EDITORIAL

The editorial team of the Biannual CVR Journal of Science and Technology is very happy to bring out Vol.25, very much in time. This has become a practice to bring out the journal in time, despite various hurdles including Carona Pandemic, sometime back. For the last 6 months the team has been working tirelessly to complete the task on time. We thank the authors, reviewers and all others involved in this task.

We are taking care to see that standard practices are followed in the publication of the Journal. Blind review is done, and a number of iterations are done till the reviewers are fully satisfied with the standard of the research paper. Senior faculty of English language Department, take care of the language issues. Template verification and typographical errors are checked before the articles go for publishing. Hope the researchers appreciate this effort. Many research articles published in the journal are being referred to by other researchers across the globe, as indicated by DOI, Crossref data.

This Volume covers research articles in the following disciplines:

CIVIL–2, ECE–6, EIE–4, ET–1, MECH–2, H & S–3 (Stats-1, Chem-1, Env. Sc.-1)

In this issue, a research article on Fiber-reinforced Lightweight Self Compacting Concrete (FRSCC) with fly ash is presented. The study consisted of substituting conventional natural aggregates with sintered fly ash. The outcome of this research yielded valuable insights into improving the mechanical and thermal properties of FRSCC. One paper on Image Inpainting using Efficient Patch Selection Technique is presented. New patch selection is proposed using the combination of Sum of Squares Difference (SSD) and Logarithmic Similarity (LS). The results obtained, according to the authors, are excellent and outperformed the state-of-art works reported in the literature. Another paper presents analysis of application of various machine learning models for plant leaf identification. Authors applied Weiner filter for noise reduction in the data. Morphological operations are utilized for feature extraction.

GSM based Patient Healthcare Monitoring System is proposed in another article. This system is claimed to be the most effective and cost-efficient solution compared to other methods available worldwide. Some other articles published are An IoT based Low-cost Artificial Mechanical Ventilator for Patients, IoT based power theft detection system, Novel approach to design a portable mobile charging device using wind energy. Hope the research articles published make interesting reading for researchers working in those areas. One article on Cloud and IoT based Monitoring System for Analytical Instruments, authored by a Scientific Officer from BARC and a student from BITS Pilani is also published in this issue. Some of the research articles have potential to develop gadgets, which can be used and released into the market by industries.

Students are being encouraged to publish research papers based on the project work done by them. P.G. students spend almost one year on the project work. So, this should result in significant work suitable for publication in a journal. Project supervisors guiding the students must give research orientation for the work of the students. Selected research papers of U.G. students are also published in this volume. It is heartening to see that U.G. students are also showing enthusiasm for publishing papers. Hope this trend will continue.

Thanks are due to **HOD, H & S,** and the staff of English Department for reviewing the papers. I am also thankful to **Dr. S. Venkateshwarlu, Assoc. Editor and Smt. A. Sreedevi, DTP Operator** in the Office of Dean Research, for the preparation of research papers in Camera - Ready form.

For further clarity on waveforms, graphs, circuit diagrams and figures, readers are requested to browse the soft copy of the journal, available on the college website www.cvr.ac.in wherein a link is provided. Authors can also submit their papers through our online open journal system (OJS) www.ojs.cvr.ac.in or www.cvr.ac.in/ojs

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Editor