publication offers the perfect platform to showcase the varied intellectual interests of the faculty that venture beyond the demands of their routine academic commitments.

This particular volume is an eclectic selection of research-oriented articles covering diverse areas like 'statistical inverse sampling', methods of measuring seasonal variations using statistical tools, GNS (Global Navigation Satellite) systems, 'autophagy', feminist issues like empowerment of women following Gandhian principles, and the capacity of social media engagement to influence the quality of women's lives, responsible conducting of research activities, and the role of grammar in language-teaching. Authored by some of the bright young members of our college faculty, they are proof of the journal's increasing consolidation of its academic foundations.

It is our firm belief that in the years to come, *The Centurion* will emerge as one of the leading journals published by academia in this part of the country.

Warm regards,



Dr. Manas Kabi
Principal, Asutosh College

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EDITORIAL

Every year, the Asutosh College Teacher's Council publishes *The Centurion*, an academic publication in the multidisciplinary field of study. This journal has developed into an archive of the intellectual pursuits of the faculty members of our institution, offering a venue for research, reviews, and publications. This year is no different. This is the ninth issue which includes numerous articles from a variety of subjects. Here we have excellent articles on hardcore scientific topics like the global navigation satellite system, time series, Autophagy, etc., complimented by articles on social issues like women empowerment. This blend of multidisciplinary topics make this issue a really interesting one.

This volume is composed of eight excellent articles spanning both the science and the humanities discipline. The first article on Statistics explores a modification of the sign test based on the inverse binomial sampling procedure. In the paper it is seen that the test procedure is applicable for both the one-sample location problem and the paired-sample location problem. It is also stressed by the author that the inverse sampling procedures are ethically appealing and cost-effective. In the second article the author investigates some statistical data which relate to successive intervals or points of time known as time series. The author mainly discusses the seasonal variation of time series. In the next paper on global navigation satellite systems, the scale of scintillation recorded by different satellites of different constellations for a particular night (high solar active year) from Kolkata are analyzed to understand the receiver performance during intense scintillation. The author also analyzes scintillation recorded at L1, L2 and L5 bands. In the next article the author discusses a procedure called Autophagy which is the consumption of the body's own tissue as a metabolic process occurring during starvation. Destruction of damaged or redundant cellular components occurring in vacuoles within the cell is the main objective of autophagy, which the author discusses in detail in the paper.

The next paper is on responsible conduct of research for students by teachers where the author discusses a very important issue related to research in modern times. The author stresses on the fact that researchers hold a significant

responsibility to conduct their work with the utmost sincerity, embodying the principle of “doing good science in a good manner”. The author discusses that by adhering to the best practices across each step, researchers can ensure that their findings and conclusions are both credible and reliable. In the following article the author discusses the empowerment of women through Gandhian principles. It is an accepted fact that women empowerment and achieving gender equality is essential for our society to ensure the sustainable development of the country. The author discusses how the ideas of Mahatma Gandhi are relevant in contemporary society and how they can be used to achieve women empowerment. In the subsequent paper on journalism the author discusses the influence of social media engagement on the quality of life of women. Based on a web-based survey, and three open-ended prompts on social support, work efficiency, and self-satisfaction, the study reveals correlations between the duration of social media engagement and women's psychological well-being. Moreover, the study reflects a self-reported positive quality of life among the women surveyed. In the final article we have an overview of the role of grammar in various language teaching methods, especially in second and foreign languages.

The editors would like to thank each and every contributor, for their invaluable contributions. We also thank each and every one of our reviewers for their insightful remarks and recommendations. We also want to express our gratitude to the entire college administration, without whose help we could not have released the ninth volume of this journal.

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