

# review



*“Uniting the world plumbing industry and promoting its public health and environmental role”*

August 2014

## Water Innovation Challenge 2014



*WPC Chairman Sudhakaran Nair gets into the swing of the Challenge, observed by Gary Hile, Bruce Pfeiffer both of the USA and Geoff Ball, Australia*

The 2014 Water Innovation Challenge was led and organized by WorldSkills Foundation, World Plumbing Council, HealthHabitat, RMIT University Melbourne, Australia, and the Institute of Technical Education Singapore (ITE) to pioneer and demonstrate how young professionals with different skill sets – in this case, Plumbing, Engineering, and Graphic Design Technology – can be integrated and work together to generate real plumbing and sanitation solutions with the potential to make significant impact on public health in the targeted communities.

Multi-skilled teams from the USA and Australia excelled in designing and producing innovative plumbing and sanitation solutions for communities in Nepal and Bangladesh who have been suffering from ongoing health issues caused by poor sanitation conditions. After competing neck and neck on the first Challenge Day, both teams were improving very fast in various tasks designed according to the actual conditions in the countries concerned. It was Team USA who emerged on top and scooped the first Water Innovation Challenge title, held in Singapore during International Water Week.

Team USA brought together Nicholas Michalenko – a veteran of WorldSkills Competition 2013 in Leipzig, Germany who obtained a Massachusetts Journeyman plumber license in 2013; Timothy Murphy – an Apprentice Plumber with Boulanger’s Plumbing & Heating; Sarah Parker – an Advertising & Design student at Appalachian State University, North Carolina and also a veteran of WorldSkills Competition 2013 in Leipzig; Judith Torres – a Graduate Mechanical Engineer who currently works with Progressive AE in Grand Rapids, Michigan.

Team Australia consisted of Babbar Ali Suleman - a third year Bachelor of Environmental Engineering student in RMIT University; David Duddy - an Apprentice Plumber and Gas Fitter



*WSF Project Manager Grant Stewart provides direction to Nicholas Michalenko and Timothy Murphy of Team USA during the Challenge*

in the fourth year of his course in RMIT University; Sean Mundy - in the third year of his Plumbing Apprenticeship and studying in RMIT University; Nurul Driver- a second year student in the Bachelor of Sustainable Systems Engineering (Honours).

Both teams spent many hours before and during the event developing their project concepts. A body of work was created through this event, covering construction, planning, logistics, budgets, project management, and skills/knowledge transfer, which will be carried forward by the project partner Healthabitat into their Sanitation Studio programmes in communities in Nepal and Bangladesh.



*Geoff Ball observes David Duddy and Sean Munday of Team Australia assemble a hand pump during the Challenge*

While the focus for the 2014 Water Innovation Challenge was providing water and sanitation solutions for Bangladesh and Nepal, next year's Challenge will be renamed the Water and Sanitation Challenge with plans to hold the event in India where, according to a recent Wall Street Journal report, 53 per cent of Indian households don't have bathrooms. The report also said that approximately 600 million of the population practice open defecation, leading the newly elected Prime Minister to campaign on a promise of "toilets not temples". It is planned for the 2016 Water and Sanitation Challenge to be held in Africa, in the lead up to the World Plumbing Conference in South Africa.

One billion people worldwide still practise "open defecation" and they need to be told that this leads to the spread of fatal diseases, U.N. experts said at recent launch of a study on drinking water and sanitation.

"'Excreta', 'faeces', 'poo', I could even say 'shit' maybe, this is the root cause of so many diseases," said Bruce Gordon, acting coordinator for sanitation and health at the World Health Organization.

Societies that practice open defecation put themselves at risk from cholera, diarrhoea, dysentery, hepatitis A and typhoid with the highest number of deaths being children under 5 years old.

Those interested in being involved in the Challenge, by entering or supporting a Challenge Team or by actually being part of a team should check out [www.worldplumbing.org](http://www.worldplumbing.org) for an announcement soon.



*Team USA celebrating their success, left to right Judith Torres, Sarah Parker, Timothy Murphy and Nicholas Michalenko.*

*Both teams were presented with WPC Medallions and honorary membership of WPC*

## IAPMO, PICAC establish world class R&D centre in Australia

The International Association of Plumbing and Mechanical Officials (IAPMO®) and the Australian Plumbing Industry Climate Action Centre (PICAC) have announced a partnership that supports a PICAC facility expansion through the establishment of The IAPMO Centre for Research Development, a world-class research and development centre to be located in Melbourne, Australia.

