

## Ninth International Workshop on Matrices and Statistics

Hyderabad, India: 9–13 December 2000

The Ninth International Workshop on Matrices and Statistics, in Celebration of C. R. Rao's 80th Birthday, was held in Hyderabad (Andhra Pradesh), India, from December 9–13, 2000. This Workshop was organized in Hyderabad by the Indian Statistical Institute (ISI) and the Society for Development of Statistics, in collaboration with the Birla Science Centre, Osmania University and the University of Hyderabad. The International Organizing Committee (IOC) comprised R. W. Farebrother (England, UK), S. Puntanen (Finland), G. P. H. Styan (Canada; vice-chair), and H. J. Werner (Germany; chair). The Local Organizing Committee in India included R. Bhatia (ISI-Delhi), P. Bhimasankaram (ISI-Hyderabad), G. S. R. Murthy (ISI-Hyderabad), V. Narayana (ISI-Hyderabad), M. S. Rao (Osmania Univ., Hyderabad), B. Sidharth (Birla Science Centre, Hyderabad), U. SuryaPrakesh (Osmania University, Hyderabad), R. J. R. Swamy (Osmania Univ., Hyderabad), P. Udayasree (Univ. of Hyderabad), and K. Viswanath (Univ. of Hyderabad).

The purpose of this Workshop was to stimulate research and, in an informal setting, to foster the interaction of researchers in the interface between matrix theory and statistics. The Workshop, with more than 100 participants (group photo on pp. 16–17 above) from 17 countries, began with the Inauguration Ceremony on Saturday, December 9. Inaugural addresses were given by D. C. Reddy (Vice-Chancellor, Osmania University), H. J. Werner (Univ. of Bonn, IOC Chair), and M. Sudhakara Rao (President of the Society for Development of Statistics). This was followed, on the Saturday and Sunday, by a Short Course comprising the ten invited one-hour talks on recent advances in Matrix Theory, with Special Reference to Applications in Statistics. This Short Course was followed by the presentation of about

forty further research papers on Monday, December 11 – Wednesday, December 13. The Workshop proper included sessions of invited talks (40 minutes), contributed talks (15 minutes) and talks by students (20 minutes). Most Workshop abstracts are included in the *Workshop Programme with Abstracts as of 2000-11-29* which can be downloaded from the Workshop Web site: <http://eos.ect.uni-bonn.de/HYD2000.htm>. It is expected that many of these papers will be published, after refereeing, in a Special Issue on Linear Algebra and Statistics of *Linear Algebra and Its Applications*; the Eighth Special Issue on Linear Algebra and Statistics is vol. 321 (December 2000).

The Short Course was held in the Auditorium at the Prof. G. Rami Reddy Centre of Distance Education on the Osmania University campus and the Workshop proper in the Birla Science Centre in downtown Hyderabad. On Tuesday, December 12, there was a special ceremony in the Bhaskara Auditorium in the Birla Science Centre celebrating the 80th Birthday of C. R. Rao (newspaper article below from the *Indian Express*, 9 December 2000). His Excellency Dr. C. Rangarajan, Governor of Andhra Pradesh, was the Chief Guest and Speaker; further Addresses, Remarks and Felicitations to C. R. Rao were presented by Malakonda Reddy (Executive Secretary, MediCiti Hospitals, Hyderabad), M. Sudhakara Rao (President: Society for Development of Statistics), S. B. Rao (Former Director, ISI) and H. J. Werner (Univ. of Bonn, IOC Chair). A ballet performance by the children of the MNR Educational Institutions was followed by the Workshop Banquet.

On Monday evening, December 10, the cultural programme was highlighted by the play "Journey through Mathematics: The Crest of the Peacock" directed by Professor Shewalker and staged by students of the Sarojini Naidu School of Performing Arts. The play began in the days of the Indus Valley Civilisation in Mohenjodaro (3000–1750 BC) and ended in the 20th century. The marble of the Naubat Pahad, Birla Mandir, was a marvelous backdrop for this "unique theatre for Mathematics". –Eds.

## The Sultan of Stats is 80 today

By B KRISHNA MOHAN  
December 8

**P**ROF. Calyampudi Radhakrishna Rao, or CR Rao as he is more widely known, is reckoned among the top statisticians in the world. The Indian born US academic's contributions to the field are both profound and prolific. He has published over 400 research papers.

To celebrate Prof. CR Rao's 80th birthday, an international workshop on 'Matrices and Statistics' is being jointly organised by the Indian Statistical Institute (ISI), the Society for Development of Statistics, Birla Science Centre, Osmania University and the University of Hyderabad from December 9 to 13.

The workshop, the ninth in the series, would be held at the Centre for Distance Education at the Osmania University on the first two days and at the

Bhaskara auditorium of the BM Birla Science Centre the next three.

Talking to *City Express*, Prof. Rao said statistics played a vital role in all spheres of life, rendering viability to the data collected by helping draw out inferences.

The prediction of demographic trends was possible only with statistics. In health it was used to interpret diagnostic reports and take decisions on medication. It was used in grading samples to carry out bulk transactions. Industry, meteorology and psychology were just a few of the fields in which statistics was used to arrive at conclusions.

He said that in coming years



the "SIGM" quartet of technologies — space, informatics, genome and management — would play a vital role, especially in the context of globalisation.

As for the use of matrices, he said they enabled statisticians to arrive at more coherent conclusions as the error percentages were quantified. The use of computers too had enhanced the success rate.

Most of Rao's fundamental contributions to statistical theory were offshoots of the practical problems he addressed himself to. His 'orthogonal arrays' are used in controlling and improving productivity and quality in manufacturing processes.

To date, Rao has received honours from universities in 15 countries and has authored 14 books. The Cramer-Rao inequality law, the Rao-Blackwell theorem, Rao's score test are some of his well-known contributions to the discipline.

Two of his books, *Linear Statistical Inference and Statistics and Truth*, have been translated world-wide.

Earlier, ISI director SB Rao addressing mediapersons, said the workshop was intended as a platform for interaction between statisticians. About 140 statisticians, including 40 from abroad, will be participating in the workshop.

International organising committee members HJ Werner from Germany, vice-chairman S Puntanen, RW Fairbrother, GPH Styan, national committee members P Bhimasankaran, RJR Swamy, K Vishwanath, M Sudhakara Rao and several other experts attended the meeting.