

of sign, is ± 0.06 corresponding to about $\pm 0.02A$ —a testimony to Eder's measures.

Rydberg formulae applied to the $^{10}S^\circ$ and $^{10}D^\circ$ terms give 46,058 and 45,803 for the limit $^9S^\circ$ of Eu II. As the denominator n^* usually increases by slightly more than unity in similar series, the value 45,750 has been adopted. This gives for the components of highest J the values of n^*

$e^{10}S$	2.542	a^8S	1.549	$f^{10}D$	3.129	$z^{10}P$	1.908
$f^{10}S$	3.582	e^8S	2.600	$g^{10}D$	4.147		

which run nearly parallel with the corresponding values for Mn I. The terms f^8S and f^8D appear to belong to the 7S limit. The principal ionization potential is 5.64 volts. The observed ^{10}D terms come from $6d$ and $7d$ electrons. The $5d$ term should be at about 20,000 (referred to a^8S°) and its combinations with the P terms are far in the infrared. Many strong lines, including some of Class I, are still unclassified, and may arise from other electron configurations.

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MEETING OF OCTOBER 26, 1934

THE first meeting of the Metropolitan Section of the American Physical Society for the season 1934–1935 was held on Friday, October 26, 1934, in Room 301 of the Physical Laboratory of Columbia University in New York City. An afternoon and an evening session were held. The presiding officer was Professor H. C. Urey.

The afternoon session was devoted for the most part to a symposium on the physics of the solid state; the papers were as follows:

Free Electrons as the Source of Metallic Binding Energy, F. SEITZ AND E. WIGNER, *Princeton University*.

The Internal Dissipation of Solids, R. L. WEGEL, *Bell Telephone Laboratories*.

Measurement of the Elastic Constants of Crystals at Low Temperatures, S. L. QUIMBY, *Columbia University*.

Some New Magnetic Properties of Alloys, R. M. BOZORTH, *Bell Telephone Laboratories*.

In the latter part of this session Professor Ladenburg of Princeton University gave a brief account of the sessions devoted to nuclear physics at the conference of the International Union of Pure and Applied Physics recently held at London.

The evening session was devoted to a lecture by Dr. J. A. Becker of the Bell Telephone Laboratories. His subject was "The Life History of Adsorbed Atoms and Ions."

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Secretary-Treasurer