CIPAC MT STATUS REPORT

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MT XXX Density of solids and liquids with automated systems

Allocated to DAPF

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CIPAC 67th meeting, June 2023 Braunschweig

Density of solids and liquids with automated systems by Mr Jonas Treutwein (5356)

Mr Treutwein reported about the reasoning behind the addition of a new procedure for the determination of the density of solids and liquids. The current methods (MT 3, MT 186, A3 and OECD 109) do not include the current practice of the majority of laboratories of applying fully automated gas pycnometers for solids or oscillating density meters for liquids. Also MT 3 is already very complicated therefore a new method incorporating the new techniques is more efficient than rewriting MT 3. It was also stated by Mr Treutwein that an interlaboratory proficiency test would not be required as the equipment is fully automated and therefore can only lead to erroneous results if operated in a not correct way.

Mr Treutwein therefore recommends that the new method 'Density of Solids and Liquids with automated systems' should be adopted as provisional CIPAC method.

The following comments were received from the meeting:

- Mr Wolffram asked whether the proposed method is related to a certain instrument brand. This was not the case, no CIPAC endorsement will be granted.
- Mr Di Loreto asked why a collaborative trial is not needed? Mr Treutwein answered that a collaborative trial is not needed because you have just to use the instrument according to its instructions.
- Mr Benke remarked that traditional methods, e.g. by using a pycnometer, is more accurate. Mr Treutwein answered that the accuracy of the automated systems is sufficient and that the current methods stay in place.
- Mr Hänel asked why an automated method should be registered as a CIPAC method. Mr Treutwein answered that it necessary because of requests from some authorization bodies. Nevertheless, the question remains why a fully automated method should be a CIPAC method.
- Ms Tessier asked whether the equipment is widely available. Mr Treutwein answered that they were.

Closed Meeting:

Mr Hänel asked the meeting whether the handling of a fully automated system should be included in a CIPAC method. It could be judged as an endorsement of a certain brand of equipment. Mrs Nováková suggested to put the method on the website only, but without CIPAC 'recognition'. Mr Pigeon suggested to incorporate the automated system in the current MT method. Mr Bura and Mr De Rijk stressed the importance of performing an interlaboratory test as correct calibration of the system was vital for obtaining correct results and because very viscous materials require a dilution step in order to obtain correct results.

It was decided that DAPF would be contacted by Mr Hänel and that no promotion could be granted. The request will return on the agenda of the 68th CIPAC annual meeting in 2024.