

History of the Metrology Society of Australasia (MSA)

This history has been compiled by John Miles and Jim Gardner. The latter years have been compiled by Anne Evans who has largely gleaned information from old copies of TAM.

It became apparent as we writing this account, that we could not name everybody who has contributed to the MSA over the years – there were, and are, so many who have done so much. We have compiled a list of previous conferences and past presidents, and we will endeavour to build a list of past committee members.

We hope this account is a true representation and we trust it will develop over time to be a wonderful walk down memory lane.....

If you were a committee member, please <u>contact us</u> so that we can add you to the data base. Also, if you have any other material or updates that should be included, please <u>forward</u> the details to the MSA

Introduction:

Metrology is the science of measurement. The Metrology Society of Australasia (MSA), founded in 1993 in Melbourne, Australia, comprises over 150 individual scientists, engineers, and technicians mainly from Australia and New Zealand. Arguably, it was the first such organisation in the world. Members are involved in a wide range of activities and fields, ranging from high level international meetings on science and trade policy, to developing new primary standards, to calibrating instruments for science and industry, to peer reviewing commercial testing laboratories and to ensuring the quality and integrity of the production of goods and services. The MSA provides, amongst other things, professional recognition for its members, organises international conferences, manages educational programs and promotes the practice of metrology. The following is a short outline of the history of the MSA, based on historical documents and personal recollections.

It is valuable to briefly examine the historical context of the MSA establishment in 1993.

At the time, Australia's standards and conformance infrastructure consisted primarily of three federal government and two non-government organisations:

- the government organisations were the National Measurement Laboratory (NML), then part of the Commonwealth Scientific and Industrial Research Organisation (CSIRO),
- The National Standards Commission (NSC)
- Australian Government Analytical Laboratory (AGAL).



These three government organisations were amalgamated in 2004 to form the National Measurement Institute (NMI), Australia's peak measurement body responsible for biological, chemical, legal and physical measurement. NMI also assumed responsibility for trade measurement under a national system in 2010. The two non-government, not-for-profit organisations, were Standards Australia (SA) and the National Association of Testing Authorities (NATA).

These five organisations supported numerous Australian manufacturing, calibration, testing and quality laboratories, state trade measurement authorities, utility organisations for gas, power, water and telecommunication and defence and university departments. Metrologists may be defined as those skilled in the science and art of measurement, in particular the determination of measurement uncertainty. They work in a diversity of organisations, large and small, scattered throughout the country.

The publication in 1987 of the ISO 9000 family of standards specifying the requirements for a quality management system had increased the adoption of quality management systems throughout the developed world. Laboratory accreditation organisations such as NATA began using ISO 9000 standards for assessing the quality management system of calibration and testing laboratories.

1993 - 1997

Of particular significance for metrology in 1993 was the publication of the ISO Guide to the Expression of Uncertainty in Measurement (GUM) by the Comite international des Poids et Mesures (CIPM). The GUM is a foundational document for metrology, now adopted by all major National Measurement Institutes (NMIs) and national and international laboratory accreditation organisations.

Globalisation and economic rationalisation in the 1980s, including deregulation and the move to a free-market economy, were resulting in major reforms of the Australian economy by 1993. These included the decline of traditional manufacturing industries and the corporatisation and privatisation of many government-owned industries. The consequent closure of many large metrology laboratories in the automotive, textile, clothing and footwear, heavy engineering, steel and shipbuilding industries, as well as defence factories, energy utilities and telecommunications, resulted in a decline in the critical environments necessary for the development and maintenance of metrological expertise.

Paradoxically this potential loss of metrological skills, knowledge and infrastructure, built up over previous decades, occurred at a time when globalism was demanding the mutual international acceptance of measurement standards and accreditation. This required skilled and experienced metrologists to conduct and manage the technical aspects of national and international comparability and traceability.

Science is a social activity. It relies on the exchange of information, on human interaction, on teaching and learning, on the testing of ideas in public fora, on patterns of behaviour. Excellence in metrology depends on a healthy social context. The beginnings of the MSA may be seen partly as a response to the lack of a proper social context for Australian metrology in the early 1990's.



The idea of an organisation to bring Australian metrologists together first arose during 'happy hour' at the Carlton Hotel in Singapore in 1992. Mr. Colin Wagg and Dr. John Miles were relaxing over a beer after a long day assessing a local laboratory for NATA. Wagg was the NATA metrology manager based in Melbourne and Miles was the manager of the Physical Metrology section of the Melbourne Branch of NML CSIRO. Wagg as staff officer and Miles as technical assessor had worked together on many NATA assessments throughout Australia and South East Asia.

NATA is the oldest laboratory accreditation organisation in the world, dating back to 1947. A NATA assessment typically involves an assessment team comprising NATA staff and one or more technical assessors, volunteers who donate their time, experience, and professional knowledge to undertake peer review. NML traditionally supported NATA by ensuring that it meets the needs of the Australian measurement system by providing 'staff time' for many NATA committees and acting as technical assessors. This support continues today.

