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## Nucleosides, Nucleotides and Nucleic Acids

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## Approach to the Synthesis of 2-(D-Ribofuranosyl)-Pyridine Compounds

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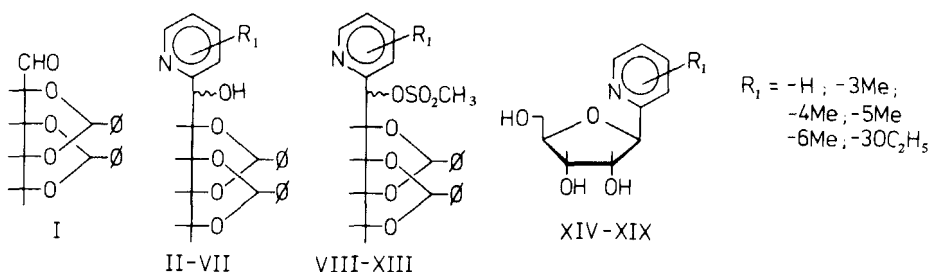
APPROACH TO THE SYNTHESIS OF 2-(D-RIBOFURANSYL)-PYRIDINE COMPOUNDS.

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Summary.

A series of pyridine C-nucleosides was synthesised by reaction of lithio pyridines with 2,4;3,5-di-O-benzylidene-D-ribose in the initial step.

A set of 2-(D-ribofuranosyl)-pyridine compounds was synthesised.



Previously mentioned difficulties<sup>1</sup>, using such lithio compounds i.e. the reduction of the aldehyde function of I, could now be avoided by choosing the proper reaction conditions. Direct cyclisation of II to VII did not occur, probably due to protonation of the ring nitrogen atom, preventing the formation of a S<sub>N</sub>1 like transition state at C<sub>1</sub><sup>1</sup>. Conversion of II to VII into the mesylates VIII to XIII and subsequent treatment with hydrochloric acid in dioxane, resulted in the formation of the ribofuranosyl derivatives XIV to XIX. All compounds were purified by chromatography and identified by NMR and D/CI-mass spectrometry.

REFERENCES.

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