

**A Negative Deviation from Stern-Volmer Equation in Fluorescence Quenching.**  
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### **Abstract**

A neg. deviation from the normal Stern-Volmer equation shown in the fluorescence quenching of doxorubicin by adenosine 5' monophosphate is interpreted in terms of doxorubicin exists in two different conformers in the ground state. An est. of the Stern-Volmer const. for the excited-state quenching is about  $218 \text{ M}^{-1}$ . The fluorescence decay of free doxorubicin is a bi-exponential in polar protic and polar aprotic solvents. In the presence of adenosine 5' monophosphate, doxorubicin shows a tri-exponential decay in water.