

EDITORIAL

In this combined issue for September-December 2019, we are excited to share with you the full papers of selected presentations made during the National Conference on Ancient Indian Knowledge: Science and Technology held at the National Council of Educational Research and Training, New Delhi from 17–18 July 2018. A wide range of articles on different aspects of science and technology rooted in ancient Indian knowledge such as healthcare, well being, mathematics, astronomy, physics, chemistry, engineering, sustainability, etc., have been covered in the issue.

In the first article '*Agasthya Ramsayanam* Used in Human Respiratory Diseases: A Review' the authors discuss about *Agasthya Rasayanam*, an ancient Ayurvedic remedy renowned for its holistic approach to respiratory health. The author notes that this time-honored remedy reflects India's rich healing tradition and offers relief to those with respiratory ailments.

The second article 'Indian Indigenous Knowledge on Medicinal Plants: Their conservation through Biodiversity Park' reflects generations of wisdom, demonstrates India's deep understanding of the various healing properties of plants and offers effective remedies with lesser side effects compared to allopathic medicines.

In the article, 'Algorithmic Approach in Ancient Indian Mathematics and Astronomy', the author explains how ancient Indian mathematics and astronomy employed advanced algorithmic approaches, paving the way for significant discoveries. A couple of fascinating algorithms that are representative of Indian mathematical traditions are discussed, beginning from the algorithm to find the square, square root, cube roots devised by Aryabhata, Bhaskara and Brahmagupta.

In the article 'Physics of Ancient Indian Ring Weapon' the author unveils the aerodynamics, trajectory, and mechanics of an ancient weapon

called *Chakram* (Rudnick) using school physics. This unique weapon's design reflects sophisticated understanding and mastery of physical principles in ancient India.

The article 'Traditional Medicinal Use of Papaya (*Carica papaya* L.)' unveils how medicine utilises the various parts of the papaya plant (*Carica papaya* L.) for health benefits. These botanical wonders showcase nature's diverse offerings of papaya.

The article 'Commercialisation of Cinnamon Grown in India' highlights its market value and cultivation practices, offering economic opportunities for growers and traders. Cinnamon, more valuable than gold has been used as a folk medicine from the ancient era due to its numerous health benefits, both in Ayurveda and traditional Chinese medicine.

The next article 'Synergistic Combination of Ancient Indian Herbal Formulations with Modern Allopathic Prescriptions is Need of the Hour' highlights that the basic need for synergising ancient Indian herbal formulations with modern allopathic prescriptions is paramount in contemporary healthcare. This harmonious blend offers holistic solutions to complex health issues, leveraging the strengths of both traditional and modern medicine.

The articles 'Environmental Preservation in Vedas: Perspectives for Better Future' provided some evidences of knowledge of science and technology in ancient India, offer timeless wisdom for a sustainable future. These ancient texts provide valuable perspectives on conservation, guiding us toward a more environmentally conscious world. Ancient India's historical evidence showcases advanced knowledge of science and technology. From intricate architectural marvels to mathematical discoveries, these insights offer glimpses into India's rich scientific heritage.

The article 'Analysis of Seed Oil of *Jatropha curcas*: A Miracle Plant' reveals its multifaceted potential. *Jatropha curcas*, a versatile "miracle plant," provides valuable seed oil used in biodiesel and cosmetics. This "miracle plant" holds promise as a versatile and sustainable resource, finding applications in various industries.

The article 'Civil Work and Town Planning in Śaiva Inscriptions of Ancient India' discusses how the Śaiva inscriptions in ancient India provide valuable insights into civil work and town planning. These inscriptions reveal meticulous urban planning and infrastructure development practices of the time.

The next article 'Understanding Ancient Indian Knowledge of Science and Technology in Terms of Architectural Wonders' explains how the architectural wonders of ancient India serve as living testaments to the profound scientific and technological knowledge of their creators. These awe-inspiring structures, like the intricate temples and complex palaces, intricately combined mathematical precision, engineering genius, and artistic mastery. They reflect a harmonious synergy of science and artistry, showcasing the depth of ancient Indian wisdom.

The article 'Speed of Light in the Vedic Literature' references to the speed of light in Vedic literature that have intrigued scholars. These ancient texts hint at an understanding of light's rapidity, sparking discussions about the scientific insights within Vedic knowledge.

The article 'Ancient Indian Cryptography' is a feature of ancient literature. Messages were often conveyed in a hidden form visible in ancient texts. The paper, Ancient India Cryptography, cites an example of Pi which is hidden in one Malayalam shloka. The paper also highlights the work of Subash Kak, a scientist, historian and Indologist in this area. Further, it discusses how we can connect modern cryptography technology to ancient literature text, monument and war techniques.

The next article 'Study of Ancient Indian Scientific Knowledge and Contemporary Nanotechnology-A Review' is a fascinating research area. The article explores how ancient insights, often found in texts like the Vedas, align with and inspire modern nanotechnology, bridging the gap between centuries-old wisdom and cutting-edge scientific advancements.

The article 'Ancient Mathematics of India' with roots dating back to the Vedic times, introduces innovative concepts and techniques. Such pioneering ideas in arithmetic, algebra, and geometry laid the foundation for modern mathematical understanding and continue to influence mathematics worldwide.

The article 'Integration of Traditional Knowledge in Secondary School Curriculum' enriches students' education by exposing them to diverse cultural perspectives, heritage, and valuable skills, fostering a more holistic and globally aware learning experiences. The paper analyses the secondary school textbooks to identify the scope for integrating relevant aspects of ancient Indian scientific knowledge in secondary school science curriculum.

The last article of this issue 'Healthy Parenting in Context of Ayurveda' emphasises a holistic approach to child-rearing. It elucidates how Ayurvedic principles guide parents to create a harmonious environment that supports the child's overall growth and development.

We hope you find this September–December 2019 issue both informative and inspiring to dig deeper into the rich ancient Indian knowledge and look for possible ways to strengthen the present-day science education.

As always, we welcome your valuable suggestions.

Happy reading and happy learning!