655 This Week in Science

Editorial

657 Future Supplies of Energy and Minerals

Letters

659 The Scientific Method: M. BURK Demography of China: A. J. COALE and R. FREEMAN

News & Comment

661 The Challenger Disaster: Assessing the Implications
664 The Shuttle Record: Risks, Achievements
665 Europe Assesses Its Options
666 A Crimp in the Pentagon's Space Plans
667 Local Opposition Halts Biotechnology Test

Research News

669 Reducing Risk: A Change of Heart?
671 Demonstrating Single Photon Interference
672 Punctuated Equilibrium Is Now Old Hat

Articles

687 A 6-GeV Storage Ring: An Advanced Photon Research Facility: P. EISENBERGER

Research Articles

699 Separation of DNA Binding from the Transcription-Activating Function of a Eukaryotic Regulatory Protein: L. KEEGAN, G. GILL, M. PTASHNE

Reports

711 Transition Between Frictional Slip and Ductile Flow for Halite Shear Zones at Room Temperature: T. SHIMAMOTO
714 Palynological and Iridium Anomalies at Cretaceous-Tertiary Boundary, South-Central Saskatchewan: D. J. NICHOLS, D. M. JARZEN, C. J. ORTH, P. Q. OLIVER
717 Synthesis of a Todorokite: D. C. GOLDEN, C. C. CHEN, J. B. DIXON
719 ElA Transcription Induction: Enhanced Binding of a Factor to Upstream Promoter Sequences: I. KOVESDI, R. REICHEL, J. R. NEVINS
COVER  Praying mantis, Tenodera aridifolia sinensis. The prominent eyes of the mantis reflect its striking visually mediated behaviors, especially prey capture. While mantises, in general, are diurnally active, many are also active at night when hearing may play a dominant role in their natural history. See page 727. [David D. Yager, Division of Biological Sciences, Cornell University, Ithaca, NY 14853]

722 Adrenal-Mediated Endogenous Metabolites Inhibit Puberty in Female Mice: M. Novotny, B. Jemiolo, S. Harvey, D. Wiesler, A. Marchlewkska-Koj

725 Transfer of Agrobacterium DNA to Plants Requires a T-DNA Border But Not the piPE Locus: R. C. Gardner and V. C. Knäuf


729 Infantile Experience with Suckling Odors Determines Adult Sexual Behavior in Male Rats: T. J. Fillion and E. M. Blass

731 Detection of Papillomavirus DNA in Human Serum: R. S. Ostrow, K. R. Zachow, M. Niimura, T. Okagaki, S. Muller, M. Bender, A. J. Faras


737 High Titters of Autoantibodies to Topoisomerase I (Scl-70) in Sera from Scleroderma Patients: J. H. Shero, B. Bordwell, N. F. Rothfield, W. C. Earnshaw


AAAS Meetings

743 AAAS Annual Meeting Future Program, I Advance Registration Form

Book Reviews

749 Presidential Management of Science and Technology, reviewed by R. Noll Habits of the Heart, R. Rubinso Technology's Storytellers, L. Winner Archaean Geochemistry and The Continental Crust, W. R. Van Schmus Reprints of Books Previously Reviewed Books Received

Products Materials

753 Desiccator Cabinet Rapid Detection of Mycoplasma in Tissue Culture Monoclonal Antibody for Lymphoma Identification Software for Fast Fourier Transform Software for Turbo Pascal Programming Leak Detector Literature