

Figure 2. Proposed structure for the complex. Arrows illustrate intermolecular NOE contacts shown in Figure 1.
in $\mathrm{CDCl}_{3}$ so its structure was examined in DMSO- $d_{6}$, where rapid exchange exists between free and bound components. Assignments for the signals were made through COSY and TOCSY methods. Fifteen intermolecular NOE's were observed in a ROESY experiment, and the cross-sections for $\mathrm{H}_{1}\left(\mathrm{H}_{8}\right)$ and $\mathrm{N}-\mathrm{CH}_{2}$ are shown in Figure 1. The negative peaks observed are labelled in the proposed structure for the complex (Figure 2).

The NOE information points to the following: (i) Base pairing is dominantly Hoogsteen (NOE's from the imide N-H of the receptor are seen to $\mathrm{H}_{8}$ of the adenines but not to $\mathrm{H}_{2}$ ) and (ii) the conformation of nucleotide a is syn ( $\mathrm{N}-\mathrm{CH}_{2}-\mathrm{CO}$ contact to $\mathrm{H}_{4}$, but not to $\mathrm{H}_{2}$ ) and that of nucleotide b is anti ( $\mathrm{N}-\mathrm{CH}_{2}-\mathrm{CO}$ contact to $\mathrm{H}_{2}$, but not to $\mathrm{H}_{4}$ ). The data best fit a structure in which most of the driving force for binding is provided by the salt bridge. In less polar solvents, such as $\mathrm{CH}_{2} \mathrm{Cl}_{2}$ used in the extraction, magnification of hydrogen bonding is expected and both Watson-Crick and Hoogsteen base-pairing are likely.

It is expected that cleft-like structures such as defined here can find use in transporting nucleotides across membranes and may even be suitable to bind to single-stranded nucleic acids. We will report on these developments in due course.

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Supplementary Material Available: $600-\mathrm{MHz}{ }^{1} \mathrm{H}$ NMR spectra of $1, d(\mathrm{AA})$, and complex, including an NOE list ( 9 pages). Ordering information is given on any current masthead page.

## Additions and Corrections

Bromination of Imidazoles Coordinated to Cobalt(III). Kinetics and Mechanism of Bromination of RImH ${ }^{3+}$ Systems ( $\mathrm{R}=$ $\left(\mathbf{N H}_{3}\right)_{5} \mathrm{Co}$ ), Wheland Intermediates, and Preassociation or Diffusion Control [J. Am. Chem. Soc. 1991, 113, 2656]. Allan G. Blackman, David A. Buckingham,* and Charles R. Clark

Page 2657: For "imidazolinium cation" read "imidazolium cation".

Page 2659: Equation 9 should rad


Page 2661, Scheme I: The C-2 addition product equation should read


Page 2662, Table III: The rate ( $\mathrm{M}^{-1} \mathrm{~s}^{-1}$ ) for $\mathrm{RIm}^{2+}$ should be $3.6 \times 10^{9}$, not $3.0 \times 10^{9}$.

Page 2663, Table IV: The rates ( $k_{2}, \mathrm{M}^{-1} \mathrm{~s}^{-1}$ ) for the following $\mathrm{N}-\mathrm{Co}\left(\mathrm{NH}_{3}\right)_{5}{ }^{3+}$ systems should be $1.1 \times 10^{8}$ for $4-\mathrm{BrIm}, 2.7 \times$ $10^{8}$ for 5 -BrIm, and $3.6 \times 10^{9}$ for Im.

