

2002 JACS Editorial

This past year the American Chemical Society (ACS) celebrated the 125th anniversary of its founding in 1876. Shortly thereafter, our society established the *Journal of the American Chemical Society* (*JACS*) that, during its nearly 125 years of existence, has evolved into the flagship journal of the ACS and the premier medium for the publication, worldwide, of fundamental research in all areas of the chemical sciences.

The dawn of a new millennium, the 125th anniversary of the ACS and the beginning of a new century are occasions for reflection and prognostication. Chemistry, as all of the sciences, has made tremendous progress in the last one hundred years. Discoveries have been made that were unimaginable by most chemists at the turn of the last century in 1900. Our understanding of all aspects of the field, from basic theory to insights at the molecular level of living organisms, has reached new heights. For over one hundred years, and especially the second half of the 20th century, *JACS* has taken the lead in presenting these advances to the scientific community worldwide.

Chemistry, the central science, is robust and vibrant in all of its aspects and is poised for seminal new discoveries and spectacular advances aided by recent striking developments in technology and sophisticated instrumentation. However, just as even the most erudite and imaginative scientist living in 1876 or 1900 could not foresee, let alone predict, the particulars of chemical discoveries and specific advances in the 20th century, none of us can foretell what creative insights and advances will undoubtedly be made in the 21st century. What is certain is that major, dramatic discoveries will be made in all areas of chemistry. It is the aim of JACS to keep abreast of these exciting discoveries and insights and thereby continue to provide the international chemical community the state-of-the-art venue for the publication and broad dissemination of first-rate, fundamental research in all of chemistry, both in the core areas of our discipline and in such emerging areas as the interface of chemistry and biology, neurochemistry, and materials and single molecule chemistry.

Just as chemistry and the sciences have advanced and changed in the last century, so has the field of publication. Modern computers, advances in information technology and, in particular, the Internet and the worldwide Web have forever changed the publishing enterprise. Electronic publishing and the worldwide Web represent the biggest revolution in publishing and the widespread dissemination of ideas since the invention of the printing press by Johannes Gutenberg in Germany over 500 years ago. It is imperative that scientific publishing in general, and the ACS and *JACS*

in particular, keep abreast and take full advantage of the latest advances in publishing. It is with this in mind that in the last couple of years *JACS* has already introduced and will continue to make changes to keep at the forefront of chemical publications.

In 2001 the ACS implemented a fully electronic procedure via the Web for the submission and processing of both Communications and Articles submitted to JACS. For details, please go to the following: http://pubs.acs.org/JACS, select "info for authors". We anticipate that this convenient procedure will greatly facilitate the submission and review process for all authors, but in particular for our international contributors from abroad, as well as to further expedite our processing time. The Publications Division is currently working on improving Web editions of ACS journals, including JACS, which will allow the visual manipulation of structures as 3-D images, animation and movies in color, linking between references cited to acquire abstracts as well as the cited full document, and deposition and reuse of numeric data of various types including the display and manipulation of spectral data. Authors are encouraged to submit graphical animation to help improve the clarity of their presentation in the Web edition. The Associate Editor will determine the appropriateness of this medium. The Web journals also provide an opportunity for depositing large quantities of data, graphics (including color), and experimental details which are economically impractical to print. In addition, digitization of JACS back to the first issue in 1879 is in progress and will soon be available. We strongly encourage our authors to take advantage of these capabilities and our readers and researchers to avail themselves of these marvels of modern publications.

Starting with this issue, *JACS* has a new, more contemporary cover. We have introduced a graphic Table of Contents, which, in conjunction with the title, gives the reader the essence of the paper and thereby captures the reader's attention. We present a more user-friendly format both for Communications, now published in the front of the *Journal*, and for Articles. We encourage the use of color, which, when warranted, is free to authors. *JACS* no longer has page charges and permits reasonable distribution of free electronic reprints. Since 2001, *JACS* has been abstracted by MEDLINE and, in special cases, three-page Communications are allowed. Other facts and details about *JACS* are given in the accompanying *JACS* profile on the adjacent page.

Future issues will include *invited*, topical perspectives in emerging and frontier areas by pioneers and leading experts in the field in order to alert our readers to new developments in chemistry and related areas.

I would like to take this opportunity to thank our authors and reviewers worldwide for their continued confidence in *JACS*, as demonstrated by publishing their best work in *JACS* and by conscientiously reviewing for us. Reviewers, as guardians and guarantors of excellence in science, are essential to the scientific enterprise. Without fair, critical and timely reviews by peers and experts, both modern scientific publishing and science itself would diminish in value. We are grateful to our reviewers and appreciate their efforts to keep *JACS* the best it can be.

Likewise, I would like to thank my predecessors in the last half century, Professors W. Albert Noyes, Jr., Marshall Gates, Martin Stiles, Cheves Walling and, most of all, Professor Allen J. Bard, for making *JACS* the premier medium for the publication of cutting-edge, fundamental chemistry worldwide. In twenty years of stewardship as Editor, Al Bard has kept *JACS* at the forefront of chemical publications through rapidly changing and sometimes difficult times in the publishing world. Similarly, I would like to express my appreciation and gratitude to the entire staff of the ACS Publications Division in Washington, DC, and

Columbus, OH, for their dedication and commitment to the excellence of *JACS*.

It is evident that, as we approach the 125th anniversary of *JACS* in 2003, the *Journal* is strong, vital and well positioned to maintain its leadership role, as well as to tackle the challenges of contemporary publishing in chemistry in the 21st century. Our Board of Editors and their staff, the Editorial Advisory Board, the Coordinating Editor and I, as well as the ACS Publications personnel in Washington and Columbus, are committed to maintain and enhance the excellence of *JACS*. We will offer all scientists worldwide the highest quality service we can provide, in the most expeditious way afforded by rapidly advancing, modern technology, for the publication and broad dissemination of their very best research results in all areas of fundamental chemistry and related fields.

Peter J. Stang, Editor January 2, 2002 JA015113C