

## EDITORIAL

As its name suggests, the Geoffrey J. Butler Memorial Conference in Differential Equations and Mathematical Biology is dedicated to the memory and honor of our friend and colleague, Geoff Butler, who passed away at the age of forty-two on July 13, 1986 after a brief illness. His love of mathematics and mathematical education is well evidenced by his published works and his involvement with the Canadian and International Olympiads.

Shortly after his death, it was decided to have the conference in Geoff Butler's memory. This conference took place from June 20–25, 1988, on the campus of the University of Alberta in Edmonton. The Department of Mathematics and the Applied Mathematical Institute supplied facilities, supplies and secretarial and other help during both the planning and the conference periods. The steering committee of the conference consisted of J. F. Addicott, W. Allegretto, L. H. Erbe (co-chairman), H. I. Freedman (co-chairman), J. W. Macki, J. Muldowney and C. Strobeck.

Previous to the conference, the Department of Mathematics established the Geoffrey James Butler Memorial Lectures to be given upon occasion by distinguished people on topics related to Geoff Butler's work. The first of these occurred at this conference when Professor Paul Waltman of Emory University, Atlanta, Georgia, gave three lectures under the title, *Competition in Chemostat-Like Models*.

The conference was singularly honored, when Geoff's father, Mr. Herbert Butler, and sister, Mrs. Ann Jury, both of England, were able to attend. Their presence, along with Karen Butler's, throughout the scientific and social activities was a large factor in the success of this conference.

The themes of the conference were related to the mainstreams of G. J. Butler's research, together with survey lectures on his work. To this end, in addition to Professor Waltman's talk, survey lectures were given by E. J. Barbeau (University of Toronto), L. H. Erbe (University of Alberta), and H. I. Freedman (University of Alberta). There were hour lectures given by J. M. Cushing (University of Arizona), K. P.

Hadeler (Tubingen University), J. Hofbauer (University of Vienna), A. Mingarelli (University of Ottawa), K. J. Palmer (University of Miami), K. Schmitt (University of Utah), H. L. Smith (Arizona State University), G. Sell (University of Minnesota), and half-hour lectures given by W. Allegretto (University of Alberta) U. Elias (Technion-Israel Institute of Technology), M. Farkas (Budapest Technical University), J. W. Macki (University of Alberta), J. S. Muldowney (University of Alberta), B. Rai (University of Allahabad), V. S. H. Rao (Jawaharlal Nehru Technical University), T. D. Rogers (University of Alberta), K. Schneider (Akademi der Wissenschaften der DDR), J. B. Shukla (Indian Institute of Technology, Kanpur), P. van den Dreissche (University of Victoria), G. S. K. Wolkowicz (McMaster University). There were also 35 contributed lectures.

This issue of the Rocky Mountain Journal of Mathematics forms the Proceedings of the conference. After the list of publications appear Professor Waltman's paper followed by the three survey papers, and these are followed by all other accepted papers (alphabetically by author).

We gratefully acknowledge support from the following at the University of Alberta: Department of Mathematics, Applied Mathematics Institute, Office of the Vice President (Research), Central Research Fund, Dean of Science. We thank the Canadian Mathematical Society for support and advice. We specifically wish to thank Professor Joseph W.-H. So for his invaluable help. We wish to thank Mrs. Doreen Fletcher for her unselfish cooperation. Finally, we are eternally grateful to Ms. Jody Smiling, the conference secretary, for her tireless devotion to this conference and for the many hours above and beyond the call of duty attending to the many idiosyncrasies of the conference organizers.

L. H. Erbe

H. I. Freedman

Edmonton, 1988