

## Physics and/or chemistry? The entangled situation of the Nobel Prizes 1903

*Tuesday, August 8, 2023 11:40 AM (25 minutes)*

Marie Curie was awarded half of the 1903 Nobel Prize in physics together with her husband Pierre Curie “in recognition of the extraordinary services they have rendered by their joint researches on the radiation phenomena discovered by Professor Henri Becquerel”. Becquerel was awarded half of the prize “in recognition of the extraordinary services he has rendered by his discovery of spontaneous radioactivity”. The Nobel Prize in chemistry this year was awarded to the physical chemist Svante Arrhenius “in recognition of the extraordinary services he has rendered to the advancement of chemistry by his electrolytic theory of dissociation”. These two areas of research do not seem that entangled, so why the heading? The complication was rather the challenge for the two Nobel committees (physics and chemistry) to make their suggestions this year and to coordinate these suggestions. Top candidates this year was Arrhenius both in physics and chemistry, and he would not have mind to receive both prizes at the same time. Furthermore, he was a member of the five person Nobel committee in physics. Another strong physics and chemistry duo was the physicist Rayleigh and the chemist Ramsay that had both worked on noble gases. Both committees saw the advantage in synchronizing Nobel prizes to them the same year. Another issue was the perpetuated narrative that Marie Curie’s Nobel prize was the result of some clever manipulation by a Swedish mathematician but was rather the careful manoeuvring by “a scientific nobody” from Uppsala. The chemists also managed to change the wording for the Nobel price to the Curies to the specifically physical “radiation phenomenon” rather than the discovery of radium, thus allowing for a chemistry Nobel prize to Marie Curie 1911. So physics and chemistry were quite entangled in view of the awarding of Nobel prizes in 1903.

**Presenter:** GRANDIN, Karl (Stockholm)

**Session Classification:** Session 6