



Uranium-235 Fission Chain Reaction. *Department of Energy.*

### Fission Comes to America: 1939

News of the Hahn-Strassmann experiments and the Meitner-Frisch calculations spread rapidly. Meitner and Frisch communicated their results to Niels Bohr, who was in Copenhagen preparing to depart for the United States via Sweden and England. Bohr confirmed the validity of the findings while sailing to New York City, arriving on January 16, 1939. Ten days later Bohr, accompanied by Fermi, communicated the latest developments to some European emigre scientists who had preceded him to this country and to members of the American scientific community at the opening session of a conference on theoretical physics in Washington, D.C.

American physicists quickly grasped the importance of Bohr's message, having by the 1930s developed into an accomplished scientific community. While involved in important theoretical work, Americans made their most significant contributions in experimental physics, where teamwork had

replaced individualism in laboratory research. No one epitomized the "can do" attitude of American physicists better than Ernest O. Lawrence, whose ingenuity and drive made the Berkeley Radiation Laboratory the unofficial capital of nuclear physics in the United States. Lawrence staked his claim to American leadership when he built his first particle accelerator, the cyclotron, in 1930. Van de Graaff followed with his generator in 1931, and from then on Americans led the way in producing equipment for nuclear physics and high-energy physics research later.

### Early American Work on Fission

American scientists became active participants in attempts to confirm and extend Hahn's and Strassmann's results, which dominated nuclear physics in 1939. Bohr and John A. Wheeler advanced the theory of fission in important theoretical work done at Princeton University, while Fermi and Szilard collaborated with Walter H. Zinn and