Michael Scheffelt (1652-1720)

Biography written by Werner Rudowski, Germany.

Michael Scheffelt was the earliest and most important inventor and maker of logarithmic and other scientific instruments in Germany. He was born on the 20th of February 1652 in the old South German city of Ulm. At the age of 14 he was sent to Nuremberg to learn the profession of a tradesman. When he returned to Ulm in 1675 he married Anna Christine Müller who came from the Faulhaber-family, famous for their mathematicians.

It is unknown when he started to make scientific instruments, but the portrait of 1691 shows him already with a "Proportionalzirkel" (sector) and other mathematical instruments.



His first book on the "Proportionalzirkel" appeared in 1697 and had at least five more editions, the latest one is dated 1781. In his second book PES MECHANICUS of 1699 he described in detail a square ruler with many scales including logarithmical scales of numbers, sines and tangents to be used with a pair of dividers. Already in a small booklet of 1702 and later (1718) in his second PES MECHANICUS Scheffelt introduced first sliding rods and then very sophisticated double sided slide rules in various forms.

The huge variety of different scientific instruments of his workshop is documented in Scheffelt's two MUSEUM MATHEMATICUM of 1708 and 1720, which may be called *sales catalogues*. Ten signed and mostly dated instruments are known in German and Swiss museums, probably some more may exist in other museum depots.

But Scheffelt was not only inventor and maker of scientific instruments. In all his books he described in detail the scales, how to construct and where and how to use them. All his books are written in German, not in Latin as most academic works of his time. Scheffelt also wrote easy to understand mathematical books for the youth and for students, mechanics, workmen and tradesmen. He became a teacher for arithmetic and geometry at the *Gymnasium academicum* at Ulm and gave lessons for mechanics and tradesmen in the evening or even at lunch time breaks.

Scheffelt and his wife had 14 children, many of them died in childhood. Michael Scheffelt died on 11th July 1720 at the age of 68.

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