Preface to E.M. Galimov Memorial Issue of *Geochemistry International*

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This issue of *Geochemistry International* is a memorial of the outstanding scientist Acad. Erik Mikhailovich Galimov, who passed away on November 23, 2020. Erik Mikhailovich worked as the editor-in-chief of *Geochemistry International* for fifteen years, when each issue of this journal was compiled under his attentive and scrupulous supervision. This memorial issue comprises papers by Erik M. Galimov's friends and colleagues, with all of these papers exploring and developing ideas that were within the circle of Erik M. Galimov's scientific interests.

The spectrum of Erik M. Galimov's scientific interests was extremely broad. He headed the Laboratory of Carbon Geochemistry at the Vernadsky Institute of Geochemistry and Analytical Chemistry, Russian Academy of Sciences, a little less than half a century ago. However, the reader should not be misled by Galimov's seeming devotion for just a single chemical element for decades: carbon is, in fact, an extremely diverse element, and studying its properties and behavior in various natural processes shall eventually lead the truly interested reader to a multitude of fields of knowledge.

Carbon is a fundamental constituent of living matter, which has been somehow mysteriously formed from inorganic matter. Carbon is a great diversity of variably complicated organic compounds, from the very simple methane molecule to amino acids, including those identified in extraterrestrial materials, in meteorites. Also, carbon is an important constituent of carbonaceous chondrites. Carbon is a very important chemical element of crude oil and natural gas, includ-

ing gas hydrates. Carbon is diamonds. Carbon is one of the principal elements of carbonates, both chemogenic and organogenic, as well as carbonates in the planet's interiors, in carbonatites. Carbon is an inherent element of the Earth's atmosphere, whose composition evolved through the geological history, and for example, such compounds as methane and carbon dioxide were once in a while responsible for the greenhouse effect and thus significantly affected the Earth's climate. Minute differences in such physical properties of carbon isotopes as their masses and spins open wide outlooks for applying techniques of isotope geochemistry in studying carbon-bearing geological materials. Obviously, studying carbon shall lead the researcher into exploring a broad spectrum of problems related to cosmochemistry, planetology, geology, inorganic chemistry, thermodynamics, ecology, and multiple other research avenues.

This is how, or almost how, Erik M. Galimov himself semiseriously explained the versatile character of the research avenue to which he devoted, very seriously, most of his life as a scientist, and where he has left very deep footprints.

We did our best to select papers for this issue of *Geochemistry International* to as much as possible reflect the circle of E.M. Galimov's scientific interests, although being aware that this can hardly be done in a single issue of any journal.

Editor-in-Chief of *Geochemistry International*
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