

co-authors (Vadodara), K.C.Tiwari (Vadodara), S.Yadav (Jodhpur), G.Das Gupta (New Delhi) and J.L. Thussu (Nagpur).

A network of palaeochannels was shown to exist in the Great Indian Desert that represent a gradual northwesterly migration from 'Luni' to 'Ghaggar'. This migration which requires geochronological confirmation was attributed to the gradual rise of a roughly NE-SW orientated cymatogenic arch. Combined satellite and archaeological data suggests that the river Satluj and the river Yamuna were tributaries of the Vedic Sarasvati. This connection was terminated by re-activation of a major transverse fault in the Kiarda Dun sector of the Siwaliks. Studies on the Haryana floodplains indicate a linkage between the Sarasvati and the Yamuna. Studies in the Kachchh area have helped in the identification of four deltas, probably belonging to Shatadru, Sarasvati and Drishadvati and the present day Indus north of the Rann of Kachchh. At a less regional scale several feasibility studies were presented of the use of synthetic aperture radar imagery data.

Singh, S.B.(Hyderabad) and D.Atchuta Rao (Hyderabad) highlighted the efficacy of aeromagnetic data and resistivity data in identifying lineaments respectively.

Based on field investigations Rajaguru and co-authors (Pune) identified five terraces in the Markanda river valley. They highlighted the presence of calcretes in Middle Palaeolithic terraces suggesting a relatively drier climate in the past. Another useful approach for palaeoenvironmental interpretation - palynology was introduced by C.Sharma (Lucknow) using examples from the Garhwal and Kumaun Himalayas. L.S.Chamyal (Vadodara) and K.S.Raghav (Jodhpur) stressed on sedimentological studies of river bank and aeolian successions and advantages of the 'facies' approach using case studies from Central Gujarat and Thar Desert respectively.

A.K. Singhvi and co-authors (Ahmedabad) discussed the age of the Thar desert using variants of the luminescence dating method and suggested that the Thar desert aeolian activity began around 200 ka BP and has since fluctuated in periodic phases. Studies around Kundala by N.Juyal and co-authors (Ahmedabad) in the Luni Basin revealed a fluvial activity between 81 - 40 ka BP, succeeded by aeolian sedimentation between 10 to 8 ka BP.

Stable isotopic studies by S.V.Navada and co-authors pointed that no present day recharge was taking place along the palaeochannels around Jaisalmer and the rate of groundwater movement was around 5 m/year.

A panel discussion was undertaken on the theme 'Relevance of palaeochannel studies in water resources management'. The discussion was conducted by P.P.Patel (Vadodara) under the Chairmanship of P.Ramachandran (Vice Chancellor, M.S. University of Baroda, Vadodara). The participants were N.Barot, K.C.B.Raju, R.N.Athavale and S.Choksi. A half day field excursion to sites in the Mahi river valley was also undertaken.

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EXQUISITE PRESERVATION OF PRECAMBRIAN LIFE

An important article has appeared in the recent issue of Nature (vol.391, 5th Feb.1998, pp.553-558) illustrating three dimensional preservation of algae and animal embryos in a Neoproterozoic (570±20 Ma) sequence from southern China. This is an exceptionally well preserved record of multicellular life from just before the Ediacaran appearance of macroscopic life. What is most striking is the preservation in three dimensional detail of cellular structure throwing light on early animal evolution. The myth of the missing fossil record ascribed to the soft and microscopic forms of early life is now blown over as fossils in an exquisite state of preservation are reported. This discovery emphasizes the importance of a close study of Proterozoic phosphorite horizons in this country - *Ed.*