



Surface Properties, Volume 95

Ilya Prigogine (Editor), Stuart A. Rice (Editor)

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DESCRIPTION

The study of surfaces has experienced dramatic growth over the past decade. Now, the editors of the internationally celebrated series *Advances in Chemical Physics* have brought together in this self-contained, special topic volume contributions from leading researchers in the field treating some of the most crucial aspects of the experimental and theoretical study of surfaces. This work delves into such core issues as:

- * Kinetics and dynamics of hydrogen adsorption on silicon surfaces.
- * Potential energy surfaces of transition- metal-catalyzed chemical reactions.
- * High-resolution helium atom scattering as a proof of surface vibrations.
- * Ordering and phase transitions in adsorbed monolayers of diatomic molecules.
- * The influence of dimensionality on static and dynamic properties of a system.
- * New applications to fields as varied as catalysts and the passage of molecules through membranes.

This valuable resource provides important insights into the current state of knowledge about surface properties. Prigogine and Rice's latest work will stimulate the imagination and motivate the exploration of other aspects of this fascinating subject.

ABOUT THE AUTHOR

ILYA PRIGOGINE is Director of the Instituts Internationaux de Physique et de Chimie, E. Solvay, Brussels, Belgium. One of the foremost figures in his field, Professor Prigogine is the Ashbel Smith Professor of Physics and Chemical Engineering at the University of Texas at Austin, where he is also Director of the Ilya Prigogine Center for Studies in Statistical Mechanics and Complex Systems. He is the holder of many scientific prizes, 35 honorary degrees, special chairs, and visiting professorships. In 1977 he was awarded the Nobel Prize in chemistry. Professor Prigogine is a member of many national academies, including the Russian National Academy of Sciences. In 1989 he was given the title of viscount by the King of Belgium.

STUART A. RICE is the Frank P. Hixon Distinguished Service Professor in the James Franck Institute and the Department of Chemistry of the University of Chicago. A former dean of the university's Division of Physical Sciences, Professor Rice is a world-renowned authority on chemical physics who has received scores of awards and honors. A former Alfred P. Sloan Fellow and Guggenheim Fellow, Professor Rice is also a Fellow of the American Academy of Arts and Sciences, the National Academy of Sciences, and the American Philosophical Society.

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