Editorial Note to the Special Issue on the Chelyabinsk Event

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The impact of the Chelyabinsk meteorite on February 15, 2013—generally speaking, an ordinary astronomical phenomenon—drew much attention because it happened in a densely populated region and was accompanied by a number of spectacular effects and damage. It provided convincing evidence that the Earth is not isolated in space, but surrounded by a great number of bodies of different sizes—asteroids and meteoroids—which periodically collide with the Earth, as well as with the Moon and other planets, as we can judge from their strongly cratered surfaces. On the other hand, this fragment of a larger body brought important scientific information about the composition of the material that constitutes complex celestial bodies of the Solar System and about the history of their formation, adding to the extensive collections of meteorites of different petrologic classes, found in different regions of our planet. Their detailed study on an interdisciplinary basis with the participation of astronomers, specialists in celestial mechanics, and geochemists is of key importance in answering fundamental questions associated with the origin and early evolution of the Solar System.

This event took place on Russian territory, allowing Russian scientists to obtain the fullest collection of

fragments and make the most significant contribution to the study of this phenomenon. This special issue includes articles that fully describe the factual data of the event and preliminary physical and astronomical findings. Geochemical aspects of the problem, including the preliminary results of the study of the material composition of the meteorite's fragments, are covered in special issue of *Geochemistry International*.

The impact of the Chelyabinsk meteorite convincingly confirmed the highly important role and place of the basic sciences, particularly, that part of astronomy devoted to studying the Solar System, in solving problems facing humankind from the point of view of a sober assessment of space hazards and the search for methods to counteract them. In this context, attention is paid to the problem of asteroid and comet impact hazards (ACH), including astronomical, technical, and even some organizational aspects. We hope that the discussion of this problem by interested domestic and foreign specialists in our journal will help experts in different fields unite their efforts and will draw more attention from the authorities.

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