A NATA assessment often involves the free flow of information between the assessor and the laboratory staff. Thus, the assessment acts as de-facto means of metrology networking and education. Wagg and Miles felt that this process needed to be expanded and formalised in some way. The idea of a metrology society was born.

It wasn't until 1993, however, that the idea was raised again by Wagg and Mr. John Mitchell, a Senior Scientific Officer and Field Manager in the NATA Melbourne office. In May 1993, Mitchell and Wagg contacted Mr. Ron Cook, the Officer in Charge of the Melbourne Branch of NML and invited Cook and Miles to a lunch meeting at a local pub on the 14th May to discuss a Metrology Association. At this meeting, it was agreed that the idea was a good one and decided that the formation of a Steering Committee, chaired by Cook, was the best way to proceed. Invitations to join this committee were sent out and the first meeting was held at NML Melbourne Branch, Clayton, on Friday 4 June 1993. Two additional meetings of the steering committee were held in June and July 1993. The membership of the Steering Committee and all MSA committees are shown in Appendix 2.

During these meetings, proposals for the name and objectives of the society, the constitution, membership eligibility and fees were formulated. Cook, instrumental in the early founding of the MSA (he was subsequently awarded honorary membership), provided the first drafts of the objectives and membership qualifications. Some of the alternatives considered for the name were: *Metrology Institute of Australia, Measurement Society of Australia, Australian Measurement Society and Australian Institute of Metrology.* The final decision to use the word Metrology rather than Measurement was a considered decision, the reasoning being that the Society should promote the correct use of the term 'metrology' in the Australian community.

Once these basic issues had been resolved, it was decided that a public meeting should be held in Melbourne to gauge interest and hopefully launch the newly named Metrology Society of Australia. In



August 1993, approximately 600 people from all over Australia, identified as working in metrology, were contacted and invited to a meeting at 6:30 PM on **Wednesday 22nd September** at the NML Melbourne Branch. It was felt that if perhaps 30-40 people indicated support, this would be enough to justify proceeding.

In the event, 300 letters of support were received from individuals and organisations from all States of Australia. More than 100 people attended the public meeting, including attendees from Tasmania, Queensland, NSW and SA. The meeting unanimously voted to form the new society and the MSA was on its way. The strength of this grass root support was crucial in first establishing the MSA and then maintaining the momentum as it developed.

The first national management committee was nominated and elected at this public meeting, with Miles the inaugural President, Wagg as Secretary and Mr Stuart McDonald (PowerNet), as Treasurer. The range



John Miles

and diversity of the organisations, backgrounds and skills in this first management committee were crucial to the ultimate success of the MSA. The first official meeting of the MSA management committee was held on the 25th October 1993 at NML Melbourne Branch, just 5 months after Cook, Miles, Wagg and Mitchell met in the pub.

There was a great deal of basic work that needed to be done in the early days. The most important task was simply to gain membership, but also needed were the design of a logo and letterheads, finalising the constitution, deciding on membership qualifications, the design of application forms, developing a member database, setting up the financial accounts, raising money, establishing forms of communication, organising social and technical evenings, becoming

incorporated, and so on.

These were exciting and demanding times. The committee met every month in Melbourne for the first year or so in order to deal with the critical and foundational matters. This, despite the fact that the members of the committee also had their normal, on-going work to deal with. By March 1994 the membership was more than 150, there was about \$8,000 in the bank, the first issue of The Australian

Metrologist (TAM) had been published under the excellent editorship of Mitchell and a general meeting of MSA members had been held in March 1994 to ratify the constitution and vote on incorporation.



By October 1994 there were over 250 members, the MSA was incorporated in the State of Victoria, a submission had been made on behalf of the MSA to the Kean review (a 1995 inquiry into Australia's standards and conformance infrastructure), and pressure was building from the other States to develop



their own State organisations. This development had always been planned for the future but it had been anticipated that it would be about 3 to 4 years before this happened. The rapid growth and enthusiasm of the State branches demanded that the structure of the MSA be revised quickly to incorporate them into the national structure.

By June 1995, 14 management committee meetings had been held, plans for the first national conference were underway, a Pressure Technical Group (PTG) had begun, State groups were operating successfully and the 5th issue of TAM had been published. The culmination of the early development of the MSA was undoubtedly the **first national conference**, **MSA95**, **held at NML Lindfield**, **Sydney in December 1995**. This was a significant milestone in the short history of the MSA, a forerunner of the many extremely successful biennial MSA international conferences held since then.

The newly established NSW state branch of the MSA conducted this event. The MSA95 committee did an outstanding job, resulting in a conference with eminent international and Australian speakers, three parallel sessions over three days, 40 papers on a wide range of subjects, networking opportunities and social events.

An international speaker of note was Professor Paul de Bievre (University of Antwerp), who gave a talk on chemical metrology, a very significant and relevant topic at the time. De Bievre was very active in the international activities of chemistry and he was a charter member of many international chemistry organizations, including the BIPM Consultative Committee on the Amount of Substance (CCQM). He was co-founder (1989) and President (1993-1995) of EURACHEM, co-founder (1992) of CITAC ("Co-operation on International Traceability in Analytical Chemistry") (1992).

