

Synthesis of Chiral Macrocycles: V.¹ Synthesis of Some *cyclo*-(*N*^α-Dinicotinoyl)aromatic Octapeptides and *cyclo*-(*N*^α-Dinicotinoyl)pentapeptide Lysine Schiff Bases²

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Abstract—A series of octa bridged peptide and macrocyclic pentapeptide Schiff base derivatives were synthesized from tetrapeptide hydrazide and macrocyclic pentapeptide ester. Condensation of hydrazide with acid anhydrides upon refluxing in acetic acid afforded the corresponding 3,5-bis-tetraimide pyridine and macrocyclic octapeptide derivatives. Treatment of macrocyclic pentapeptide ester with hydrazine hydrate gave the corresponding acid hydrazide derivative. Condensation of the latter with aromatic aldehydes led to the corresponding cyclic pentapeptide Schiff bases.

Keywords: synthesis, macrocyclic penta- and octa peptides, Schiff bases

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