NATA’s two-day ‘Aspects of Quality Control in the Microbiological Laboratory’ (QCML) course is designed to provide participants with a thorough understanding of the elements required for Quality Control in a microbiological laboratory.

QCML has long been one of NATA’s most popular training courses. A recent session in Melbourne held in August 2013 was the 90th time the course has been presented.

The course had its origins in the ‘Advanced Assessor Training course in Biological testing’ which was first conducted in February 1995 with 16 participants.

During 1995, six courses were held in Sydney, Brisbane and Melbourne. Perth and Adelaide were covered in April 1996. Around 90% of NATA’s Technical Assessors in biological testing attended one of these sessions.

Based on these courses and the feedback obtained from attendees, the course content was streamlined and the birth of QCML followed. The first QCML course was held in 1997 and was available to operators in any microbiology lab whether or not it was a member of NATA.

Throughout its history the course materials have been based on real life documents and case studies contributed by NATA-accredited laboratories and Technical Assessors.

In all, more than 1,000 people have attended “Aspects of Quality Control in the Microbiological Laboratory” since it was first offered.

The course was developed by Professor Stuart Andrews, a Senior Lecturer at the University of South Australia who was a member of the NATA Biological Accreditation Advisory Committee for twenty years, from 1992 until he retired from the Chair’s position in September 2012.

He has been a NATA Technical Assessor since 1981.

“I did the original design and workup for the QCML course about fifteen years ago,” says Professor Andrews.

“Since that time I’ve been the only presenter and we’ve just finished our 90th course!”

He said that when the course began it was a one-day course, but since then it’s been regularly updated and about five years ago was extended to incorporate a second day.
“It was originally developed to standardise the way NATA’s Technical Assessors conducted assessments.

“Once about 90% of the Assessors had been trained, the course was transitioned to train staff from laboratories doing biological testing.”

“We started off with groups of twenty but over time as more content was added the number was reduced to ensure everyone got the full benefits.”

“The original course is what’s now called Part 1. Part 2 was added when labs were required to do measurement uncertainty. The course content just couldn’t all fit into one day, and more new elements were added including verification and validation.

“At that time people weren’t doing their studies properly. The course taught people the right way to do things.”

He said that the highlight of these courses for the first few years was having the participants involved in playing games to break up the technical sessions.

“These produced much laughter and were a great release from the concentration on technical requirements which they were learning about.

“However, eventually the games had to be phased out because new participants knew about them from previous attendees and came along waiting for them; they lost their effectiveness in assisting attendees to concentrate.”

He said there have been regular updates over time as field requirements have changed and the course meets international standards for ISO/IEC17025.

“The emphasis is on teaching good microbiological practice that then complies with ISO/IEC 17025, rather than simply teaching compliance with ISO/IEC 17025.”

Professor Andrews says the present two-day course is now a great one for new laboratory staff.

“Many senior people working in laboratories have already been through the course so their new staff members can get a good induction and learn how things work.

“I don’t just stand at the front of the group and tell attendees what to do. They learn more by working things out for themselves.

“Attendees come up with specific examples from their own labs and ask questions. They can ask what they like and they come along with their own issues and get free advice on how to deal with them.”

Professor Andrews says the course isn’t about NATA or meeting NATA’s specific requirements.

“NATA hardly gets a mention during the two days. We have people from other countries in the course and they have their own accreditation bodies.
“Participants do however gain a better understanding of the key elements in the assessment process and the range of assessment techniques that can be used.”

He emphasized that attendees from hospital and path labs need to understand that the focus of the course is on biological testing.

“We have to tell medical people in advance that most examples are taken from water and pharmaceutical areas. However, the same principles apply in the chemical laboratories.”

In-house courses can be tailored for organisations. This means they usually have a narrower focus than off-site courses.

“The course can be taught in-house if required, but it works best with a mix of participants. They benefit from cross-fertilisation, from seeing how other people do things in different labs.

“When people come off-site there are no work distractions and they can learn without interruptions.

He said the QCML course enables participants to interact with their peers and gives them the opportunity to discuss issues of mutual interest and concern in a suitable forum.

“There’s a lot of great networking chat during the tea breaks. The food’s also a lot better when courses are held at NATA venues.”

He said that every group is unique: “I have to try to meet the expectations of everyone in the audience, which means I have to think on my feet all the time.

“It’s two very full days and nobody ever goes to sleep in the course.”