**Procedure characteristics**

* Water is placed in a 100 mL Chemspeed-Vial
* Furthermore the reservoir bottle is filled with water
* Uptake-vials are weighed and placed inside or on top of a chemspeed Vial-rack (normally used for SEC-sampling) (2mL SEC vials for volumes below 1 mL), 10 mL vials for volumes above 1 mL
* the programme is called „2024\_06\_18 – volume\_transfer\_accuracy\_test”
* the robot takes the samples which are subsequently weighed again to distinguish the weight of the aspirated liquid (directly after filling, to avoid evaporation)
* the measured values are put into a table to distinguish the variation between wanted and reached volume
* the needle depth was set so low, that the needle tip was inside the water at the end of aspiration
* **for Dilutor 1 and 2:**
  + pre-rinsing with 3 mL inside and 3 mL outside volume at 10 mL/min
  + 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.85, 1 mL
  + The volume was aspirated from a vial and transferred to the sampling vials
  + At 1 mL, the robot had to do 2 transfers (1x 0.9 mL, then 0.1 mL)
  + Equilibration time for aspiration and dispensing was 2 s
  + Extra volume was 0.05 mL and air gap volume was 0.05 mL
  + Source and destination speed were 1 mL/min
  + It was always rinsed (with water from the valve port B (distilled water) after each transfer with 2 mL inside and outside volume at a speed of 10 mL/min
* **for Dilutor 3:**
  + pre-rinsing with 10 mL inside and 10 mL outside volume at 10 mL/min
  + 0.5, 0.6, 0.7, 0.85, 1, 3, 3.5, 4, 5, 5.5, 6, 7 mL
  + The volume (up to 1 mL) was aspirated from a vial and transferred to the sampling vials; above 1 mL the volume was aspirated from the reservoir bottle (valve ports B)
  + Equilibration time for aspiration and dispensing was 2 s
  + Extra volume was 0.05 mL and air gap volume was 0.05 mL
  + Source and destination speed up until 1 mL volume was 1 mL/min; above that, the speeds were adjusted to the volumes (e.g. for 3 mL volume 🡪 3 mL/min, for 7 mL volume 🡪 7 mL/min
  + It was always rinsed after each transfer(up to 1 mL volume with 2 mL in- and outside at 10 mL/min; above 1 mL with the corresponding volume at 10 mL/min (e.g. 4 mL 🡪 4 mL inside and 4 mL outside volume or 7 mL 🡪 7 mL inside and 7 mL outside volume)