Unified pH values of liquid chromatography mobile phases

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**Unified pH values of liquid chromatography mobile phases**

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**pH measurement of LC mobile phases** is not trivial

pH measurement in mixed solvents is not well established, the most widespread approach is with pH

**Is there a rigorous way?**

There is the concept of Unified pH scale (pHabs * scale)!

* Here we used pHabs in the meaning of pHabs, i.e. "aligned" with the aqueous pH scale [1]

**How to measure that in practice?**

Differential potentiometry[1]


**pHabs of mobile phases?**

Possible in any mobile phase

Anchoring: Aqueous std buffers

Which works better in practice, with pH or pHabs?

Degree of ionization: pHabs is better with bases, with pH with acids

Retention: Neither is perfect

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