the motor’s excited state to the fullerenes. The operate as wheels, and kinetic studies in solution demonstrate that the motor rotates when inoperative in the presence of fullerenes, probably because of rapid energy transfer from irradiated with light. Next, the group hopes to drive the nanocar across a flat surface. Paddle-wheel motion. The Rice team also replaced the fullerene wheels they used in the earlier model of the nanocar with p-carborane tires. The motor, they say, was completely light-powered unidirectional molecular motor and attached it to the chassis of a newer Tour, along with colleagues Jean-François Morin and Yasuhiro Shirai, have taken a but without an engine, this so-called nanocar couldn’t go anywhere without being pushed. But now Tour, along with colleagues Jean-François Morin and Yasuhiro Shirai, have taken a light-powered unidirectional molecular motor and attached it to the chassis of a newer model nanocar (Org. Lett. 2006, 8, 1713). The motor should propel the car forward with a paddle-wheel motion. The Rice team also replaced the fullerene wheels they used in the earlier model of the nanocar with p-carborane tires. The motor, they say, was completely inoperative in the presence of fullerenes, probably because of rapid energy transfer from the motor’s excited state to the fullerenes. The p-carboranes are spherical enough to operate as wheels, and kinetic studies in solution demonstrate that the motor rotates when irradiated with light. Next, the group hopes to drive the nanocar across a flat surface. A compound composed of six indium atoms arranged in a linear chain has been synthesized by researchers in England (M. S. Hill, P. B. Hitchcock and coworkers; Science 2006, 311, 1904). The study broadens understanding of main-group metal chemistry and may lead to novel strategies for preparing inorganic oligomers and polymers. Unlike carbon and other group 14 elements, which readily form molecular chains of various lengths, elements in group 13 are far less likely to bond to one another in a linear fashion, particularly in chains of three or more atoms. But now researchers have shown that under the right circumstances, indium can form linear oligomers. By reacting indium iodide with a protonated N-xylyl β-diketiminate and a strong potassium base, the scientists formed a hexaindium chain in which one β-diketiminate ligand is bound to each metal atom. On the basis of crystallography studies, the team reports that both ends of the chain are capped with iodine and that there are no bridging ligands supporting the five indium-indium single bonds.