IAPMO and PICAC have worked in parallel toward advancement of the plumbing industry for years and this partnership consolidates many of those efforts and gives both organizations access to world-class resources and professional expertise.



Australia sits at the gateway of the Asian Pacific community, an economic centre expected to experience major growth through trade and innovation over the next 15 years. The Asia Pacific middle class is anticipated to expand from 300,000 to 3.3 million by 2030 and Indonesia's GDP will surpass that of Germany within 10 years.

"I'm absolutely thrilled that IAPMO and PICAC are able to forge such a meaningful partnership, with significant long-term positive benefits for the industry through the ongoing development of this technology park," IAPMO CEO GP Russ Chaney said. "IAPMO continues to dedicate resources to ensure our industry remains on the leading edge of the remarkable growth occurring throughout the Asian-Pacific region."

Being right on the developing edge for new materials, technologies and process will not only expose the Australian Plumbing Industry to future trends and innovation sooner, it will more importantly ensure the ongoing development of contemporary skills and competency.

"Because of its sheer size and exposure to the very exacting requirements of the nuclear energy, military and semiconductor industries, the USA has developing technologies not seen in Australia," said Shayne La Combre, Chief Executive Officer of PICAC. "The IAPMO and PICAC Partnership will contribute to the continuing globalization of Australia's plumbing workforce and industry. We will continue to work together for all of our stakeholders to grow a Global Plumbing Industry with endless opportunities."

PICAC is a unique industry led training facility in Brunswick, Melbourne. The Centre is a 5 Star Green Star rated building and is a working example of innovative design and sustainable plumbing. PICAC's facilities are pre-eminent amongst training providers and include the Fire Protection Centre of Excellence, the Occupational Health and Safety Centre of Excellence, a demonstration Green Plumbing House, world class reticulated water systems and the newest technology in water and energy efficiency. By showcasing the world's very best leading edge technology, PICAC are training the plumbers of tomorrow, today. Learn more about PICAC at [www.picac.vic.edu.au](http://www.picac.vic.edu.au)

Founded in Los Angeles in 1926, IAPMO has grown to be recognized the world over for its *Uniform Codes*. With offices in 12 U.S. states and 13 countries, IAPMO has assisted with code development all over the world, and provisions from its *Uniform Plumbing Code*® protect more than half the world's population. For more information, visit [www.iapmo.org](http://www.iapmo.org)

# Indigenous Plumbing & Sanitation Foundation officially launched

Former and present-day players from the Australian Football League were on hand for the launch of the Indigenous Plumbing and Sanitation Foundation in Richmond, Victoria at the end of May. Guest speaker was legendary Essendon Football Club player Michael Long who, ten years ago, walked the 400-plus miles from Melbourne to Canberra to raise awareness of the issues affecting Aboriginal and Torres Strait Islanders.

The former Essendon star and Indigenous Plumbing and Sanitation Foundation Board member said Australia can be proud of how far it had come since the dark days when racism was embedded in the country's football game. "We may never eradicate the racism," said Long. "One of the best things we are seeing is attitudes changing both sides of the boundary which has gone a long way to wipe it from our game. I think that's important."

Michael has played a pivotal role in putting the lives of Indigenous Australians back on the national agenda. Working to establish the Indigenous Plumbing & Sanitation Foundation further illustrates his commitment to making a real difference in the everyday lives of Indigenous Australians. "As a Board Member," he said, "I'm committed to building productive partnerships with the community, business and government sectors to help raise funds for worthy projects. "Plumbing is on the front-line in the defence against disease and this is where the IPSF has an important role to play".

Many self-administered remote Indigenous communities face acute challenges in maintaining access to the basic human needs, due to a lack of skilled trades people. The Indigenous Plumbing and Sanitation Foundation has been established to provide direct relief from disease and sickness for people in Indigenous communities who are living with poor sanitation. For more information about the Foundation visit: [www.ipsf.org.au](http://www.ipsf.org.au) or email [info@ipsf.org.au](mailto:info@ipsf.org.au).



*Michael Long (left), IPSF Board member and Australian Football League Legend speaking with Bryan Dawe, MC at the IPSF launch*

## The future of Apprenticeships

An audience of nearly 100 people gathered at the House of Lords in London, England at the end of July, to hear the outcome of research into Apprenticeships and Professional Recognition in the UK's plumbing and heating industry.

