

remarkable increase shown in the energy of activation due to ageing (Table 2).

These alterations found in the kinetic parameters (Figure 1) therefore point out to enhanced catalytic potential of enzyme catalase of the myocardium on feeding with *Cichorium*. *Cichorium* leaves when fed for 30 days have rendered the catalase enzyme of the heart biologically more efficient to suppress peroxidative damage.

To sum up, administration of *C. intybus* leaves has caused an activation of enzyme catalase and lowering of lipid peroxidation. It caused a substantial decrease in taurine and glutathione levels. The activation of myocardial catalase as indicated by decreased energy of activation and  $K_m$  by the extract of the leaves of *Cichorium* is suggestive of increased activation of antioxidant system

offering protection to the heart from oxidative damage, suggestive of ageing.

1. Chubb, J. and Huxtable, R., *Eur. J. Pharmacol.*, 1978, **48**, 357–359.
2. Dwivedi, S., Somani, P. N., Chansouria, J. N. and Udupa, K. N., *Indian J. Expt. Biol.*, 1988, **26**, 969–975.
3. Colowick, S.-P. and Kalpan, N. D., *Methods Enzymol.*, 1967, **6**, 613–615.
4. Sushamakumari, A., Jayadeep, A., Suresh Kumar, J. S. and Venugopal, P. M., *Indian J. Exp. Biol.*, 1989, **27**, 134–137.
5. Parker, Jr C. J., *Anal. Biochem.*, 1980, **108**, 303–305.
6. Patterson, J. W. and Lazarow, A., *Method Biochem. Anal.*, 1955, **2**, 259–261.
7. Xia, Y., Hill, K. E. and Burk, R. F., *Nutrition*, 1985, **115**, 733–735.

ACKNOWLEDGEMENT. We are grateful to Bangalore University for providing facilities to conduct the study.

Received 25 January 2002; revised accepted 4 March 2003

## PERSONAL NEWS

### Pramod Sadasheo Moharir (1943–2003)

Prof. Pramod Sadasheo Moharir, a widely respected researcher, teacher and philosopher, breathed his last on 14 January 2003 after brain haemorrhage. Born in Nagpur on 21 April 1943, Moharir had his early education in Nagpur. He obtained M Tech from IIT Bombay (now Mumbai) in 1966 and Ph D from IIT Kanpur in 1971. He worked as a lecturer at BITS, Pilani during 1971–72 and then moved to Roorkee for a short duration in 1972. Subsequently, he was a lecturer at IISc, Bangalore during 1972–76, Assistant Professor at IIT, Bombay during 1976–77, and then Reader and Professor at University of Roorkee (now IIT Roorkee) during 1977–89. He joined National Geophysical Research Institute, Hyderabad in 1989 as a visiting scientist and, since May 1992, served the institute as a senior scientist.

Moharir made significant contributions in geophysical signal processing, modelling of earthquake sequences, mathematical analysis and modelling of various geophysical problems. His initial work was on the problem of redundancy reduction and bandwidth compression of sampled pictures. He developed many new techniques to obtain linear orthonormal transforms useful for signal processing, secrecy coding and pattern recognition. His extensive work on signal processing was applied in geophysical signal processing. He covered a range of transforms, developed recursive relationships for linear systems and extended these notions to define efficient nonlinear transforms.

Moharir's immense interest in pulse compression sequences for system identification resulted in the development of Barker sequences of lengths above 13 and ternary sequences with Barker specifications. Besides, he extended the notion of correlative processing for pulse compression to monogenic signatures. He modified the predictive deconvolution



technique to develop a superior recursive deconvolution technique and generalized the notion of minimum entropy deconvolution to Occam deconvolution strategies. His contributions to the field of pattern recognition and its application to seismic discrimination are invaluable.

His contributions in the field of earthquake mechanics, geophysical inversion and numerical techniques are numerous. He developed new statistical models for earthquake sequences and proposed modi-

fied finite difference techniques based on approximation-theoretic and operator-algebraic notions. His critical analysis of the non-uniqueness in geophysical inversion provides insight into various types of non-uniquenesses in geophysical interpretation. For his significant contributions, he was awarded S.S. Bhatnagar prize in 1987.

Moharir was a voracious reader and a great orator. He could speak on any topic with authority and philosophical touch. He never shied away from expressing his bold views on scientific pursuits as well as on any general theme. On the personal front, he was a very affectionate, encouraging, and caring person to his friends. Among many instances of his affectionate gestures, I would like to mention here his letter of 12 July 2001, where he appreciated my efforts in setting a new tradition and treading a new path of giving equal financial weightage to contributors of my edited volume on fractals and counted me as one among his friends. In his death the country has lost a great philosopher, teacher, and researcher whose innovative ideas and critical appraisals always infused enthusiasm in colleagues and students. His sad, untimely demise is an irreparable loss to all those people for whom he was a great source of inspiration.

VIJAY P. DIMRI

*National Geophysical Research Institute,  
Uppal Road,  
Hyderabad 500 007, India  
e-mail: dimrivp@rediffmail.com*