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The volume on Ancient sciences and Archaeology recently brought out includes the paper presented on various aspects of Ancient Sciences and Archaeology in the year 2010. The papers have been brought out as a compendium for the benefit of researches. This volume aims at the interaction of the scholars on different issues and recent researches done in the field of Ancient Mathematics, Archaeology, Epigraphy, History, Economics, Ancient Medicine, Manuscriptology, Temple Architecture, Ancient Indian Engineering, Astronomy, Language, Literature and so on. Among the contributions made to this journal by reputed authors mention may be made of the scholars like Dr. T. Sathyamurthy, Dr. Priya Thakur, Dr. Anuradha K. Ranade, Dr. Mallinathpur, Dr. Raja Reddy, Dr. N. Kannan, Dr. N. Pankaja and Dr. Subrata Kumar Acharya.

The study made by Dr. T. Sathyamurthy on the subject "Unfolding the Ancient Indian Engineering marvel is a rich contribution in the sense, that for the first time a schematic cross section of the Vimana structure was taken for analysis. He has emphasized several aspects to create interest among the modern architects to focus their models on native techniques that resisted many natural calamities in the past.

Dr. Anuradha K. Ranade by using the epigraphic and literature data has drawn our attention to the regional culture especially of Maharashtra. She suggests that the evolution of Maharashtra as a socio-cultural unit is a long drawn process and inscriptions and literature from this

region are of great value for the reconstruction of the state of Maharashtra.

In an endowment lecture delivered on Traditional Boat Building techniques by Dr. P. Jayakumar emphasized the fact that the traditional seafarers are still preferring to choose their own traditional techniques and one can notice their sailing without board engines and sails together in order to avoid unexpected failures in the mid-sea. The contribution of Dr. Priya Thakur on the study of the astronomical elements at the Vidhya Shankar temple at Shringeri draws our attention to the aspect of the orientation of this temple on an east-west axis and presently stands parallel to the flow of the Thungabhadra river flowing south of it. The architectural details like orientations and pillars were laid out to indicate dates that were in meaningful relations to those marked by horizon pictures.

Dr. Yogesh Mallinathpur has conducted an extensive survey of the sites in Hagari Basin which will be valuable to the archeologist who are indulged in the study of Megalithic culture of the region. This detail study of the period ranging from early ironage to the early historical period of the Hagari Basin. He has emphasized the scope for further research is very limited since most of the sites have been destroyed.

Inscriptions are valuable for the study of weights and measures that were used in the ancient and medieval periods. Smt. T. Shanthi has dealt with this subject elaborately and narrated the

techniques that have been employed to measure the lands given to temples and plots assigned to the individuals etc. Even though the measuring rods seem to be used continuously yet there is a change in the measurement because of the fluctuation in the lands measured in the different areas. Dr. Raja Reddy's contribution on Ancient beads and coins to Chebrolu is a valuable addition to the numismatists and archeologists. Chebrolu site is an important site from the Satavahana period till the Vijayanagar period. Coins and beads furnish valuable data on the comprehensive history of the town.

Dr. N. Manoramma in her endowment lecture on Knight's Tour and Palindromic verses has brought out the features of unique Bandha that needs elaborations due to its peculiar usage and its demanding nature of the users artistic and accurate mathematical skills. She has analyzed the mathematical structure and the Algebra of Matrices. It is stated that the history of the Keladi period can very well be understood with the help of a rare manuscript called Gita Gowrivaram. Dr. G.V. Kallapura has brought out the importance of this Kavya which is preserved in the form of manuscript. Dr. N. Kannan has pointed out that the exorbitant greatness of the number "ONE" is explained enormously in a vivid and picturesque style by Swami Sri Vedanta Desika through the various ranges in contrast to the number "NINE" which may be presumed to have lower qualities in his paper on Mathematical Mountain Structure in Subhashita Nivi.

Dr. N. Pankaja and Smt. N. Leelavathi have drawn our attention as to how our Indian people from the ancient period knew about the Chitrakavyas and the introduction of the same by Acharya Dandan. All the Bandhas like Chaturanga turanga Bandha, Muraja Bandha, Ardhabhramaka or Sulikulam, Chakra Bandha are all written in 4 x 8 rectangle, one half of chess board. They have described the mathematical

approach to Chitrakavyas namely Matrix theories, Magic diagrams, Cryptography, Graph theory, etc. Each poem is transformed into a Matrix. Given a poem p the different Bandhas can be viewed as transformations. Given a poem of m lines each having n letters, it is possible to get a matrix of the type $m \times n$. This matrix is called the matrix of the poem indicated by (p) . The matrices can be thought of as graph, whose vertices are located at mn positions of the matrices. Each Bandha give rise to directed edges resulting in a directed graph. Given a matrix A of type $m \times n$, the various Bandhas transformations (BT) may give rise to semi-magic rectangles or squares. They have suggested in a detailed way with lot of illustrations, graphs, etc. about the uses of matrix and its various types of symmetries that were known to the Indian people from time immemorial.

This Journal is a valuable addition to the library and to the researchers in different faculties like Science, technology, history and commerce.