Letter from the editor

Recently, the demands on the R&D results are becoming diversified. Just decades ago, the main mission of R&D was to produce research results that will help create products with better functions because we had a belief that “products with excellent functions will sell.” However, today, it is said that the demand is not only for the functionality of the products or services, but is for the “values at a higher dimension.” On the other hand, after the Great East Japan Earthquake and Tsunami of 2011, the demands for “specific applications (implementations) of the research results to society” have increased, and in the ways in which the research results “realize values in society” are under scrutiny.

Synthesiology sets the following as requirements for its papers: to set specific values and goals of R&D in society; to create scenarios to realize the goals; and to select and integrate the elemental technologies necessary to achieve the goals. One of the most important requirements is how to set the “goals and values in society.” It is very interesting to see how the researchers have tackled this issue. In this issue of Synthesiology, there are four papers and one article, and I shall write my thoughts from this perspective.

The paper by Arizono et al., “Marine geological mapping project in the Okinawa area,” provides the methodology for exploring submarine mineral resources, based on geological phenomena. It should be noted that the paper presents the synthesis process of the methodology to generate “higher values,” that is, resource development, without staying in the bounds of organizing the basic land information.

Finally, we published an article, “Portfolio structuring and social implementation in the development of complex technology.” by Dr. Komai. Here, the portfolio analysis was conducted for a complex technological development using the synthetic method. It is a report of a method and diffusion of the analysis results of the geo-environmental risk assessment system (GERAS). This article is a recommended reading as it presents an example of the new way of applying synthesiology that goes all the way to social implementation as mentioned in the beginning.

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