Journal of Mechanical Design

## Memoriam

## Homage to Professor A. C. Rao



Professor A. C. Rao was born in a rural agriculturist family in the state of Andhra Pradesh, India on December 29, 1935. He shall always be remembered for the Hamming number technique which he proposed to test the isomorphism in mechanisms which yielded the best results; he was among the very first researchers to use genetic approach for generation and rating of the linkages and the gear trains. He was also the very first person to focus on the importance of structural aspects of kinematic chains for manipulator applications; he initiated the idea of fuzzy logic applications in the generation, rating, and selection of mechanisms. His contributions are widely referred by the present researchers as a backbone for their current research and also his works have been greatly applauded by numerous noted researchers. Other than his research papers he contributed several technical briefs and letters to the editors for pointing out technological and logical errors, and to highlight the important aspects that had to be brought into focus for the betterment of quality research in mechanisms. He left behind a spark amongst his students and fellow researchers which motivate them to work hard and produce quality research work long into the future.

He started guiding doctoral students in the year 1981 and worked with his students researching the field of mechanisms and gear trains. He guided 29 doctoral students of which 28 have been awarded with the Ph.D. degree and one is currently awaiting the dissertation. He published 157 research papers in various reputed international journals like ASME Journal of Mechanical Design, Mechanism and Machine Theory, CSME, JSME, and the Journal of Mechanical Engineering–Slovakia; 168 papers in the Indian national journals like Journal of Mechanical Engineering– Institution of Engineers (India), Indian Journal of Engineering and Material Sciences (NISCAIR), Indian Journal of Engineering Technology, etc.

He obtained his Ph.D. at the very young age of 32 years and his D.Sc. by his 35th year. This charismatic personality left for the heavenly abode on April 3, 2008, but still five of his papers are pending with various international journals and six are in the completion stage for corresponding to the journals which are now lying with his students. This implies that he continued his research until almost his last breath. Hats off to such a vivid personality.

Let us all pray to the Almighty to make his soul rest in peace and bless his family and students with the courage to face the loss of this vivacious person. The researchers and students of mechanisms and robotics shall always remember Professor Rao for his invaluable work and contributions.

## **Srinath Atluri**

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