

## Academy Publications on History of Science

### *Indian Journal of History of Science*

Editor : S. Sriramachari; : Periodicity-Biannual since 1966, Quarterly since 1983, Rs. 250.00; \$ 135.00 (Annual Subscription)

Published under the guidance of the Indian National Commission for History of Science. Devoted to studies and researches in various fields of ancient, medieval and modern science in historical perspective, and an interesting forum for scientists, historians, sociologists, indologists and philosophers for exchange of their ideas on the evolution and characteristics of scientific concepts and technological advances.

*Caraka Saṃhitā* (A scientific synopsis) by P. Ray and H.N. Gupta, 1965; Second edition, 1980, Rs. 30.00; \$ 10.00.

A renowned medical treatise of Ancient India, prior to Galen; contains synoptic survey on authorship, date of composition, scope sub-division of the treatise, concepts and theories, physiological process health and longevity, physicians in diagnostic methods of treatment including surgery, poisons, physio-chemical processes, classifications and twenty tables including bibliography & index.

*A Bibliography of Sanskrit Works in Astronomy and Mathematics* by S.N. Sen, A.K. Bag and S.R. Sarma, 1966, Rs. 20.00; \$ 5.00.

A bibliography of primary source materials along with their place of availability, secondary studies, commentaries made on the sources etc. indispensable for the study of History of Astronomy and Mathematics in ancient and medieval India.

*\*Some Aspects of Pre-historic Technology in India* by H.D. Sankalia, 1966, Rs. 10.00; \$ 2.50.

Deals with the development of technology during pre-historic times.

*Fatullah Shirazi* by M.A. Alvi and A. Rahman, 1968, Rs. 2.30; \$ 0.33.

The book presents an interesting reading of the life and works of Fatullah Shirazi, a sixteenth century Indian Scientist of remarkable knowledge.

***Jahangir, the naturalist*** by M.A. Alvi and A. Rahman 1969; Reprinted 1989, Rs. 75.00.

Jahangir (1605-1627), the Mughal emperor was a keen lover of nature. The book is based on the studies of Memoirs of Jahangir and throws light on the scientific interest of Jahangir. It has six sections : - 1. Mammals, 2. Aves, 3. Botanical Informations, 4. Chemical Technology, 5. Medical Phenomena & Astronomical Data. The reading has been made interesting with the presentation of colourful plates originally drawn by the artists of Jahangir's Court and are available in various museums of the World.

***A Concise History of Science in India***, Editor - D.M. Bose, S.N. Sen and B.V. Subbarayappa, 1971; Reprinted, 1989; Rs. 200.00; \$ 70.00.

The volume throws light on the History of Indian Science from pre-historic times to modern age. Major focus is on the Survey of source materials, Astronomy, Mathematics, Medicine, Chemical practices and Alchemy, Agriculture, Botany, Zoology, the Physical World, Western Science in India. The work is a joint effort of the historians and scientists and was planned for the Indian National Commission for History of Science.

***Āryabhaṭīya of Āryabhaṭa***, Text with English translation by K.S. Shukla & K.V. Sarma, 1976, Rs. 21.50; \$ 7.00; £2.75.

***Āryabhaṭīya of Āryabhaṭa***, with the commentary of Sūryadeva Yajvan edited by K. V. Sarma, with introduction and appendices, 1976, Rs. 25.00; \$ 8.00.

***Āryabhaṭīya of Āryabhaṭa***, (in Hindi), by R.N. Rai, 1976, Rs. 25.00, \$ 8.00, ₹3.00.

The series in four volumes were released on the occasion of 1500th birth anniversary of great Astronomer-mathematician, Aryabhata I, (b. 476 AD), the founder of scientific astronomy in India.

***Rasārṇavakalapa*** by Mira Roy and B.V. Subbarayappa, 1976, Reprinted 1995 Rs. 80.00; \$ 27.00.

An eleventh century AD Sanskrit manuscript (814 verses) of Alchemy and Iatrochemistry on alchemical recipes and mercurial preparations. The present book is a critical edition with English translation of the manuscript.

***Suśruta Saṃhitā*** (A scientific synopsis) by P. Ray, H.N. Gupta and Mira Roy, 1980, Reprinted 1993, Rs. 225.00; \$ 75.00.

An Ayurvedic surgical classic of Dhanvantari School (128 chapters, divided in five books) composed by Suśruta summarised in English under the headings viz. Aim of Āyurveda, Authority and Date of Composition of the *Suśruta, Saṃhitā*, Scope and Subdivisions of the *Suśruta Saṃhitā*, Concepts and theories, embryonic growth and obstetrics and post-natal measures, Human body-its anatomy and physiology, food, health and longevity, diseases, poisons and antidotes, Some special recipes and formulae, Living creatures and their classification, Plant life, Pharmacology and Materia medica, Surgery, Convalescence, Training and duties of physicians, surgeons and nurses.

***Śiṣyadhivṛddhida Tantra of Lalla***, New Delhi, 1981

Part-I, Critically edited by Bina Chatterjee with commentary of Mallikarjuna Suri, Rs. 45.00; \$ 15.00

Part-II, English translation and mathematical notes by Bina Chatterjee, Rs. 45.00; \$ 15.00

An authoritative text of Indian Astronomy written by Lalla (7th century AD) in 22 chapters, following Āryabhaṭīan school of Astronomy.

***A Bibliography of the Works of Abūll-Raihan Al-Birūnī*** by Ahmad Saeed Khan, 1982, Rs. 30.00; \$ 10.00

Compiles a list of 135 works of Al Bīrunī, the great astronomer-mathematician (b. 973, d. 1050 A.D.) of Central Asia, of which 28 are on India along with details of secondary studies.

