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The Solid State: Introduction

The dramatic advances made in superconducting materials during the past year has lead to an increased awareness of the importance of solid-state chemistry by virtually every layperson. This thematic issue of *Chemical Reviews* features 13 articles dealing with various aspects of the "solid state". Some fall into the traditional lexicon of solid-state chemistry, whereas others describe interfaces with other disciplines.

A subjective account of Professor Jeremy Burdett, highlighting promising directions for future research, opens the issue. A large group of reviews deal with specific classes of materials (von Schnering and Honle, polyphosphides; Meyer, reduced rare-earth halides; Babel and Massa, transition-metal fluoro compounds; Greenblatt, molybdenum bronzes). Other articles focus on important properties of materials with an array of molecular compositions (Clearfield, ion exchange; Miller, Epstein, and Reiff, ferromagnetism; Ratner and Shriver, ion transport in polymers; Wudl, Patil, and Heeger, optical properties of conducting polymers). Two reviews present theoretical analyses of aspects of solid-state structures (Andersson, Hyde, Larsson, and Lidin; Smith). Finally, one article describes an important example of solid-state catalysis (Ebner, Franchetti, Centi, and Trifirò), and another details the latest innovations in low-temperature X-ray structural characterization (Veith).

In summary, we believe that the 13 articles in this issue provide readers with an exciting picture of the diversity of contemporary research involving the solid state.

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