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High-Performance Liquid Chromatography–Mass Spectrometry: J. L. Vestal
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Nuclear Magnetic Resonance Technology for Medical Studies: T. F. Budinger and P. C. Lauterbur
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BOOK REVIEWS

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REPORTS

Spread of Diadema Mass Mortality Through the Caribbean: H. A. Lessios, D. R. Robertson, J. D. Cubit
The Jovian Nebula: A Post-Voyager Perspective: J. T. Trauger
Photocontraction of Liquid Spiropyran-Merocyanine Films: I. Cabrera et al.
Temporal Variability of the Antarctic Circumpolar Current Observed from Satellite Altimetry: L.-L. Fu and D. B. Chelton
Extensive Volcanism Associated with the Separation of Australia and Antarctica: J. B. Jones and M. J. Fitzgerald
Chromosomal Location of Human T-Cell Receptor Gene Tβ: P. E. Barker et al.
Frequency-Dependent Noradrenergic Modulation of Long-Term Potentiation in the Hippocampus: W. F. Hopkins and D. Johnston

COVER

Sequence of mass spectra, obtained using Fourier transform mass spectrometry (FTMS), shows the in situ synthesis of the bare dimer ion CoFe²⁺ and its subsequent reactions with 1-pentene in the gas phase. Recent developments in FTMS, involving both software and hardware, now enable selected ions of interest to be stored on the order of seconds during which time they can be mixed with various reagents and their chemistries monitored through a series of more than eight reaction steps (all under computer control). See page 261. [Research by D. B. Jacobson and B. S. Freiser, Department of Chemistry, Purdue University, West Lafayette, Indiana 47907; illustration by J. Christenson and R. Cody, Nicolet Instrument Corp., Madison Wisconsin 53711]
Editor's Summary

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