

Editorial for the Special Issue on Mechanisms in Metal-Based Organic Chemistry

"Nature gave chemists an organ with more than 100 different pitches to compose and play on. But he can also listen to and inquire into the infinitely more beautiful music of nature itself. Both are tasks that can fill a well-considered life".

Organic chemists have taken this advice, given by E. O. Fischer during the 1973 Nobel Banquet, to heart. The study of the wide range of structure and reactivity of organometallic compounds and their application to the development of new transformations has long been a central topic in organic chemistry. The power of metal-based organic chemistry and the fascination of organic chemists with the mechanisms involved are evident by the sheer number of manuscripts in every issue of *The Journal of Organic Chemistry* that report the use and study of organometallic compounds in a wide variety of ways.

It is thus fitting that "Mechanisms in Metal-Based Organic Chemistry" is the theme of this inaugural special issue of *The Journal of Organic Chemistry*. With this series, *The Journal of Organic Chemistry* presents a new collection of original papers that give a broad overview of a focused topic of current interest in organic chemistry. While such an overview can necessarily not be comprehensive, the editors have tried to reflect on the state-of-the-art research in this field by inviting original contributions from some of its foremost practitioners across the globe. We hope readers will find the papers compelling, stimulating further interest in the field and providing a collection of work that can be shared in the classroom. It is our intent to continue inviting such features for topics deemed to be of broad relevance and impact to authors across the discipline.

The 37 manuscripts in this Special Issue come from research groups in 14 different countries. The issue is a testimony of the vitality of the field, the ingenuity of the researchers in it, and the breath of the methodologies used. Research in organometallic chemistry is enhanced by the interplay between synthesis, mechanistic investigations, and computational analyses providing new directions for the preparation of molecules, molecular arrangements and devices. Both applications of stoichiometric amounts of organometallic reagents as well as the use of metal-based catalysts have their role in advancing organic synthesis. The contributors to this Special Issue are at the forefront of our discipline, and their insightful scientific presentations will surely affect the next generations of organic chemists.

In closing his remarks, E. O. Fischer wished that dreamers would always have a place in chemistry in the future. The imagination and creativity shown by the authors of this Special Issue prove that his wish continues to be fulfilled.

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Notes

Views expressed in this editorial are those of the authors and not necessarily the views of the ACS.

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