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EDITOR'S DESK

Journal of Applicable Chemistry (JOAC), an international journal of research in chemical sciences, enters second decade during this calendar year of 2022. I thank from the bottom of my heart the researchers in academic/industrial domains of India and abroad who devoted the time in review process to sustain quality, style and scientific rigor.

The concerted efforts of Dr. Gudipudi Kishore, and Smt. Bezawada Naga Krishna Vani, Executive Editors, culminate into timely release of the journal. The editorial committee places on record the appreciations to K.Kalyani Sekhar, M E., who plays a key role in overall management and bringing new sparkles in the design aspects from time to time as a publisher.

The chemistry remains as chemistry involving intra- and/or inter- chemical species interactions confined to making/breaking of co-valent chemical bonds. The non-covalent interactions (H-bond, X-bond, Tr-/Tt-/Pt-/Ch-/Ng-/Rg- bonds), co-operativity/anti-co-operativity are also operative with chemical species, but of lower magnitude of energy. Yet, they have profound influence on stability of structure, functional specificity, and amazingly render impossible transformations/interactions into feasible ones in biological/physical world. The influence of electro-magnetic radiation, visible light, mechanical (sound, water) waves. Quantum-Gravity, electric/magnetic fields also have note worthy consequences. This part of transformation energy in chemical sciences is accumulated into large databases. The typical inter-disciplinary branches emerged over decades are as physical-chemistry, chemical-physics, PCCP, chemical-physics-chemistry(CPC),chemical biology, Bio-PCCP, Bio-CPC etc.

The scale of study in the last century was in the range of tens to hundreds of chemical compounds. Now, thousands of molecules are common in select task-force projects. The synthetic/virtual chemical space is inspected from a different perspective i.e., fifth paradigm. In the quantum computational world, a chemical species in isolation is perceived in nano-, micro-, macro- scale. The environment considered is in presence of inert gases, solvents, micelles, vesicles and also in all three phases namely, solid, liquid, gases, glasses and plasma. Considering the application domains, single cell in biology is the smallest unit under peer investigation. Simple structure (or

response/sequence/function) relationships models have now given way to genetic (evolving) adaptive models. Direct and inverse structure-function-relationships-method-workflows opened up into deep learning with deep-architecture-nets using state-of-knowledge-learning-algorithms.

The future of chemistry is that it will live long on human life-time-scale. It was born billions of years ago in the universe, learned to crawl, walk, run and became responsible for growth of material world, life and intelligent human beings with evolved brains. After another five billion years when Sun, G2 star, will die to a white dwarf, the chemistry on earth changes radically.

On the smaller time scale, a few centuries this way or that way, chemistry-of-life, chemistry-for-life, life-chemistry or chemistry-life are interwoven and has huge impact on/by environment (both external/internal).

Futuristic chemistry will be a man-made activity for sustenance, combat, prosperity and to achieve goals of governess/scientists. In the next decade, the chemical analysis of rock samples from Mars will be challenging and outcropped methodologies will be of landmark in the years-to-roll on. The design and manufacture of smart materials and optimal use of chemical energy will change the facet of life-style. The clean nuclear fusion energy, knowledge of dark energy/matter and conversion of mass to energy/radiation will open new vistas in brain-bending activity.

Futuristic chemists' experimental tool kit contains an arsenal of green-chemistry approaches, systems' chemistry knowledge, biomimetic shortcuts etc. At the work-bench, statistical experimental designs, pareto-optimal methods and robotic adaptive machines replace long practiced OVAT methods, random exploration and classical instruments/optimizations.

This annual best publication award, as judged by a panel of experts, goes to Dr. S. Narasinga Rao, Dept. of General Medicine, Andhra Medical college (AMC), Visakhapatnam, INDIA for the transdisciplinary review on 'Inspiring (Intelligent, Informative) Medical Physiology (IMP) : Nobel Prize in Physiology or Medicine for 2021', which was published in sixth issue of JOAC 2021.
The web viewers of the journal-site exceeded two lakhs and ninety thousand by now.

This journal is in memory of my better half Smt. Kaza Indira Devi.

(Prof KazaSomasekhara Rao)
Founder, Editor-in-Chief