WHY A JOURNAL OF BIOMECHANICAL ENGINEERING?

While Bioengineering is still in its infancy, it is beginning to move into adolescence. It is a new and exciting phase in which we are all fortunate to be participants.

There is a core of people around the country who are doing outstanding work in all phases of this field. The technical sessions at ASME and other societies' meetings have increased dramatically in the last five years. We are beginning to see a number of real bioengineering graduates for the first time in the overcrowded technical sessions.

ASME has felt the rapid growth of people and activities in Bioengineering. The publications of the many papers which have emerged have been in bound symposia volumes and dispersed throughout a wide variety of other journals. There has been an outcry for some time that "a journal is needed where the papers can be published." It is not that bio journals do not exist. Rather, what was needed and what the Journal will do is provide a publication outlet for papers which emerge from the vast range of technical activities and meetings organized and participated in by its members. That is not to say that we will not accept papers from outside ASME membership. Quite the contrary, we will accept papers from anyone. However, the Bioengineering Division within ASME will provide a solid core for a stable and high-quality journal.

Scope of the Journal

The objective of the Journal is to serve as an excellent forum for the literature in Bioengineering. The scope of the Journal will reflect both the interest in the Bioengineering community and the competency of the Editorial Board.

Bioengineering is very much device and applications oriented. This will also be reflected in the Journal. Also, Bioengineering is equally concerned with seeking new understanding of the behavior of living systems. Thus, the Journal will include topics on design of new devices, research for establishing fundamental system behavior, application of known methods to new concerns in the field of health care, and simulation of systems to obtain a better understanding of system behavior.

We have divided the topics for review purposes into the following categories:

Artificial Organs and Prostheses
Controls and Instrumentation
Design
Fluid Mechanics
Solid Mechanics
Heat and Mass Transfer
Materials
Health Care

The Journal will also include:

Notices of future conferences and paper deadlines
Survey, state-of-the-art papers on various bioengineering topics
Editorials concerning philosophy and directions of bioengineering education, research, and employment
Abstracts of current interest papers
Divisional news
Discussions of papers previously published

The Associate Editors

The Editorial Board is made up of the Associate Editors of the Journal. They are the policy-making body of the Journal. They are also the same people who request and evaluate reviews, and essentially make the decisions for or against publication.

The Associate Editors of the Journal are among the most outstanding engineers, researchers, and educators in Bioengineering. Their work and activities are well established and widely known both nationally and internationally.

The following is a list of the Associate Editors:

Perry L. Blackshear (Artificial Organs & Prostheses)
Professor of Mechanical Engineering
University of Minnesota

John C. Chato (Heat and Mass Transfer)
Professor of Mechanical Engineering and Bioengineering
University of Illinois, Urbana

Philip A. Drinker (Health Care)
Harvard Medical School/P.B.B.H.

Richard J. Forstrom (Fluid Mechanics)
Applied Research/Hospital Group
American Hospital Supply Corporation

Y. C. (Bert) Fung (Solid Mechanics)
Professor of Bioengineering and Applied Mechanics
University of California, San Diego

Seth Goldstein (Controls and Instrumentation)
Biomaterials Engineering and Instrument Branch
National Institutes of Health

Thomas J. Love (Heat and Mass Transfer)
George Lynn Cross Research Professor of Aerospace
The University of Oklahoma

Robert W. Mann (Design)
Whitaker Professor Biomedical Engineering
Massachusetts Institute of Technology

Robert E. Mates (Review Papers)
Mechanical Engineering Department
State University of New York at Buffalo, New York

James H. McElhaney (Materials)
Professor of Biomedical Engineering
Duke University

Robert M. Nerem (Fluid Mechanics)
Associate Dean, Graduate School, Bio-Medical Engineering Center
The Ohio State University

Winfred M. Phillips (Editor at Large)
Associate Professor of Aerospace Engineering
The Pennsylvania State University

Albert B. Schultz (Solid Mechanics)
Professor of Mechanical Engineering in the Materials Engineering Department
University of Illinois, Chicago

Richard Skalak (Fluid Mechanics)
Professor of Civil Engineering and Engineering Mechanics
Columbia University

Charles R. Smith, Jr. (Editor at Large)
Associate Professor of Mechanical Engineering
Purdue University
The technical meetings within ASME, of which there are at least two or three a year relating to Bioengineering, provide a means of oral exchange of the latest information both formal and informal. These meetings are an important element in providing a solid foundation for the Journal.

In Bioengineering, better ways are being sought to meet the health care needs of all of the people. Fortunately for all of us the medical and engineering professions are finally getting together. It is at last recognized that the engineering mind is an important part of development and utilization of medical devices. We cannot say that the communication is yet perfect but it is definitely improving.

When we seek to design and build better prostheses, better diagnostic methods and equipment, when we seek a better method of health care delivery, we turn to the available literature. We all have the responsibility to see that the best possible information is available. It is the objective of the Journal to serve this function. It truly will be the forum for the bioengineer.