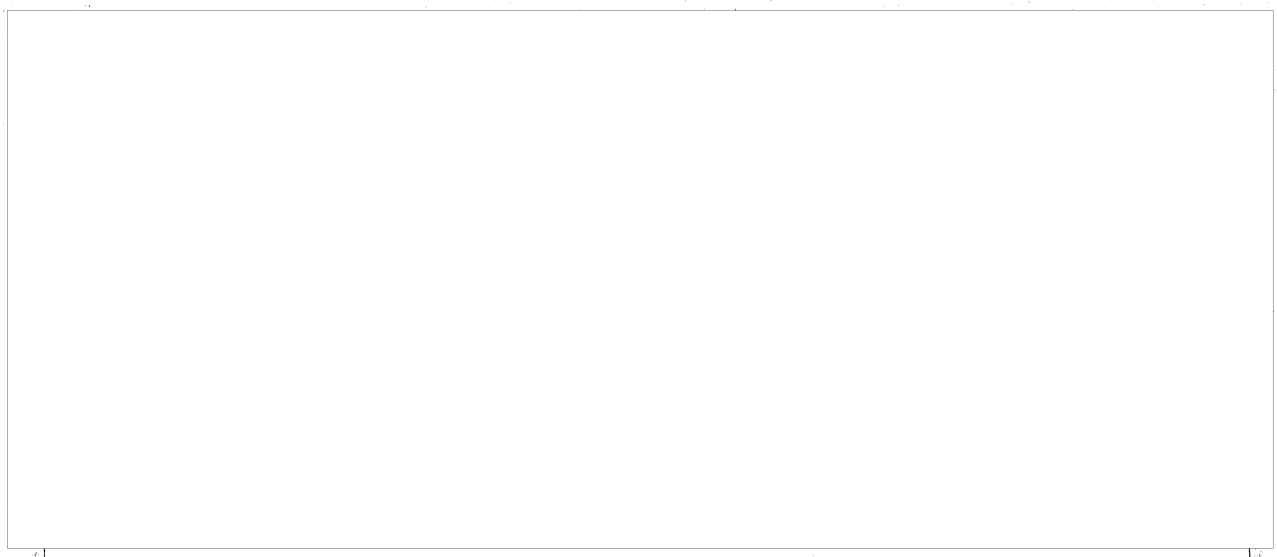

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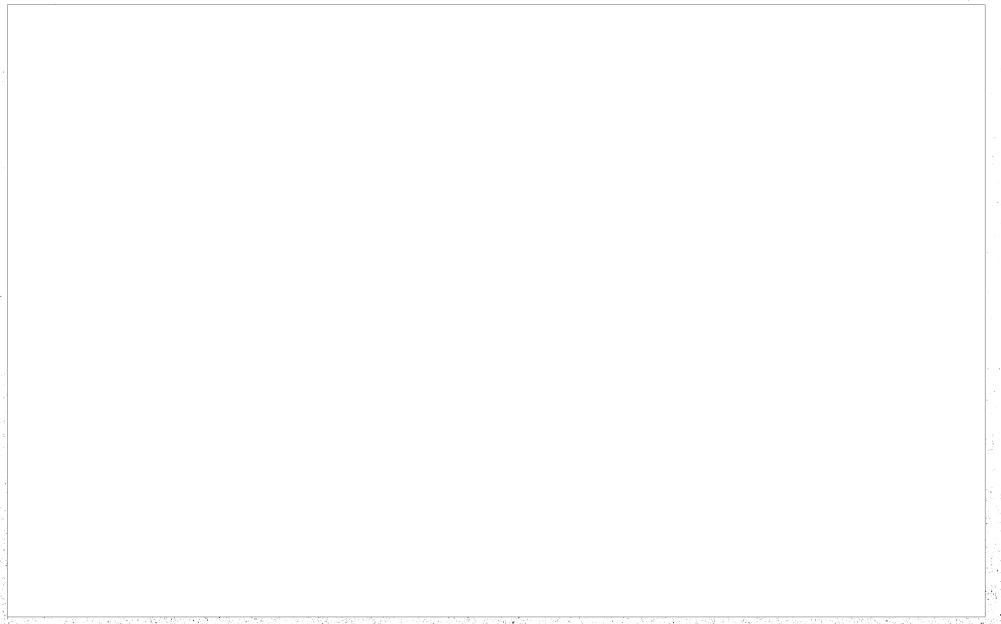
3 Abstracts From 'Die Naturwissenschaften', Volume 36, No. 11 (Nov'49):

"Electron Generation in Ionosphere" R. Seeliger

"Isopachs in Potential Field Optics" R. Landwehr and A. Dosc

"No Superconductivity in Na-NH_3 Solutions" E. Justi and G. Vieweg

Die Naturwissenschaften, Volume 36, No. 11, pages: 321-6; 342; 343-4. Berlin: November 1949



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3 ABSTRACTS FROM 'DIE NATURWISSENSCHAFTEN', VOLUME 36, No. 11 (NOVEMBER 1949)

R. Seeliger; R. Landwehr and A. Dosc;
E. Justi and G. Vieweg.

1. "Generation of Electrons in the Ionosphere" R. Seeliger. Pages 321-6.

The author attempts to explain the presence of the great amount of electrons in the ionosphere, theoretically necessary for the occurence of most ionospheric phenomena. He confines himself to the study of the E layer and gives a surgey of the latest problems involved, derived from the study of elementary processes.

2. "Determination of Isopachs (Lines of Equal Total Potentials) in Potential Field Optics" R. Landwehr (Menden i.W.) and A. Dosc (Detmond). Page 342.

Optical investigations of potentials using polarized light on models gave lines of equal potential differences (isochromes) and lines of equal axial directions (isoclines). For complete determination of the potential field a study of the interference pattern is necessary. Method was previously applied by Frost(J. Franklin Inst. 216, 73 (1933); J. Appl. Phys. 10, 248 (1939))and by Fabry(C. R. Acad Sci Paris, 190457 (1930)). Author describes method using Askania-Werke equipment.

3. "No Superconductivity in Na-NH_3 Solutions" E. Justi and G. Vieweg (Brauschweig, Institute of Applied Physics of the Tech Univ Muhlenpfodtstrasse 307). Pages 343-4.

R. A. Ogg (Phys Rev 69, 243; 70, 93 (1946)) found in the solidified solution at 90°K a transition curve to superconductivity, ascribing the residual resistance to the resistance of electrodes. Further experiments denied Ogg's theory. Author describes method applied in the Braunschweig Low Temperature Lab-

oratory by using a Diesselhorst compensator instead of a Wheatstone bridge. Results proved absence of superconductivity in Na-NH_3 solution.

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