

Foreword

c-Type cytochromes play many important roles in the energy transduction reactions of the bacteria. Appreciation of their roles in different species has developed steadily since such cytochromes and their importance were first recognized in anaerobically grown photosynthetic bacteria by Professor Martin D. Kamen and his associates in the early 1950's [1]. The subsequent growth in knowledge of these bacterial cytochromes prompted Professor Kamen, during his tenure as a Fogarty Scholar in Residence at the National Institutes of Health, Bethesda, Maryland, U.S.A., to organize a workshop in August 1990 to review progress in understanding them. Much of this progress stemmed not only from discoveries made by Kamen and his pupils, now spread worldwide, but also from his enthusiasm over many years in characterizing organisms, developing the large-scale preparation of cytochromes and organizing collaborative efforts to characterize many cytochromes. Details of Professor Kamen's involvement with cytochromes together with fascinating accounts of his involvement with other areas of science, in particular the discovery of ^{14}C and recognition of its use in biochemical research, have been summarized by him in two engaging publications [2,3].

The workshop reviewed most of the current points of interest concerning non-mitochondrial cytochromes *c*. There was naturally some emphasis on systems that had attracted the interest of Professor Kamen during his long career. Despite the title of the workshop, it was recognized that the properties of mitochondrial cytochrome *c* could be discussed, even if only as a model for the related bacterial cytochromes *c*! We believe that publication of summary versions of the papers given at the workshop is appropriate and valuable because this

was, as Professor Kamen emphasized, a unique gathering for its ability to provide a useful perspective for the many investigators who are or will become intrigued by these proteins. In another sense the contributions here provide a partial update to Volume 1 of *Cytochromes c* by Pettigrew and Moore [4] that was published in 1987 and provided an excellent overview of the subject.

The papers are organized to give (1) a view of the diversity of chemical properties of the cytochromes, (2) their sequences and evolution and (3) some structural and theoretical considerations regarding their function.

In concluding, we are sure that we speak for all the participants, and many other investigators, in recognizing the important role that Professor Kamen has played in enlarging the bounds of our knowledge about a significant aspect of the way that life is sustained. All the speakers at the meeting, and each has contributed his or her paper, wish to dedicate this volume to him in recognition of his friendly and good-humoured leadership.

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References

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- 2 Kamen, M.D. (1985) *Radiant Science, Dark Politics*, University of California Press, Berkeley.
- 3 Kamen, M.D. (1986) *Annu. Rev. Biochem.* 55, 1–34.
- 4 Pettigrew, G.W. and Moore, G.R. (1987) *Cytochromes c: Biological Aspects*, Springer, Heidelberg.