

*Play with 3D structure data of biomolecules - PDBj*

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As a member of World Wide Protein Data Bank (wwPDB), Protein Data Bank Japan (PDBj)[1] is making effort to provide outreach and educational contents as well as maintaining a centralized PDB archive of macromolecular structures and providing database-integrated tools. In the symposium, we will introduce some our educational and outreach activities, such as protein encyclopedia eProtS, Japanese translation of Molecule of the Month, and our new molecular structure viewer Molmil. With WebGL technology and special tuning of data usage, we can use Molmil very comfortably even on smartphones and tablet devices as well as PCs. While present virtual-reality devices are in fashion, we would like to emphasize the usefulness of anaglyph stereo visualization with 3D red cyan glasses for educational use. Many molecular viewers including Molmil support anaglyph visualization. They do not require special hardware, run even on general mobile devices, and can project the views on a large screen. Touch operation combined with a stereo view helps well to understand molecular structure. Although red cyan glasses attract interests of students and attendances in a classroom and science communication event, some paper-made glasses are enough simple, compact, and low-priced to be good gifts for them.

[1] Akira, R. K. (2016). Nucleic Acids Res, 45, D282–D288.

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