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## SYMPOSIUM ON LIPOXYGENASE: ITS BIOCHEMISTRY, PRODUCTS, AND ROLE IN PLANT AND ANIMAL CHEMISTRY

### Introduction

The rapid expansion of lipoxygenase research has spread the boundaries of investigation beyond that of the plant kingdom, to which it was once thought limited. This expansion has also produced a challenge of major proportions to those who wish to maintain contact with all the facets of lipoxygenase research. Not only does the challenge exist within the literature aspects of our communications but also exists in the wide diversity of meetings in which lipoxygenase-related research is now presented. One of the aims of this symposium was to attempt to bring researchers from both the plant and animal lipoxygenase-related areas together. To a certain degree this aim was achieved. In the future it is hoped that greater success and improvements can be achieved in this endeavor through a joint presentation-discussion forum. What form this forum should take is an open question; however, I believe the need for it increases in importance with each passing year and it is hoped that such a need is also felt by many other researchers in the lipoxygenase field. Expressions of concurrence regarding the need for such a forum and its proposed form would be most welcome.

The quest for an understanding of the role of lipoxygenase in plants still continues while the role for animal lipoxygenases may be within our grasp. However, recent findings, presented in this symposium by Dr. Zimmerman and elsewhere by Dr. Axelrod and his co-workers, regarding the formation of prostaglandin-like metabolites by plant extracts and the proposed involvement of lipoxygenase and linolenic and arachidonic acids in their synthesis may be a significant step forward in determining the role of lipoxygenase in plant tissue. As we gain a greater insight into the mechanisms of the reaction, improve technology for product isolation, and understand the interactions of the products with other plant constituents our ability will expand to postulate, theorize, and design the appropriate provocative experiments to unlock the secrets of nature which we seek. We will find the key by cooperation, mutual support, hard work, and a little luck. It is to this goal that energy and resources put forth for the organization and presentation to this symposium are dedicated.

As organizing chairman of the symposium, I wish to thank the participants in the symposium for their splendid contributions and cooperation. Thanks also are due to our financial supporters—the American Chemical Society and the Upjohn Company.

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