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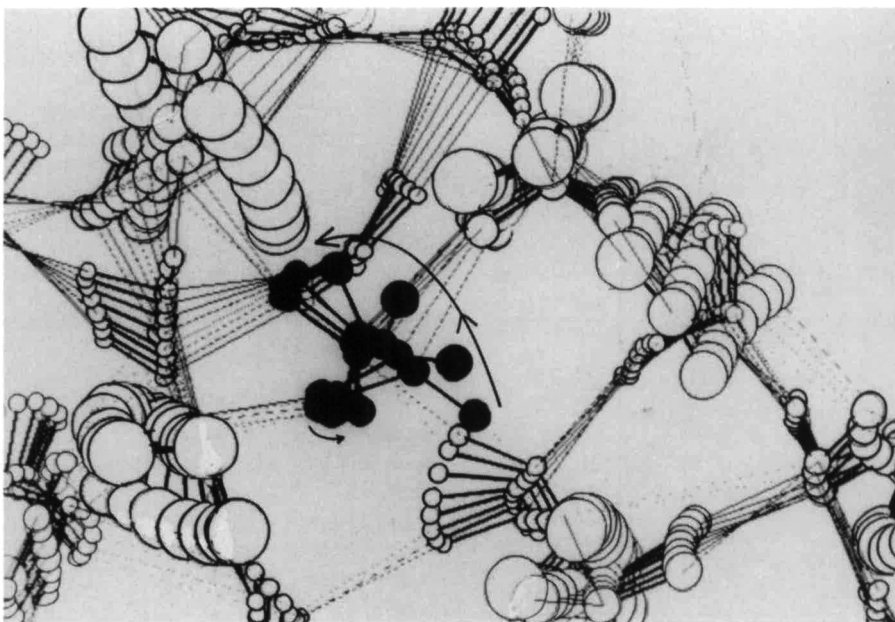


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Scientists quickly learn that underlying the simplest outward appearance the most complex and intricate processes are at work. Water, plain everyday water, is the subject of a study by H. Tanaka and I. Ohmine published in *J. Chem. Phys.* last November (87, No. 10, p. 6128-6139). Applying a molecular dynamics calculation, they find large local excursions in the potential energy of the water molecules and associated fast reorientations. One of their schematic illustrations is the Editor's Choice reproduced here. Shown are the positions of the constituent atoms of H₂O molecules (projected on a plane) at eight distinct consecutive time steps of 0.05 picoseconds (5×10^{-14} s). Heavy solid lines represent the intramolecular bonds while lighter lines show attractive interactions among the hydrogen atoms. In this toy-like balls-and-sticks diagram, the size of the balls indicates distance into the plane of the figure (smaller being farther). During only 0.2 ps of the 0.4 ps time span covered here, the water molecule in the center (shown by the dark circles) makes nearly a 180 degree rotation out of the plane.

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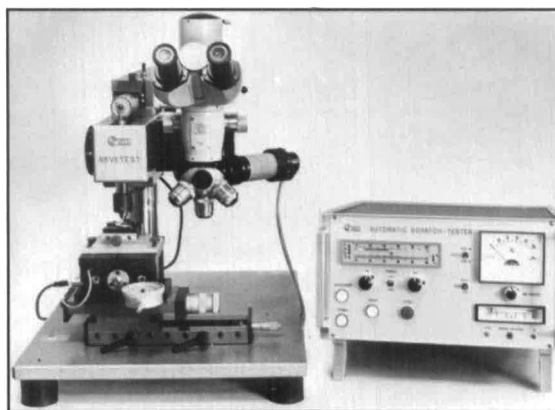
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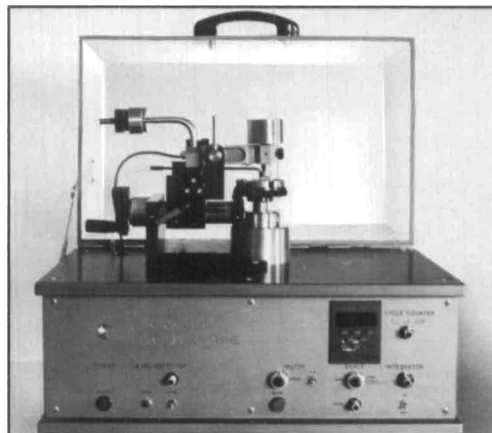
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