The Chartered Institute of Plumbing and Heating Engineering (CIPHE) and SummitSkills led the research project, which was funded by the Gatsby Charitable Foundation. Information was gathered over a 12-week period from focus groups and questionnaires. Around 800 individuals, employees and owner/directors of business across the plumbing and heating sector took part. Nigel Hollett, General Manager at SummitSkills said: "We have been involved in the development of apprenticeships for many years and we are pleased to be acting as the secretariat for this project. We hope this research will provide a valuable springboard to the development of a new apprenticeship standard that builds on the excellent work undertaken by employers and other stakeholders to date."

The main survey spanned a three-week period, with 500 employers, individuals and industry organisations responding. It explored how the present apprenticeship system for the plumbing and heating sector is currently working. One of its aims was to identify support amongst small businesses for professional recognition, such as Engineering Council registration.

Here are a few of the findings:

- 98 per cent of respondents think it is important that the plumbing and heating industry should collectively promote career progression;
- Over 83 per cent think apprenticeships should lead towards registration with Engineering Council at Engineering Technician level;
- per cent think it is important for the industry to recruit more apprentices;
- Only 40 per cent think that the current qualification system is fit for purpose and meets the needs of apprentices, employers and the industry as a whole.



*From left: Nigel Hollett (SummitSkills); Dave Merrett (Employer Stakeholder Group); Frank Glover (BPEC); Baroness Margaret Wall (Host); Tanya Lawes (BIS); Kevin Wellman (CIPHE)*

It is hoped that the findings of the research will help in developing a new, employer-led 'Trailblazer' Apprenticeship for the industry.

Kevin Wellman, Chief Executive of the CIPHE said: "The response from industry has been overwhelming and I commend all those who have participated so far in this important research. It recognises the need for meaningful apprenticeships and the value of professional recognition.

"We are especially grateful to the Gatsby Foundation for funding support for the research. The collaboration between the trade associations, training organisations and the CIPHE in encouraging employers to develop future apprenticeship standards is vital and I hope that the Government recognise this by sanctioning a plumbing and heating Trailblazer."

## China introduces new Standard for water supply devices

A new trade product standard for Additive Pipe Pressure Water Supply Devices in China has been published by the Department of Housing and Urban and came into force on 1st July.

The new standard mainly focuses on water supply and drainage nationwide with direction for enterprises in the plumbing industry. It was edited and revised from the 2007 standard by the Plumbing Facilities Committee of China Construction Metal Structure Association (PFC of CCMSA) over two years, using the expertise of 20 companies, 30 experts and scholars from the plumbing industry. Seminars and other meetings were also held before arriving at the excellent new standard.



*Gentlemen in front row (left to right): Mr.Hua Mingjiu, Chairman of PFC of CCMSA; Mr.Zhao Li, Deputy Chairman of China Architectural Design and Research Institute of Architectural Design Institute; Mr. Jiang Wenyuan, Consultant & Experts of Water Supply and Drainage Standard Technical Committee of Construction Ministry*

## Worshipful Company of Plumbers welcomes WPC Chairman

Sudhakaran Nair, Chairman of World Plumbing Council was inducted to membership of the London-based Worshipful Company of Plumbers at a ceremony in Singapore in May. Mr Nair, who is President of the Indian Plumbing Association, is only the second international member of the Company, which was established in London, England in 1365.

In the 14th century, the City of London had many 'guilds' which were responsible for promoting high standards of workmanship in their respective crafts. These guilds subsequently became Livery Companies which again sought to ensure that crafts in the City were carried out to the highest possible standard. They also embodied activities similar to those carried out at present by employers' organisations, trade unions and professional institutions. The plumbers guild became a Livery Company under a Royal Charter in 1611, eventually becoming today's Worshipful Company of Plumbers. The motto of the Company is 'Justicia Et Pax', Latin for Justice and Peace.

Membership of the 600-year-old organisation is by invitation only and for Mr Nair's swearing-in ceremonies, Mr Nick Gale, the 'Master' of the Company travelled to Singapore. The whole ceremony was linked by Skype to Mr Paul Nash, 'Clerk' of the Worshipful Company in London. Mr Nair was in Singapore to attend the 'Water Leaders Summit' as well as a WPC meeting.