The conference was memorable for the quality and enthusiasm of the delegates, the superb organisation and a conference dinner spent cruising Sydney Harbour with the Harbour Bridge and the Opera House as a magnificent backdrop.

During the years 1995 to 1997, the MSA continued to develop. Membership grew to more than 350, educational and social events were being regularly organised by the state branches, including site visits to facilities not normally open to the public, 13 issues of TAM were published, with editorship moving from Mitchell to Deller, and international links had been established with the National Conference of Standards Laboratories (NCSL), the Chinese Metrology Society, the Metrology Society of Thailand and IMEKO, the International Measurement Confederation. An educational sub-committee, under the leadership of Mr Helmi Salem (Australian Quality Training Services), was beginning the preparation of a draft course outline for a Graduate Certificate in Metrology and Quality, in association with the Industrial Research Institute Swinburne, Swinburne University of Technology (Melbourne).

The culmination of the first five years of the MSA was undoubtedly MSA97, the 2nd MSA International Conference in Melbourne. MSA97 was a spectacular success. The committee put together a 3-day



international conference, attracting many metrologists from Europe, the Asia-Pacific, United States, Canada and South Africa. Opening remarks were made by Mr Bruce Kean, author of the influential Kean report (see above). The keynote speakers were Dr. Thomas Huttemann, head of Corporate Metrology for Eastman Kodak, Professor Volkmar Kose, vice President of the German National Standards organisation PTB, and Dr. Barry Inglis, then Director of the National Measurement Laboratory (NML) and co-ordinator of the Asia Pacific Metrology Programme (APMP). The quality and eminence of these speakers was remarkable. The inaugural winner of the MSA Metrologist of the Year was Horst Sieker for innovation in linear measurement.

There were many factors critical to the successful establishment of the MSA. The support of NML, NATA and NSC, was crucial, providing people, time and material resources as well as political endorsement. It is interesting to reflect on the participation of these organisations, given that there was an atmosphere of economic rationalism in government and business circles at the time. A simple cost-benefit analysis of the resourcing of the MSA would almost certainly have questioned the immediate dollar benefits to these three organisations. The landscape has since changed, with most countries now seeing the immense but subtle benefits in supporting measurement infrastructures. Special mention should be made here of Dr Barry Inglis, the then Director of NML CSIRO. He not only strongly supported the MSA but also served on the Management Committee for a number of years. His backing, including making available NMIA staff over the years, the use of resources such as lecture theatres and meeting rooms, and national and international promotion were instrumental for the recognition of the MSA. It is fitting that he was awarded an honorary membership in the MSA, went on to become the CEO and Chief Metrologist of NMI Australia and ultimately the President of the CIPM.



The support of many of Australia's larger technological, manufacturing, research, educational and defence organisations was also critical. They included Telstra, the Bureau of Meteorology, ADI, Philips Scientific, Army Quality AWA, Assurance, Hewlett-Packard, and Aerospace Technologies of Australia. These organisations recognised at the time the importance of a workforce educated in metrology, networked with those of similar skills and knowledge. This support included providing their staff to sit on MSA committees, allowing their staff to attend MSA conferences, and opening their doors to MSA visits.

Finally, the input and involvement of people from many small, privately owned metrology laboratories and businesses, including ACM Laboratories (Horst and Carol Sieker), Quality Calibration Services (Ron McBain), LaMETS (Jack Deller), Australian Pressure Laboratory or APL

THE AUSTRALIAN METROLOGIST

THE 1995 MSA CONFERENCE
- METROLOGISTS AT PLAY



Issue 7 8 December 1995

(Randall Anderson), S. G. Prittie Precision Gauges (Alex Smart) and Duncan Tool and Gauge (Richard Duncan) reflected the significance of the MSA at the grass roots level. These were often one- or two-person, family-owned businesses. The time given by these people to help establish the MSA was noteworthy. They had more skin in the game than those who came from government organisations or larger companies, given that it took them away from generating income for their small businesses.

From the very early days, the MSA management committee believed that it had to ultimately move on from Melbourne to another Australian city if the MSA was to be considered a truly Australian organisation. Sydney was the logical choice and steps were taken in 1997 to successfully drive this transition.

The end of 1997 therefore saw the transfer the Management Committee from Melbourne to Sydney. Most of the members of the outgoing management committee were also members of the inaugural committee.



They had worked for 5 hard, ground-breaking years to put the MSA on a firm footing. Particular mention should be made of Miles, Wagg and McDonald, the senior members of the committee for their dedication and proficiency. The beginning of 1998 therefore saw a new MSA management committee in a new city, with exciting times ahead.

1998 - 2002

With Jim Gardner at the helm, 1998 – 2002 became a time of growth and consolidation for the MSA. Highly successful biennial conferences continued as did regular site visits.

Queensland and South Australian branches began to flourish, while quality systems, and traceability became the dominant themes across all disciplines of metrology.

The digital area began in earnest in this time period. The MSA had its own 'webpage' from 1997 and members were encouraged to share their emails with the webmaster. Photos started to appear in the TAM magazine from 1995 but by the 2000's, digital cameras were becoming common place, sharing images was easier and photos became prevalent in TAM.

