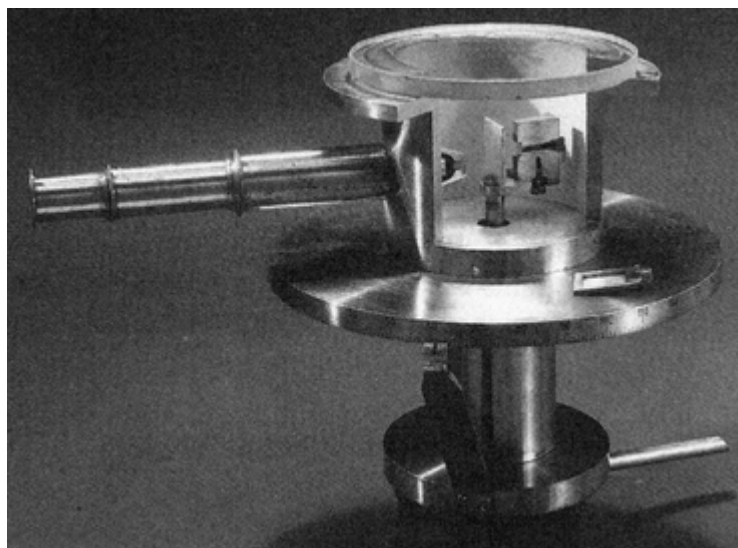


# Dawn of Quantum Chemistry

The development of quantum theory in the early 20th century resulted in a seismic shift in chemistry. For the first time, humans were able to start to understand the fundamental laws that governed chemical structure and reactivity at a molecular level.

This was facilitated by advances in engineering and physics that enabled pioneering measurements of atomic and molecular structure for the first time.



**Left:** A replica of the apparatus used in the Geiger-Marsden experiments, where it was demonstrated that atoms have a nucleus.

**Right:** A postcard sent from Walther Gerlach to Niels Bohr, showing the results of the Stern-Gerlach experiment. The results confirm the existence of spin angular momentum. The message reads "Attached is the experimental proof ... we congratulate you on the confirmation of your theory".