***Science and Technology in Medieval India - A Bibliography of Source materials in Sanskrit, Arabic and Persian*** by A. Rahman, M.A. Alvi, S.A. Khan Ghorī and K.V. Samba Murthy, 1982, Rs.200.00; \$ 70.00.

A most comprehensive single volume bibliography based on a survey of 10,000 medieval technical manuscripts in Sanskrit, Arabic and Persian available in India. It supplies information on contents of the manuscripts, authorship, availability, date, language, text studies and translations of manuscripts wherever possible, on the basis of catalogues and other sources.

***The Śulba Sūtras of Baudhāyana, Āpastamba, Kātyāyana and Mānava*** with text, English translation and commentary by S.N. Sen and A.K. Bag, 1983; Rs. 85.00; \$ 30.00.

Four *Śulba Sūtras* by Baudhāyana, Āpastamba, Kātyāyana and Mānava of the pre-Christian era have been edited, translated and commented upon. The *Śulba Sūtras* are of special importance because these deal with the rules for the necessary measures and constructions of the various sacrificial fire altars, involving geometrical propositions, construction and mathematical discoveries.

- \* ***Vedāṅga Jyotiṣa of Lagadha in its ṚK and Yajus Recensions with the translation and notes of T.S. Kuppama Sastry*** critically edited by K.V. Sarma, 1985, Rs. 25.00; \$ 8.00

The *Vedāṅga Jyotiṣa* of Sage Lagadha is the earliest work compiled on Indian calendar which were in vogue for fixing times for rituals and sacrifices during vedic times. The work is edited in two recensions, one relating to the *Ṛgveda* (36 verses) and the other relating to the *Yajurveda* (43 verses).

- \* ***Science and Technological Exchanges between India and Soviet Central Asia (Medieval Period)*** Editor, B.V. Subbarayappa, 1985, Rs. 125.00; \$ 42.00.

The seminar proceedings of the first Indo-Soviet bilateral seminar in history of Science, giving details of scientific and cultural heritage and interaction that took place between two regions-India and Central Asia.

- History of Astronomy in India***, Editors : S.N. Sen & K.S. Shukla, 1985, Rs. 200.00; \$ 100.00, £ 50.00.

Narrates astronomical development in India from antiquity to modern times. Thirteen experts contributed to the areas like Survey of Sanskrit, Arabic and Persian sources and studies made on these sources. A survey of twentieth century astronomy in India makes the reading interesting.

***Vaṭeśvara Siddhānta and Gola of Vaṭeśvara***

Part-I Sanskrit Text edited by K.S. Shukla, 1986, Rs. 100.00; £ 35.00.

Part-II English Translation and Commentary by K.S. Shukla, 1985, Rs. 130.00; \$ 45.00.

Most comprehensive 10th century AD Text compiled by Vaṭeśvara giving details of methods and processes employed by Indian astronomers.

- Ancient Glass and India*** by S.N. Sen and Mamata Chaudhuri, 1985, Price Rs. 100.00; \$ 35.00.

The book traces the history of glass, the techniques of glass manufacture and trade since 2nd millennium BC to 14th century AD with special reference to India based on both literary and archaeological evidences.

- A Critical study of Laghumānasa of Mañjula*** (AD 932) by K.S. Shukla, 1990; Rs. 10; \$ 50.00.

The Astronomical text is critically edited with commentary and English translation.

- Interaction between Indian and Central Asian Science and Technology in Medieval Times***, 1990, Rs. 500.00; \$ 170.00 (per set).

Vol-I General ideas and Methodology, Astronomy, Mathematics and Physical Concepts.

Vol-II Medicine, Technology, Arts & Crafts, Architecture and Music.

The volumes are the product of Indo-Soviet bilateral programme jointly sponsored by Indian National Science Academy and the Academy of Science of the USSR. The volumes have revealed the importance of many Indian and Central Asian manuscripts, their methodology, contents and impact on Central Asian culture.

***Scientific and Technical Education in India - 1781-1900*** by S.N. Sen, 1991, Rs. 250.00; \$ 85.00.

Contains documented materials and critical analysis of the development of scientific and technical education in India during the 18th-19th century. A rich source book to all scholars interested in the history of education specially in technical and science education and is useful for formulation of policies and strategies of higher education in India.

***Rasa Ratna Samuccaya by Sri Vagbhaṭa*** edited with English translation, notes and appendices in two parts by Damodar Joshi, 1991-92, Rs. 200.00; \$ 70.00.

A very popular Sanskrit text of medieval period on Indian alchemy and pharmaceuticals, an authentic English translation useful for modern scientists. This contains useful information on essential pharmaceutical processes, apparatuses, heating devices etc.

***History of Medicine in India***, Editor: P.V. Sharma, 1992, Rs. 350.00; \$ 120.00.

The book contains contributions of well known international scholars making a systematic survey of pre-Vedic, Vedic and post-Vedic literature dealing with medicine followed by studies on different traditions of Ayurveda, medicinal plants, general medicine, preventive and social medicine, surgery, obstetrics and gynaecology, pediatrics, primitive therapy, toxicology and other topics besides basic concepts of Ayurveda and Siddha medicine. The role of Indian medicine viz-a-vis world medicine as a whole have also been highlighted in a perspective manner.

***History of Technology in India, Vol. I***, Editor: A.K. Bag, 1997; Rs. 1200.00; \$ 350.00

Planned in four volumes with an objective to know the nature of technology developments in India, this volume is based on the analysis of major sources and the results of modern researches by different specialists in the period from antiquity to 1200 AD.

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