2003 - 2016

This time period was presided over by Dr Jane Warne for 5 years then Dr Daniel Burke from 2007 – 2016.

If we think we may not have time to volunteer for the MSA committee, this would be a good time to reflect that during 2003 - 2007, Jane Warne held down her job at BOM, presidency of the MSA and was

mother of primary school children – a metrology wonder woman!

In 2003 a 40-page Operations Manual was written on how to conduct/run the MSA – this was a comprehensive guide that ensured information and knowledge was preserved.

The TAM magazine was now in a professional magazine format, about 20 pages long and produced 3-4 times a year – no small feat when you consider it was produced by volunteers!

QUEENSLAND



Shane Bran, Rai Pippia, Geoff Barnier



A metrology diploma at Swinburne university was up and running,

An MOU was signed between the MSA and the Croatian Metrology Society

The state of the 'kilogram' in Paris was starting to be discussed as was the state of metrology education!

In 2005 NMIA was launched and in the same year MSA member forums were set up on the MSA 'web site'. The 2005 conference in Canberra successfully engaged with politician highlighting the problems of training, education and skill shortages – it seems some things never change...



Jane Warne addresses the 2005 conference

In 2007 video conferencing was used for the first time at an MSA AGM. Members from a region gathered together in order to see proceedings on a screen that was linked to the physical meeting!

By June 2010 the TAM magazine was printed in colour. It was a constant battle to get material submitted and the TAM publications were produced as and when the voluntary organisers could arrange it. From a historical point of view TAM was an excellent resource to create this history but its days were numbered.



In the September 2011 issue of TAM, president Daniel Burke indicates the proposal of a NZ branch of the MSA will be discussed at the 2011 conference. See Appendix 4. The conference welcomed New Zealand metrologists with open arms.

Now that the MSA consisted of Kiwis it was proposed that the MSA change its name to the Metrology Society of Australasia. This name change was accepted by members and formalised via ASIC in 2014. The NZ branch hosted the first international MSA conference in Queenstown, NZ in 2015.

President Daniel Burke planted the seed for the Professional Metrologist programme in 2012 which was eventually launched in 2021.

2017- Present

The MSA committee under President Khaled Chahine (2017-2023) embarked on taking advantage of further digital opportunities.

An MSA LinkedIn account was initiated and to date it has close to 1000 followers. MSA switched to OneDrive so that they could now store, share and sync their files. This enabled committee members to access, share and update files from anywhere in the world. They also transitioned to QuickBooks which enhanced transparency and accuracy in its financial transactions.

The constitution was updated in 2019 and 2020 to include the digital age so that email and online proxy forms were recognised.

Digital transformation had unfortunately seen the demise of TAM – the hard copy magazine also known as The Australian Metrologist. This was at first replaced by hardcopy/snail mail newsletter and then email newsletters. MSA no longer had anyone within its ranks that had the time to carry on the wonderful work previous editors had put in.

This decision resulted in MSA members no longer having an MSA platform on which they could publish their scientific papers. In order to mitigate this, it was decided to publish papers that were presented at conference onto the MSA website.

In 2018 MSA signed a Memorandum of Understanding (MOU) with the Chinese Measurement Society (CMS).

In 2021, MSA signed a MOU with the Australian Gas and Oil Industries via their Measurement Allocation Working Group (MAWG). MAWG is responsible for custody-transfer metrology.

Education became a focus of the committee. Dr Rod White was engaged to write **12 measurement lectures**. These lectures are now taught at universities in Australasia and available free to educational organisations and MSA members.

In 2021 after much work by Neil Sturrock (CSIRO), Tony Bergen (PSI) and Tom Elliot (Wika) the **Professional Metrologist Programme** (MSA-PMP) was launched. It was initiated to ensure that, in the absence of formal NZ and Australian metrology qualifications, a peer recognition system was available for metrology professionals. The programme is designed to give formal recognition to metrologists in their fields of expertise and realised the goal of Daniel Burke back in 2012.



Over the years MSA conferences have been outstanding, this is thanks to MSA members who have worked hard to maintain such a terrific tradition. However, the MSA2020 in Melbourne is notable because it only just happened!

By March 2020 **Covid-19** had become a real problem in parts of the world and a few cases had been identified in Australia. The MSA2020 conference went ahead as usual – although handshakes were off the menu and hand sanitiser was very prevalent! Our world was about to change. Soon both NZ and Australia were in lockdown and we learnt to work in different ways.

It quickly became apparent that our metrology labs were an essential service. In the absence of a vaccine our members worked in masks to carry out their important roles. Work stations were changed so they could be at least one metre apart and 'counting sick leave days' was abandoned as management simply did not want infected people at work. We all learnt that, where possible, we should work from home. Platforms like Zoom and Teams became the norm and the MSA committee continue to use these tools to meet today. World Metrology Day events moved to online as did MSA committee meetings.

After two attempts were hampered by waves of Covid, the MSA committee were finally able to organise another conference - the usual biennial conference pattern had been disrupted by the pandemic. MSA President, Tony Bergen welcomed delegates from around the world to MSA2023 in Wellington – it was good to be back face to face and the positive energy at the conference bodes well for a terrific MSA future.

