The PiSToL News

Issue 3

November 2016

Salam kepada semua!
Welcome to issue 3 of the PiSToL. I hope you are finding the information in the newsletters useful, or at least entertaining!

If your laboratory is accredited for testing steel reinforcing mesh, please make sure you read the update (first feature) below.

We were wondering if there is a desire to see 'IANZ tips', or similar information about IANZ assessments, what might be expected etc. See below for the first examples of these! As always, your feedback is appreciated.

I am also thinking of having a 'Focus on Criteria' type feature, semi-regularly, which would pick a clause from accreditation criteria (mainly ISO 17025, IANZ specific criteria) and 'explain' how you could apply or use it, or how IANZ might assess compliance with it. Let me know if you have any ideas for what to start off with!

In this feature

Reinforcing mesh testing update

The Ministry of Building, Innovation and Employment (MBIE) has published Amendment 14 to Acceptable Solutions and Verification Methods for Building Code clause B1. This affects the requirements for testing steel reinforcing mesh. Laboratories accredited for these tests should make themselves familiar with the variations and apply to IANZ for a modification to their scope of accreditation to include the additional requirements. The Amendment can be viewed here.

New Zealand has featured in a recent round of ILAC global news with updates to the steel mesh testing saga. You can see the article here.

Source: Radio NZ/Cultura

IANZ tip #1: Presentation of Units

Let's start simple and general; this applies to everyone who uses units of measurement!

One of the most common things we find on endorsed calibration reports and in other records is incorrect representation of scientific units. This is relatively minor in terms of assessment findings, and of course, whether you write 10kg or 10 kg the reader will probably know what you mean. However, correct use of the scientific units requires there to be a space between the unit and the measurement quantity, and there are 'right' and 'wrong' ways of writing unit symbols. Writing units consistently and correctly will aid in the professional presentation of your endorsed reports.

All units require a space between the quantity and the symbol, including degrees for temperature, but excluding plane angle degrees, minutes and seconds (for example 20° of arc but 20 °C for temperature).

For more information, see the BIPM's specific page here. On the Downloads tab, you can download the whole (or parts of the) SI Brochure, including a credit-card sized 'wallet' guide.

IANZ tip #2: Review of received calibration reports

Recently we have noticed that a lot of labs are not adequately checking calibration reports which have been issued for their reference equipment. It means that sometimes there is the need to review, and potentially recall, work which has already been completed and reported in endorsed reports, because a piece of reference equipment has not been appropriately verified before being put back into service. For example, in an electrical testing laboratory this might be a digital multi-meter sent to an external IANZ accredited

laboratory for calibration. As you all know, an endorsement on a calibration report is a must, but it is not something which absolves the client laboratory of responsibility when it comes to ensuring the calibration and calibration report have met its requirements.

Does the report contain all the ranges and/or parameters you need? (If not, did you ask for the ones that you need?) Is the uncertainty presented in an understandable and appropriate way? Did the issuing laboratory issue any non-compliances or measurements in the window of uncertainty (WOU)? Does the report feature a suitable endorsement logo and statement?

These, amongst other things, will need to be reviewed on return of the equipment from calibration, before it is put back into service. The equipment and traceailbity clauses of ISO 17025 (5.5 and 5.6) include more information.

Just this morning I also read one of the latest articles on the ISOBudgets blog, regarding measurement traceability. I highly recommend this read, with emphasis on the part about reviewing your calibration report!

Update on PT (proficiency testing)

We have seen some fantastic activities happening lately, where IANZ accredited laboratories have partnered or teamed up to intitiate their own inter-laboratory and inter-operator comparisons. It is excellent to see this cooperation, as all accredited laboratories need to show evidence of forms of PT so it really is great for everyone!

Source: bookboon.com

Remember that PT needs to be analysed, summarised and reviewed in the course of your usual yearly laboratory activities. Where there are results which are suspicious these should be discussed and remedied by resubmitting results or retesting/measuring as appropriate.

There are a few different combinations which laboratories class as PT. Some labs test operators with their own unique sets of reference equipment, for example in controlled environment testing where technicians carry around the country their own sets of gear. This seems to be a comparison of the lab systems to ensure similar results are gained at the same device under test. Another method is to use the same reference gear across different laboratories which would appear to really compare the procedures in the different laboratories. Then there is more usual practice of comparing an artefact in different labs with that lab's own reference equipment, which is the more usual inter-laboratory test scenario.

Have a think about what it is you want to, and are able to, compare and design your comparison from there. Approach other labs in your industry or technical field – you never know what you might get out of the relationship!

As your Proficiency Testing Coordinator I'm more than happy to help if you have any queries.
Thank you to all those labs who have already initiated such activities, and keep it up!

Update on ISO 17025 draft

Most of you will by now be aware that ISO/IEC 17025 is under review at the moment. I have been informed that the first public draft of the standard will be published for comment between 29 December 2016 and close on 22 March 2017. Please contact us if you would like more information.

Fun Bits and Internet Stuff

- Tom Scott explains the fascinating Falkirk Wheel, which is the world's only rotating boat lift (between Edinburgh and Glasgow in Scotland) in this video on YouTube;
- Detecting brainwaves with atomic vapour. Need I say more? Link.

Sehingga masa akan datang ...