IN-1

REGULAR 2-D ASSEMBLIES OF MOLECULAR MACHINES

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Controlled attachment of various molecular machines (motors, rotors, and switches) to flat surfaces is an attractive and promising route towards new generation of regular 2-D materials. Organization of individual molecules into regular arrays (Figure 1) should amplify their function and lead thus to the new types of smart materials with potential application for example in nanoelectronics. Several approaches leading to such systems built on solid-gas[1,2] and liquid-gas[3,4] interphases will be discussed.

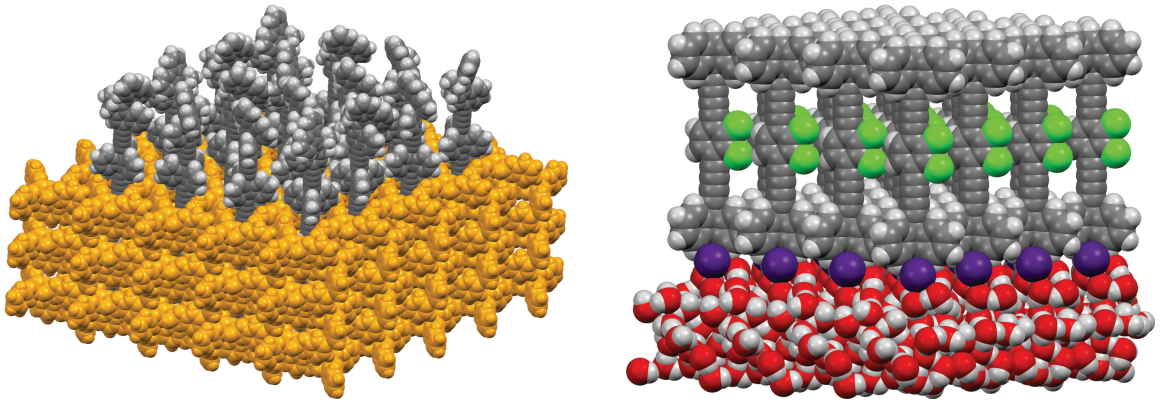

Figure 1: Regular array of molecular motors (left) and rotors (right).

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