Further information and timelines follow...



Appendix 1.

Acronyms and Abbreviations

Acronym	Meaning		
3AQAU	3 rd Army Quality Assurance Unit		
ACM Laboratories	ACM		
AFF	Ammunition Factory Footscray, Department of Defence Support		
AGAL	Australian Government Analytical Laboratory		
APL	Australian Pressure Laboratory		
APMP	Asia Pacific Metrology Programme		
ASTA	Aerospace Technologies of Australia Ltd		
BIPM	International Bureau of Weights and Measures		
ВОМ	Bureau of Meteorology		
CCQM	Consultative Committee on the Amount of Substance		
CIPM	Comite international des Poids et Mesures		
CITAC	Co-operation on International Traceability in Analytical Chemistry		
CSIRO	Commonwealth Scientific and Industrial Research Organisation (Australia)		
GUM	ISO Guide to the Expression of Uncertainty in Measurement		
НР	Hewlett-Packard		
IMEKO	International Measurement Confederation		
IRIS	Industrial Research Institute Swinburne, Swinburne University of Technology, Melbourne		
MSA	Metrology Society of Australasia		



National Association of Testing Authorities
National Conference of Standards Laboratories
National Measurement Institute
National Measurement Laboratory, CSIRO
National Standards Commission
GUP PowerNet Pty Ltd
Pressure Technical Group
Standards Australia
S. G. Prittie Precision Gauges P/L
The Australian Metrologist



Appendix 2.

MSA Committees

1993 Steering Committee

Chairman: Mr Ron Cook (NML), Dr John Miles (NML), Mr Colin Wagg (NATA), Mr John Mitchell (NATA), Mr. Ron McBain (AFF), Mr Allan Griffiths, Mr Stuart McDonald (PowerNet), and Mr Jack Phillips.

1993, 1994, 1995, 1996 Management Committee

Dr John Miles (NML), President; Dr Barry Inglis (NML), Vice President; Mr Colin Wagg(NATA), Secretary; Mr Stuart McDonald (PowerNet), Treasurer; Mr John Mitchell (NATA); Mr Ron McBain (AFF); Dr Grahame Harvey (NSC); Mr Horst Sieker (ACM); Mr Bill Cerutty (HP), Mr Jack Deller (3AQAU), Dr Jane Warne (BOM Melbourne); and Mr Bob Collins (ASTA). Collins dropped out of the committee within several months due to work commitments and was replaced by Ms Glenda Sandars (NML). From 1995; Mr Richard Duncan (Duncan Tool and Gauge), Grahame Harvey (NSC).

John Mitchell is editor of TAM until 1996 when Jack Deller assumes the role.

1995 MSA95 Conference Committee

Ms Kerry Marston (NSC), Ms Glenda Sandars (NML), Dr Ilya Budovsky (NML), Mr Robert Kelly (??) and Mr Barry Sutcliffe (NATA).

1997 MSA97 Conference Committee

Mr Walter Giardini (NML Melbourne Branch), Chairman; Randall Anderson (Australian Pressure Laboratory), Ron Breen (xx), Stephen Jenkins (Steve Jenkins & Associates Pty Ltd), Mr Leigh Mackinnon (ADI), Mr McBain (AFF), Mr Helmi Salem (Australian Quality Training Services) and Mr Mark Thomas (Tenix Defence).

1997 Outgoing Management Committee

Dr John Miles (NML), President; Vice President, Dr Jim Gardner (NML); Mr Colin Wagg (NATA), Secretary; Mr Stuart McDonald (PowerNet), Treasurer; Dr Barry Inglis (NML); Mr Ron McBain (Quality Calibration Services); Ms Carol Sieker (ACM Laboratories); Mr Bill Cerutty (HP), Mr Jack Deller (LaMETS Pty Ltd), Dr Jane Warne (BOM Melbourne); Mr Richard Duncan (Duncan Tool and Gauge), Mr Alex Smart (S. G. Prittie Precision Gauges Pty Ltd).

1998 Management Committee



Dr Jim Gardner (NML) President; Dr Jane Warne (BOM), Vice President; Dr Laurie Besley (NML), Secretary; Ms Marion Haire (NSC), Treasurer; Dr John Miles (NML), Past President; Dr Ilya Budovsky (NML), Mr Barry Deeth (ADI), Mr Frederick Emms (Telstra), Mr Patrick McErlain (AWA), Mr Jim Miles (TAFE), Mr Gary Price (NSC), Ms Mary Ryan (NATA), Mr Mark Spillane (Philips Scientific). Support by Marian Haire.

