

SPACE LIFE SCIENCES SYMPOSIUM (A1)
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CLAYSN: A NEW REAGENT FOR THE SYNTHESIS OF PREBIOTIC RNA OLIGOMERS

Abstract

For a successful synthesis of a considerably large molecules like RNA ,DNA, ssRNA etc convergent approach utilizing easily accessible building blocks is considered to be prudent .Thus several such building blocks have been previously synthesized will be synthesized in future . A synthetic sequence for complex molecules like RNA and DNA etc molecules must be based on a logical retrosynthetic analysis , should be convergent and an efficient , to meet this criteria our lab adopted a policy to make new reagents with their help to develop new methodologies eventually new synthetic methods for larger molecules . herein this report we choose to synthesize RNA Oligomers. As a continuation of our efforts to make new methodologies Herein our lab produced a new reagent known as ClaySN just like our previous ClayAN .ClaySN is prepared by using Clay (montmorillonite) and Silver nitrate in 1:1 ratio grind together in a mortar for at least two hrs until it becomes uniform powder . The newly formed reagent would be stored over Calcium chloride .

So far we are successful in synthesizing RNA oligomer , as well as Pyrophosphates All these reactions gave moderate to good yields. Our data we have compared with the existing and details will be discussed in our presentation . In conclusion our new reagent named ClaySN which is environmental friendly and is very mild in synthesizing products in good to better yields is a good addition for By using this new reagent several oligomer as well as and pyrophosphates , bisphosphates and triphosphates are presently underway in our laboratory . Acknowledgement : The Authors are thanks ful to Scientific educational society , Sriramachandra University and also University of Guyana for their contribution

References : Clay Catalysis vol 6 2004. , and H.M Meshram , IICT, India, New reactions with ClayAN, Dale Srinivas etal.