Special Issue

Selenocysteine: Synthesis, Function, and Evolution of the 21st Amino Acid

Message from the Guest Editor

Selenocysteine (Sec), the 21st amino acid, is found in enzymes known as selenoproteins, typically located in their active site. Sec is inserted by an expansion of the genetic code, wherein the UGA codon (normally a stop) is recoded for Sec insertion, through a highly regulated process involving various *cis*-signals and *trans*-factors. Some 46 years after the discovery of Sec, our understanding of this intriguing amino acid has greatly advanced, but many aspects remain obscure. In this Special Issue, we seek manuscripts from the diverse branches of molecular biology that take on the study of Sec. Submissions may cover the processes of its biosynthesis and peculiar insertion, the function and regulation of specific selenoproteins, their role in human health and disease, the evolution and phylogenetic distribution of Sec, and the biochemical nature of its catalytic benefit. We welcome both original research articles and reviews, and encourage you to contact us for preliminary inquiries.

Guest Editor

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Deadline for manuscript submissions

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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