

American Chemical Society.

On Wednesday, March 16, the members of the American Chemical Society and their guests were treated to a very interesting lecture on "Radium and Radio-active Bodies," by Professor Rutherford of McGill University, Montreal, who is, perhaps, foremost among American Scientists in the work of experimenting with these bodies. Professor Rutherford dwelt at length upon the research work of Madame Curie and M. Becquerel in actually finding out what substance it was that exhibited such a peculiar characteristic as the ability to ionize a gas and thus to make it a conductor of electricity. He traced the further investigation of these bodies by various scientists and summed up their conclusions as to the nature of the three distinct kinds of rays given off by radium, known as Alpha, Beta, and Gamma rays. The Alpha rays are responsible for the remarkable supply of energy and for the fact that radium remains at a temperature of several degrees above that of the surrounding medium. These Alpha rays are particles, atomic in size, given off with a velocity of about 20,000 miles per second. They are charged with positive electricity and may be diverted by a magnet, but in an opposite direction to what are known as the Beta or Kathodic rays. These latter are negatively charged particles given off at a velocity much greater than that of the Alpha particles, but are themselves much smaller, perhaps only 1 — 1000 as large as a hydrogen atom. The third or Gamma rays are emanations, or infinitely fine solid particles, which produce the discharging of the electroscope and prevent the spark discharge from the terminals of an induction coil.

It is a curious fact that the presence of helium is almost always noted in connection with radium in pitchblende, and it is likewise a curious fact that helium is recognized as the transition product of the emanations given off by the radium. These two facts have led to new theories regarding the transmutation of matter from elements

of great atomic weight to those of low atomic weight; not from the baser metals into gold, as the ancients would have it.

Calendar.

THURSDAY, MARCH 24.

- 4.00 P.M. 1906 "TECHNIQUE" ELECTORAL COMMITTEE. Meeting in 11 Rogers.
- 4.00 P.M. GLEE CLUB REHEARSAL. Trophy Room.
- 4.15 P.M. TECH SHOW REHEARSAL. Ballet.
- 6.00 P.M. DEUTSCHER VEREIN DINNER. Tech Union.

FRIDAY, MARCH 25.

- 4.00 P.M. MANDOLIN CLUB REHEARSAL. 31 Rogers.
- 4.15 P.M. TECH SHOW REHEARSAL. Chorus.
- 4.15 P.M. CIVIL ENGINEERING SOCIETY. Meeting in 11 Engineering B.
- 8.00 P.M. MINING ENGINEERING SOCIETY. Mr. W. R. Ingalls will address the Society. Tech Union.

SATURDAY, MARCH 26.

- 12.45 P.M. GLEE CLUB REHEARSAL. Tech Union.
- 2.23 P.M. HARE AND HOUNDS RUN. Leave South Station for Milton at 2.23. Round trip, 25 cents.
- 6.00 P.M. SATURDAY NIGHT KOMMERS. Get tickets of Mr. Powers or Co-operative branches. "The only reason you are not a regular attendant is because you have never been."

MONDAY, MARCH 28.

- 4.15 P.M. TECH SHOW REHEARSAL. Chorus.
- 4.15 P.M. CIVIL ENGINEERING SOCIETY. Meeting in 11 Engineering B. Mr. Frank B. Gilbreth will speak on "A Contractor's View of the Baltimore Fire."

TUESDAY, MARCH 29.

- 4.15 P.M. TECH SHOW REHEARSAL. Ballet.

WEDNESDAY, MARCH 30.

- 4.15 P.M. TECH SHOW REHEARSAL. Principals.
- 7.15 P.M. Y. M. C. A. INFORMAL DISCUSSION: "False Ambitions." 240 West Newton Street.
- 8.00 P.M. SMOKER AND REUNION of Class of 1903 at Tech Union.

THURSDAY, MARCH 31.

- 4.00 P.M. 1906 ELECTORAL COMMITTEE. Meeting 11 Rogers.
- 4.15 P.M. TECH SHOW REHEARSAL. Ballet.
- 8.00 P.M. ELECTRICAL ENGINEERING SOCIETY. Smoker—Tech Union.