1999 Management Committee

2022 Management Committee

Tony Bergen, President; Liam Shanahan, Vice President; Jason Dortmans, Secretary; Cynthia Lendrum Executive Secretary; Saeedeh Saadati, Treasurer; Paul McMullen, Jane Warner, Rai Pippia, Daryl Pettit, Lenice Evergreen, Anne Evans, Greg Hender, Khaled Chahine

2023 Management Committee

Tony Bergen, President; Liam Shanahan, Vice President; Jason Dortmans, Secretary; Cynthia Lendrum Executive Secretary; Saeedeh Saadati, Treasurer; Paul McMullen, Jane Warner, Rai Pippia, Daryl Pettit, Lenice Evergreen, Winston Yan, Owen Brace, Greg Hender, Khaled Chahine



Appendix 3.

MSA Honorary Members

Barry Inglis

Ronald Cook

Alex Smart

John Birch

William Blevin



Appendix 4.

Timeline 1993 to 2005

Date	Event	People	Location
1992	Informal conversation on the	John Miles (NMI, Melbourne	Carlton Hotel,
	formation of a metrology	Branch), Colin Wagg (NATA)	Singapore
	association		
14 May,	Lunch meeting to discuss	Colin Wagg (NATA), John Mitchell	Albion Hotel,
1993	Metrology Association	(NATA), Ron Cook (OIC, Melbourne	North
		Branch, NMI), John Miles (NMI)	Melbourne
4 June,	Meeting to form steering	Ron Cook (Chair), Allan Griffiths,	NMI
1993	committee.	Stuart McDonald, John Mitchell,	Melbourne
		Colin Wagg, Jack Phillips, Ron	Branch,
		McBain, John Miles	Clayton,
			Melbourne
18 June,	Meetings of steering committee.	Steering committee	NMI
1993	Name to be Metrology Society of		Melbourne
July 1993	Australia. Ron Cook provides first		Branch,
July 1993	drafts of objectives and		Clayton,
	membership qualifications.		Melbourne
July 1993	Decide to send out letters 600	Steering committee	NMI
	metrologists from all over Australia		Melbourne
	to gauge support, including		Branch,
	invitation to a public meeting.		Clayton,
			Melbourne
6:30 pm,	Public meeting. 300 letters of	National committee, consisting of:	NMI
22nd	support received from all States of	John Miles (President), Barry Inglis	Melbourne
September	Australia, 100 people attended	(Vice President), Colin Wagg	Branch,
1993	public meeting. Unanimous vote to	(Secretary), Stuart McDonald (SECV	



	form MSA. First national	then, now GPU Power Net,	Clayton,
	management committee elected.	Treasurer, and ordinary members,	Melbourne
		Grahame Harvey (NSC), John	
		Mitchell, Horst Sieker (ACM	
		Laboratories), Ron McBain (ADI	
		then, now Quality Calibration	
		Services), Bill Cerutty (Hewlett-	
		Packard), Jack Deller (3rd Army	
		Quality Assurance Unit then, now	
		LaMets), Jane Warne (Bureau of	
		Meteorology) and Bob Collins	
		(ASTA), subsequently replaced by	
		Glenda Sandars (NML).	
25 October	First management committee	Management committee	NMI
1993	meeting.	_	Melbourne.
1994	Monthly management committee	Management committee	Various
	meetings		locations
By March	Membership has reached 150,	Management committee	Various
1994	finances sound, first issue of TAM		locations
	published, general meeting to ratify		
	constitution and vote on		
	incorporation.		
By October	250 members, MSA incorporated,		
1994	submission to Kean review,		
	pressure to develop State branches		
	and national structure.		
By June	A total of 14 management		
1995	committee meetings had been		
	held, planning for first national		
	conference begun, Pressure		
	Technical Group initiated, 5 th issue		
	of TAM published,		
		<u> </u>	1



December	First national conference	NSW State branch, conference	NML, Sydney
1995		committee Kerry Marston, Glenda	
		Sandars, Ilya Budovsky, Bob Kelly,	
		Barry Sutcliffe.	
By 1997	Membership 350, 13 issues of TAM,		
	established links with NCSL,		
	Chinese metrology society,		
	metrology society of Thailand,		
	joined IMEKO.		
26	MSA97, second international	MSA97 organising committee, chair	Melbourne
November	conference. 20% of delegates from	Walter Giardini, members Randall	University
1997	overseas,	Anderson, Ron Breen, Stephen	
		Jenkin, Leigh MacKinnon, Ron	
		McBain, Helmi Salem, Mark Thomas.	
1998	Management committee moves to	Jim Gardner President (NMI), Jane	NMI Sydney
	Sydney, NSW.	Warne, Vice President (BOM), Laurie	
		Besley, Secretary (NMI), Marion	
		Haire Treasurer (NMI), John Miles,	
		Past President (NMI), Ilya Budovsky,	
		Barry Deeth, Frederick Emms,	
		Patrick McErlain, Jim Miles, Gary	
		Price, Mary Ryan, Mark Spillane.	
19 October	6 th biennial conference	MSA 2005 organising committee	Australian
2005		chair Ilya Budovsky	National
			University,
			Canberra



Appendix 5.

