

**JOINT INSTITUTE FOR MOLECULAR AND NANOSCALE INNOVATION (IMNI) AND
DEPARTMENT OF CHEMISTRY SEMINAR****“DNA: Not Merely the Secret of Life”**

Ned Seeman

Margaret and Herman Sokol Professor of Chemistry
New York University**Email:** ned.seeman@nyu.edu<http://seemanlab4.chem.nyu.edu/>**Friday, December 12, 2008
McMillan Hall, Room 115
4:00PM****Abstract**

DNA nanotechnology utilizes reciprocal exchange between DNA double helices to produce branched motifs. These motifs have been combined with single-stranded cohesion to construct objects, devices and lattices. The objects include stick polyhedra and a variety of DNA nanotubes. Robust devices have been built that are predicated both on structural transitions and on hybridization topology. 1D, 2D and 3D lattices have also been assembled, which has led to control over the geometrical structure of matter based solely on the design of DNA sequences. Combinations of devices and lattices offer programmable control of the structure of matter on the nanometer scale.