## **CAN MOLECULES RUN?**

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The discovery and application of catalysis allowed (usually) faster reactions to occur that would otherwise be very slow. Catalysis was known from the time of the ancient Egyptians, and ordinary yeast represented a real puzzle. People were not aware that beer and bread production share a common thread. Furthermore, enzymes, catalysts for chemical reactions in biological systems, are probably the best-known catalysts in general. Today, more than 90% of modern industrial processes require the use of catalysts, and the global automotive catalyst market has experienced the fastest growth compared to other branches of applications. In this lecture we will talk more about molecular catalysts, homogeneous and heterogeneous catalysis and theirs application in some important industrial process. And all this under the veil of green chemistry since environmental protection is one of the key-roles of modern society.