

# Biophysical Journal

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*Cover picture:* State-dependent binding of a cationic ligand in the Na<sup>+</sup> channel. (*Top left*) When a water molecule (*space-filled*) occupies the selectivity filter, the ligand's ammonium group (*red dot*) often occurs in the focus of macrodipoles of the green-colored pore helices. (*Top right*) When a Na<sup>+</sup> ion (*yellow*) occupies the selectivity filter, it repels the ammonium group, which often faces the cytoplasm. (*Bottom*) Representative complexes show the space-filled ligand and residues contributing to the interaction energy (*sticks*). See the article by Tikhonov and Zhorov on page 1557.