

Abstract:

Probeware already has a long history and it is now more recognised as an effective utility in chemistry education. One of the main obstacles for probeware to expand is the lack of the financial means which is one of the main reasons why they are still plenty of teachers that do not use probeware in chemistry education. To solve this issue it is important then to find a cheaper replacement for original probeware so every teacher can use it. The rise of e-shops and cheap international shipping led to the appearance of cheap alternatives to relatively expensive probeware and to professional devices for instrumental methods. It is then vital to find these alternatives and to test their potential of becoming a fine replacement of the original probeware and that is also the main topic of this bachelor thesis. The results have shown that these cheaper devices already exist and by buying them a lot of financial means can be saved. This alternative probeware provides quality reproducible outputs based on real expectation which are not that much different from the outputs of the original probeware. They are also some disadvantages like long delivery time of goods from foreign e-shops and its complaint. As well as, advanced functions for data analysis are not available in the case of devices with autonomous display. Overall it seems like all cheaper alternatives to probeware that have been tested for this thesis have the potencial of implementation in chemistry education.