

Editorial

Dear reader,

This year is full of events, anniversaries and milestones. Not only does *HThP* celebrate its 50th anniversary, but also the Periodic Table of Elements has its 150th birthday. In 1869 Dimitri Mendeleev and Lothar Meyer discovered and presented this table. In order to commemorate this breakthrough, UNESCO has declared 2019 as the “International Year of the Periodic Table of Chemical Elements”. In addition, another important event takes place in May 2019. The Conférence Générale des Poids et Mesures will put into effect the new SI system of units on May 20, 2019, the “World Metrology Day”. The introduction of this new system marks a change in paradigm: the new system relates all units to fundamental constants, rather than artefacts. The most prominent example is the definition of the new kilogram, which is now linked to the Planck constant, h . Of course, all of this has an impact on thermophysical property measurements. Therefore, we have asked Dr. Matthieu Thomas from the Laboratoire National de Métrologie et d’Essais (LNE), France, to explain shortly how this new definition works and how it was implemented. Dr. Thomas is involved in the Kibble balance project of LNE, a key element in the realisation of the new kilogram. You find his article in this issue of *HThP*. The editors thank Dr. Thomas for his cooperation; we hope you will enjoy reading his article as well as the rest of this issue.