

# Use of Laboratory Data to Model Interstellar Chemistry

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## Abstract

We show that experiments conducted in the laboratory under simulated astrophysical conditions have yielded quantitative information on molecule formation on and ejection from dust grain analogues. Data on processes leading to the formation of molecular hydrogen on different surfaces of dust grain analogues will be presented. We then illustrate how, in close collaboration with theoretical groups, these results are used in models of the chemical evolution of ISM environments. As the result of these studies, a new picture of the formation of molecular hydrogen on dust grains is emerging.

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