MSA Presidents

MSA Presidents		
Year	Name	Organisation
1992		
1993	John Miles	NMIA
1994	John Miles	NMIA
1995	John Miles	NMIA
1996	John Miles	NMIA
1997	John Miles	NMIA
1998	Jim Gardner	NMIA
1999	Jim Gardner	NMIA
2000	Jim Gardner	NMIA
2001	Jim Gardner	NMIA
2002	Jim Gardner	NMIA
2003	Jane Warne	ВоМ
2004	Jane Warne	ВоМ
2005	Jane Warne	ВоМ
2006	Jane Warne	ВоМ



Daniel Burke	NMIA
Daniel Burke	NMIA
Khaled Chahine	NMIA
Tony Bergen	MD Australian Photometry and Radiometry Laboratory
Tony Bergen	MD Australian Photometry and Radiometry Laboratory
Tony Bergen	MD Australian Photometry and Radiometry Laboratory
	Daniel Burke Khaled Chahine Khaled Chahine Khaled Chahine Khaled Chahine Khaled Chahine Khaled Chahine Tony Bergen Tony Bergen

Appendix 6.

MSA Conferences

MSA C	MSA Conferences				
Year	Place	Country	Comments	Date	Convenor
1994					
			National Measurement	29 Nov - 1	
1995	Sydney	Aus	Laboratory Lindfield	Dec	
1996					
1997	Melbourne	Aus	Melbourne University	26-28 Nov	Walter Giardini
	Broadbeach,				
2001	QLD	Aus	Grand Mercure Hotel	2-4 Oct	Tony Collings
			Edmund Barton Centre,		
2004	Melbourne	Aus	Moorabbin	15-17 Mar	Steve Jenkins
			Australian National		
2005	Canberra	Aus	University	19-21 Oct	Ilya Budovsky



			The Lakes Resort Hotel, West		
2007	Adelaide	Aus	lakes	25-28 Jul	Les Felix
	Geelong,				
2011	Victoria	Aus	Deakin Centre	12-14 Oct	
2013	Sydney	Aus	Macquarie University	15-17 Oct	Daniel Burke
2015	Queenstown	NZ	Millenium Hotel,	14-16 Oct	Anne Evans et al
2017	Brisbane	Aus	Brisbane Convention Centre	12-14 Sept	Nigel Gibson & Rai Pippia
2020	Melbourne	Aus	Angliss Conference Centre,	3-5 Mar	Tony Bergen
2023	Wellington	NZ	Te Papa Tongarewa Museum of New Zealand	20-23 Feb	Cynthia Lendrum
2025	Sydney	Aus	Mercure Hotel Sydney	25-28 Aug	2024 MSA Exec Committee
2026					
2027					

Appendix 7.

New Zealand Branch History

History of the Metrology Society of Australasia (MSA) in New Zealand

Timeline

2011	NZ Branch inaugural meeting 8 th February 2011 called by Chris Woudenberg (CPS) to form a
	Pressure Testing Association – those in attendance decided to form a wider metrology group.
2011	NZ becomes a branch of MSA
2012	NZ has a mambay (Cooff Clark) on the NACA eventive committee

NZ has a member (Geoff Clark) on the MSA executive committee
AGM approves name change to better reflect the NZ membership - N

AGM approves name change to better reflect the NZ membership - Metrology Society of Australia becomes Metrology Society of Australasia. The name is officially changed on the ASIC site in 2014



2015	NZ hosts its first conference in Queenstown; largest sponsorship dollars received and 160 attend
2016	First World Metrology Day event hosted at MSL
2021	\$20k approved by MSA committee to write university lectures in order to start promoting metrology to students
2022	Measurement university paper taught at the University of Waikato in semester one.
2022	Inaugural Emerging Metrologist Award – winners were Annalyse Ryan and Shairae Taepa
2023	NZ branch hosts a conference in Wellington
	Inaugural NZ Metrologist Award – winner Dr Rod White
2023	By 2023 there are 49 NZ MSA members more than WA, QLD, SA. NSW has 51 and Vic has 49

History

Prior to February 2010 Chris Woudenberg from CPS NZ Ltd phoned Anne Evans at Teltherm Instruments Ltd and asked if she would be interested in forming a Pressure Association similar to The *Cylinder* Testing Laboratory *Association* (CTLA). Anne was not aware of the CTLA and Chris explained how it could be of benefit to Pressure testing laboratories around New Zealand (NZ). Anne, like most of the other NZ pressure testing labs supported this idea and a meeting was called.

On February 8th 2010, interested parties from around NZ were invited to the inaugural meeting of **the Metrology Society of New Zealand (MSNZ)** at the Industrial Research Ltd (Measurement Standards Laboratory or MSL) offices at 24 Balfour Road, Parnell.

Those present were;

Chris Woudenberg, CPS

Shane Rika, Wika

Anne Evans, Teltherm

Mark Evans, Teltherm

Alan Glover, IANZ

Gavin Tasker, IANZ

Dwayne McCalman, Air New Zealand

Dave Abbey, Wika

Anne Evans, Teltherm

Alan Glover, IANZ

Mark Fitzgerald, MSL

Paul Martin Tyco

Vaughan Astwood, Vector Brett Matthews, Northcal

Apologies were received from;

Kirsty Russell, CPS Matt Wellington' Tyco Flow Maintenance

Mike O'Neil EHL Paul Naran Wika

Brian Hill, IIL Robin Wallace, GaugeTech

The following were invited but did not attend;

Grant Stone from Air NZ, Luke Edkins from Calibration Services and Mauray Ganter from TechRentals.

