

Max Planck (1858-1947)

He had a big influence on the foundation of the basics in physics. A lot of his discoveries are named by his surname, like for example: the "Plancksche medal", the "Plancksche action quantum" or the "Plancksche radiation law". In 1918 Planck lent with the Nobel prize because he has established the quantum theory which succeeded 20 years later the break through with the help of Einstein and Niels Bohr.

Max Karl Ernst Ludwig Planck was born on the 23th of April in the year 1858 in Kiel, Germany. The family Planck consists of father and mother Planck (Johann Julius Wilhelm and Emma) and three children. Earliest in school, Max Planck presents himself as conscientious, diligent and capable. His passion for physics develops in the following years, after he started his mathematics and physics studies in Munich, Germany in 1847/75. To finish his studies, Planck moved to Berlin (1877). In the following summer Planck did his doctor about the mechanical theory of heat. Only one year after becoming a doctor, Planck worked as a private professor for physics at the university in Munich and got to be called back to Kiel in the year 1885.

Two years later, on the 31th of March (1887) was the announcement of Plancks wedding with

his teenage love Marie Merck (the daughter of a banker in Munich). The result of this wedding were 4 children. In the year 1892, Planck accepts the professorship in theoretical physics in Berlin. Here, Planck especially concentrates on the thermodynamics and the investigations about "black fields". In the year of the turned century, Planck developed with the help of the interpolation he was able to define the exact law of the black heating radiation which is known as the "Planck's law" for the whole frequency range.

Determining was Planck's hypothesis and theory that the electromagnetic radiation could not be appreciated as konstantly; they are more comparable to small particle which he named "quanta". This hypothesis led him to the natural constant that is called after him: "Planck constant". This discovery built the basis for a totally new area in physics, to the so- called quantum mechanics. The quantum mechanics should celebrate its boost about ten years later. Planck's special committment layed in the "German Physical Society" in which he also has been a member and later the board of that society (1905 until 1909 and 1915 until 1916). In 1905 Albert Einstein adapted the quantum theory on the classic physics to solve the unknown "photoeffect".

From 1912 until 1938, Planck worked as a secretary at the Prussian Academy of Science. Before his wife Marie died (1909) and two years after her death, Planck decided to marry Miss Marga von Hoesslin who was a niece of his wife. Out of this marriage one child came off (1911). In 1913 got Planck the principal of the university in Berlin. The Nobel prize was awarded to Planck due to the explanation of the quantum theory in December 1918. Planck got awarded with many different prices (of the physical society, because of his jubilee as a doctor,..). Caused by an airattack his house burned out and he lost everything in the year 1944. In the same year Planck also lost his son who got executed. In the <u>assassination</u> <u>attempt</u> on Adolf Hitler on the th July 1944 Planck

was a member. He lived under modest means at seiblings in Goettingen, Germany. He was always championed for the German scientific.

Max Planck died on the 4th of October 1947 in Göttingen at the age of 89 years. Two years after his death the Kaiser- Wilhelm- society as the Max-Planck-society grew to one of the most important research establishment.