

PSJ-PSK Joint Symposium: Functional mechanisms of disease-related proteins, revealed by physicochemical analysesMasanori OSAWA¹¹Keio Univ. Fac. Pharm

Elucidation of the functional mechanism of disease-related proteins in the light of their structure would contribute not only to further understanding of the diseases. Furthermore, it enables to design ligands that binds to the proteins specifically and regulates the protein functions, which could lead to new drugs. Recently, atomic structures of many important proteins have been solved by X-ray crystallography and cryo-electron microscopy. In addition to the atomic information, physicochemical methods are necessary, because they are able to investigate quantitatively the changes in the structure and dynamics related to the protein functions, formation of the precipitations or fibers critical for some diseases, and do on.

Here, we invite four speakers from Japan and Korea pharmaceutical societies. It would be precious opportunity for us to know how they have taken advantages of physicochemical methods such as nuclear magnetic resonance, in order to reveal functional mechanism of the disease-related proteins.