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## Measurement results without statements of reliability (uncertainty) should not be taken seriously

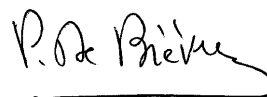
Still in 1997, results of analytical measurements are published in international Journals – including in some with a high reputation – without statement of reliability (uncertainty). Should authors not themselves give more and better proof of the degree of confidence which can be placed in the result of their measurement? Should more attention not be paid to either better understanding of the measurement method and instrumentation used to produce these? And clear evidence given that the degree of reliability of the result has been properly evaluated?

We have drifted very much into the “black box” concept for carrying out measurements. Not being

able to estimate the degree of reliability is not acceptable in case important decisions are based on measurements. Regretfully this is a widespread phenomenon.

And that is a problem, because that result may be used for some purpose. The task of the analyst inherently includes the study and evaluation of a measurement result and its degree of reliability. And a result can only be considered of some value if accompanied by a range within which that value is claimed. The validity of a conclusion made on the basis of a measurement result, can be no better than the indicated quality of the result permits.

So, a result without reliability (uncertainty) statement cannot be published or communicated because it is not (yet) a result. I am appealing to my colleagues of all analytical journals not to accept papers anymore which do not respect this simple logic.



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