At the meeting, Chris welcomed everyone & thanked them for attending the meeting. He asked who should run the meeting – everyone was happy that Chris chaired the meeting & Anne took the minutes.

Who should comprise the Society's members?

After some discussion, it was decided that the Society should draw its members from a broader spectrum of the Metrology laboratories including Pressure, Temperature, Electrical, Humidity, Flow and Weights & Balances.



It was decided that members will be required to work at IANZ accredited laboratories. Alan noted that MSNZ would be akin to a Professional group that would be able to educate the masses, while Gavin & Mark F also noted that MSNZ would also be able to lobby regulatory bodies & lobby to change laws.

Structure of the MSNZ

The meeting questioned if the MSNZ structure could be compatible with the Metrology Society of Australia (MSA)? Could NZ be a branch of the MSA? If not, MSNZ could be a separate organisation working alongside the MSA.

Anne offered to email MSA for their constitution, so that members of the committee could study it at a later date while Chris offered to find out more about the rules of the MSA to see if the MSA & MSNZ could work alongside each other.

The name Metrology Society of New Zealand was decided on as the committee felt that this name aligned well with the MSA.

It was also decided a fee structure, bank account & signatories would evolve over time.

Overall, the outcome of the meeting was a huge success as it got competitors into the same room to discuss the greater good of the industry. This was remarkable foresight by Chris Woudenberg.

In October 2011 at the Geelong conference AGM, Anne Evans spoke on behalf of MSNZ asking to be a regional branch of MSA.

At this time a name change was not requested.

Anne asked that there be a pathway for NZ MSA members to fit within the MSA framework. It was also mooted that NZ should host the 2015 MSA conference.

Daniel Burke proposed, "MSA accept the formation of a New Zealand regional group into the MSA." This motion was moved by Jane Warne and seconded by I. Dollery and carried by all.

As a result of becoming a branch of the MSA, the NZ committee then took it upon themselves to encourage NZ metrologists to become MSA members.

By 2010 NZ members of the MSA were Geoff Clark, Chris Woudenberg and Anne Evans. By 2012, twelve NZers were members of the MSA and Geoff Clark was the NZ representative on the MSA executive meeting – these were held via teleconference.

The 2013 MSA conference was held at MacQuarie University near Sydney. Eight MSA members from New Zealand attended and 5 of the papers presented over the three days were 'Kiwi' papers.

The 2013 MSA AGM at the Sydney conference was well attended and the **name change** from Metrology Society of Australia to Metrology Society of Australasia was passed unanimously. At the 2013 AGM it was announced that the next MSA conference would be hosted by the NZ branch in Queenstown in 2015.

The onus of holding the **first NZ MSA conference** galvanised NZ metrologists into action. A committee was formed and they travelled the country promoting the event and the MSA as a whole. The NZ membership numbers continued to increase. MSL (the NZ NMI) was firmly on board and they provided manpower in the form of marketing and admin people as well as full access to their scientists. This MSL support was the foundation of the NZ MSA committee.



Kirsty and Chris from CPS, introduced the first 'Sponsors Prospectus' for a MSA conference. The prospectus and sponsorship team's hard work led to the 2015 conference netting \$60k worth of sponsorship – the largest in MSA history at that time.

This initiative is still used for conferences to date.

The marketing of the 2015 conference was so successful there were >150 attendees.

2015 Conference Committee members

Kirsty Russell – Communications
Chris Woudenberg -Sponsorship
Cynthia Lendrum –Secretary
Anne Evans - Team Leader
Joan McSweeney - Marketing
Gavin Tasker –IANZ/ NATA liaison
Kevin Gudmundsson – Trading Standards,
Rod White & Peter Saunders - Programme
Walter Giardini Australian liaison
Llew Richards from IANZ and Tim Armstrong from MSL supported the committee when asked.

The first **World Metrology Day** event was held in 2016 and these have become an annual fixture on the NZ metrology calendar. WMD is generally hosted by MSL and compromises of a mixture of speakers, tours, training opportunities and the MSA networking hour.

In 2021 the NZ committee was active in the promotion of **metrology education** and supported the MSA initiative to create a university paper on measurement scientist. MSA funds were approved to pay Rod White to write the 12-lecture university course and the course was accepted by the University of Waikato – the first cohort of students were taught the course in semester one, 2022.

The **Emerging Metrologist Award** was created in 2021 and the first recipients were named at WMD in 2022 – the 2022 joint winners were Annalyse Ryan and Shairae Taepa.

2023 – The NZ branch hosted a second conference in 2023 at Te Papa, Wellington. This was the first conference in 3 years due to the disruption of the Covid-19 pandemic. Regardless of the busy time of year and the downstream effect of the pandemic, the Wellington conference netted close to \$90k in sponsorship and 100 delegates attended. It was a great event.

The **NZ Metrologist Award** was first awarded at the MSA conference in 2023 – the inaugural winner was DR Rod White.