

PROGRAM OF THE SECTION ON PHYSICS AND MATHEMATICS

ROLLA V. COOK, Chairman

1. Mathematics which predicts Bohr's law of stationary states of central orbits. Oliver E. Glenn, Lansdowne, Pennsylvania.
 2. Acoustical properties of wood. R. B. Abbott, Purdue University.
 3. A demonstration experiment of acoustic and mechanical impedances. C. K. Stedman, Purdue University.
 4. Conductivity and viscosity of glasses of the soda-potash-silicate system. K. Lark-Horovitz and C. L. Babcock, Purdue University.
 5. A magneto optic effect with x-rays. K. Lark-Horovitz and H. C. Clark, Purdue University.
 6. A new method of making thin films. E. M. Purcell and J. D. Howe, Purdue University.
 7. Crystal growths. K. Lark-Horovitz and S. E. Madigan, Purdue University.
 8. X-ray diffraction in molten salts and solutions. K. Lark-Horovitz and E. P. Miller, Purdue University.
 9. Mechanism of the Geiger-Mueller tube. J. F. Sears and G. E. Read, Purdue University.
 10. Atomic factor and nuclear lattice parameters. H. J. Yearian, Purdue University.
 11. Dielectrics solidified in electric field. W. Lark-Horovitz, W. I. Caldwell, and Mr. Ogden, Purdue University.
 12. Radiographic study of stringed instruments. K. Lark-Horovitz and W. I. Caldwell, Purdue University.
 13. Four demonstrations as follows:
 - a. New application of traveling magnetic fields.
 - b. New phenomena in association with sucking effects of solenoids.
 - c. A polyphase electric gun.
 - d. A device for effective demonstration of rotating magnetic field phenomena.
- Leonard R. Crow, Terre Haute.
14. The new heavy radioactive element No. 93 isolated from a meteor. E. A. Smith and F. M. Smith, Secaucus, New Jersey.
 15. Dielectric capacities of solids at high frequencies. Arthur L. Foley, Indiana University.
 16. Sound analysis with a neon tube. James F. Mackell, Indiana State Teachers College.
 17. Representation of tensors in conical coordinate systems. E. S. Akeley, Purdue University.
 18. Diaphragmless microphones. H. M. Trent, Indiana University.
 19. A study of the velocity of sound in solutions. H. M. Trent, Indiana University.

Papers 12, 13, and 14 were illustrated with exhibits.