

About the Design of the Cover :

The cover is designed to envisage a hopeful future shining in the sky which is a clear blue like the color of the JAEA logo. This is accompanied with white colored hexagons similar to the pattern in a tortoise shell which symbolizes the wish of people for longer lives from ancient times in Japan. Coincidentally, this shape is the same as that of core fuel assemblies for both the prototype fast breeder reactor "MONJU", and the high temperature engineering test reactor "HTTR".

The images on the cover show the element mapping of MOX-6.9wt%SiO₂ analyzed by EPMA (top left), and the HTTR-IS nuclear hydrogen production system (bottom right).

The former is the results of tests carried out to understand the behavior of silicon impurities in MOX fuel, the precipitation conditions of compounds were confirmed (Topic 1-9).

The latter is expected as clean hydrogen production technique with no carbon dioxide emissions, based on the thermochemical iodine-sulphur (IS) process using the heat from the high temperature gas-cooled reactor (Topic 9-2).



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