The Indian Plumbing Association said it was a "matter of great privilege and pride" that their President had been invited to join such a prestigious organisation while Mr Nair himself said, "I consider it a great honour to be inducted as one of the very few International Members in this most respected organisation, one of the oldest forums of plumbing professionals across the globe! I am particularly delighted as in the early phases of my 44-year plumbing career, I had extensively used the Design Guides published by another renowned British plumbing organisation, Chartered Institute of Plumbing and Heating Engineering (then Institute Of Plumbing) where I was the first Fellow Member from India!"

There is more about the Worshipful Company of Plumbers at [www.plumberscompany.org.uk/](http://www.plumberscompany.org.uk/)



*From left: Nick Gale, Master of the Worshipful Company of Plumbers; Sudhakaran Nair; Kevin Wellman, WPC Board member*

## Social Justice Coalition seeks better sanitation



Members of the Social Justice Coalition (SJC) of South Africa appeared in court in Cape Town in July, accused of staging an illegal gathering in September last year. The city's magistrates' court heard that the SJC had become frustrated at the city's lack of action to deal with poor sanitation in informal settlements like Khayelitsha.

SJC general secretary Phumeza Mlungwana and 20 other members were subsequently arrested after singing and dancing at the stairs of the Cape Town civic centre without giving the city notice. Some of them had chained themselves to the stair railings, forming a human chain. Mlungwana said the SJC had fought tirelessly since 2008 to promote rights envisaged in the Constitution, accountability and active citizenship. They had sought to speak with Mayor Patricia de Lille about their grievances.

The group pleaded not guilty on the basis that their actions were not criminal. Their lawyer had applied for them to be discharged, but this was refused. Testimony will continue in October.

## Celebrate 50 years of advancing plumbing engineering



This year's ASPE Convention and Exposition, produced by the American Society of Plumbing Engineers, will combine professional education and networking with a celebration of ASPE's 50th Anniversary. Running from September 20 -24 at McCormick Place in Chicago, the Convention & Exposition offers plumbing engineers, designers, specifiers, manufacturers, and code officials an opportunity to view the largest display of the newest plumbing products and services

available while networking with thousands of plumbing industry professionals from across North America. Attendees will experience:

- 300+ manufacturers of the latest plumbing products and technologies
- Direct contact with the technical experts who designed the products
- 25 technical education and professional development sessions geared toward plumbing industry professionals at all career levels
- Thousands of networking connections with engineers, designers, manufacturers, specifiers, and others from across North America
- Sunday Night at the House of Blues presented by Sloan Valve
- Keynote speaker Dan Hampton from the 1985 Super Bowl Champion Chicago Bears
- The chance to earn up to 19.25 hours of continuing education units for relicensing and recertification

Those who sign up for the full ASPE Convention and Exposition get access to the Exposition, all professional development seminars, the Sunday Night Party, CEUs, and networking events. The free Exposition on September 22-23 is open to everyone. For more information and to register, visit [www.aspe.org/expo](http://www.aspe.org/expo)

### Dates for Your Diary

#### World Plumbing Council General Meeting

Suissetec Training Centre, Lostorf, Zurich, Switzerland  
September 4, 2014

#### ISH Shanghai & CIHE 2014

Shanghai New International Expo Centre, China  
September 3-5, 2014

#### IAPMO 85th Annual Education and Business Conference

Minneapolis, Minnesota, USA  
September 14-18, 2014

#### 2014 ASPE Convention and Expo

Chicago, Illinois, USA  
September 20-24, 2014

#### CIPHEX WEST

Stampede Park, Calgary, Alberta, Canada  
November 5-6, 2014

#### Joint Industry Plumbing Conference

Royal Pines Resort, Gold Coast, Queensland, Australia  
13-14 November 2014

#### ISH 2015

Frankfurt am Main, Germany  
March 10-15, 2015

#### World Plumbing Day, March 11 Every year, Everywhere

#### World Plumbing Council General Meeting

ISH 2015, Frankfurt am Main, Germany  
March 14, 2015

#### ISH CHINA & CIHE 2015

New China International Exhibition Center, Beijing  
May 13-15, 2015

WPC Review is published by the World Plumbing Council initially incorporated in Geneva as a non-profit organization under Article 60 of the Swiss Civil Code Federal Number CH-660-2641000-8, it is now registered with the Commercial Register of the Canton of Zurich

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*The World Plumbing Council aims to unite the world plumbing industry and promote the role of plumbing in improving public health and safeguarding the environment for the benefit of all*

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