LAUFER CENTER
FOR PHYSICAL AND QUANTITATIVE BIOLOGY

Seminar 2016

Nicholas V. Hud
Professor
Department of
Chemistry & Biochemistry
Georgia Tech

Seeking a plausible prebiotic solution

The RNA World remains a popular and influential hypothesis in origins of life research. However, prebiotic chemists are still lacking a plausible prebiotic synthesis for RNA. We are investigating the possibility that RNA was preceded by a polymer that would have assembled more easily than RNA (i.e., pre-RNA), and that non-aqueous solvents could have facilitated prebiotic nucleic acid synthesis and replication. In support of these theories, recent experiments have revealed alternative nucleobases that readily form nucleosides with ribose, a property not observed with the nucleobases of extant RNA. Alternative solvents have also been identified that allow nucleoside phosphorylation from water-insoluble minerals, as well as the polymerase-free transfer of information from long nucleic acid duplexes.

Friday November 18, 2016

2:30 PM

Laufer Center Lecture Hall 101

Host: Ken Dill

Stony Brook University

For a disability related accommodation,
please call 631-632-5400