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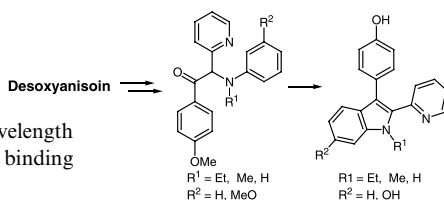
Contents

2-Pyridin-2-yl-1*H*-indole derivatives: Synthesis, estrogen receptor binding affinity, and photophysical properties

pp 1–14

Konstantinos M. Kasiotis and Serkos A. Haroutounian*

A series of novel 2-pyridin-2-yl-1*H*-indoles were prepared. Among them, the indol-6-ol derivatives displayed long wavelength fluorescent emission sensitive to solvent polarity, pH and good binding affinity to estrogen receptor.



Effect of kosmotropicity of ionic liquids on the enzyme stability in aqueous solutions

pp 15–25

Hua Zhao,* Olarongbe Olubajo,
Zhiyan Song, Artez L. Sims,
Terra E. Person, Rasheed
A. Lawal and LaDena A. Holley

Anions: (*kosmotropic*) $\text{PO}_4^{3-} > \text{SO}_4^{2-} > \text{CH}_3\text{COO}^- > \text{Cl}^- > \text{Br}^- > \text{I}^- > \text{BF}_4^- > \text{PF}_6^-$ (*chaotropic*)
B-coefficients: 0.495 \rightarrow 0.206 \rightarrow 0.246 \rightarrow -0.005 \rightarrow -0.033 \rightarrow -0.073 \rightarrow -0.093 \rightarrow -0.21

Cations: (*chaotropic*) $(\text{CH}_3)_4\text{N}^+ > \text{K}^+ > \text{Na}^+ > \text{Li}^+ > \text{Ca}^{2+} > \text{Mg}^{2+} > \text{Al}^{3+}$ (*kosmotropic*)
B-coefficients: 0.123 \rightarrow 0.009 \rightarrow 0.085 \rightarrow 0.146 \rightarrow 0.284 \rightarrow 0.385 \rightarrow 0.744

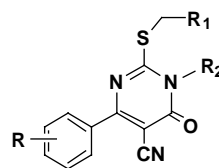
Hydrophilic ionic liquids dissociate into individual ions in water. The effect of individual ions on the enzyme activity follows the Hofmeister series: kosmotropic anions and chaotropic cations stabilize the enzyme.

Parallel synthesis of 5-cyano-6-aryl-2-thiouracil derivatives as inhibitors for hepatitis C viral NS5B RNA-dependent RNA polymerase

pp 26–38

Yili Ding,* Jean-Luc Girardet, Kenneth L. Smith, Gary Larson,
Brett Prigaro, Jim Z. Wu and Nanhua Yao

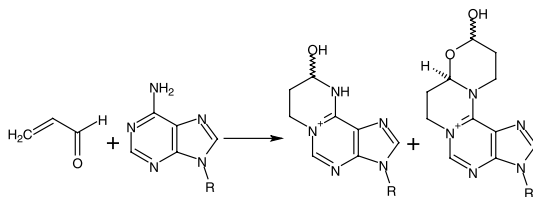
Through the parallel synthetic strategy, 5-cyano-6-aryl-2-thiouracil derivatives with single digit micromolar inhibitory activity for the hepatitis C viral NS5B RNA-dependent RNA polymerase were obtained.



Reaction of acrolein with 2'-deoxyadenosine and 9-ethyladenine—Formation of cyclic adducts**pp 39–48**

Agnieszka J. Pawłowicz, Tony Munter,
Karel D. Klika* and Leif Kronberg*

Acrolein forms two cyclic adducts with the adenine base in aqueous solutions. One adduct is an unstable acetal consisting of two condensed rings derived from two units of acrolein.



Synthesis and effects of 3-methylthiopropionyl thioesters of lipoic acid, methional metabolite mimics**pp 49–58**

Celine Courvoisier, Marie Julie Paret, Jacqueline Chantepie,
Jacques Goré, Guy Fournet* and Gerard Quash

