69TH IIW ANNUAL ASSEMBLY
AND INTERNATIONAL CONFERENCE
10-15 JULY 2016
MELBOURNE, AUSTRALIA
2016 IIW Annual Assembly: Spirit of Cooperation ‘Down Under’

The International Institute of Welding (IIW) comprises members from 59 countries who work together to foster and share innovation in welding and related technologies across a wide range of industry sectors, and to develop and promote education, training, qualification and certification for the building of welding capability around the world and the subsequent improvement of global quality of life.

Over 700 of these people, from 55 different nations, gathered in Melbourne, Australia from 10 to 15 July 2016 to share their knowledge and vision at the 69th IIW Annual Assembly and International Conference, the premier event for the global welding and fabricating industry.

At a time of turmoil in world affairs, the spirit of cooperation and the common goals within this group of people from disparate cultures, religions and economies are both remarkable and exemplary.

The Australian scene

Although midwinter Melbourne did its utmost to dampen the participants, spirits remained high and comments such as ‘this is just like summer where I come from’ abounded. At the opening ceremony, a ‘Welcome to Country’ delivered by Mr Ian Hunter, a Wurundjeri Elder, showcased and acknowledged local Indigenous culture. A smoking ceremony ‘cleansed’ the audience while the haunting resonance of didgeridoo music and images of the Australian outback carried everyone out into the ancient landscape of this unique country.

IIW President Prof. Gary Marquis welcomed the participants and their partners, declaring the assembly officially open, and introducing Dr Cécile Mayer, IIW CEO and Mr Geoff Crittenden, CEO of the host Member Society the Welding Technology Institute of Australia (WTIA). They went on to present the 2016 IIW Awards which are described in more detail later in this article.

A presentation by Mr Wayne Hayes, General Manager Industry and Innovation at DCNS Australia, Platinum Sponsor for the week, demonstrated why this French company is the recently-announced preferred international partner for the design of 12 ‘Future Submarines’ for the Royal Australian Navy.

It also highlighted the global nature of modern industry and the positive role that IIW and its Member Societies can play in the international arena.

Technical visits during the week also gave visitors a closer understanding of the construction and manufacturing industries in Australia as well as world-leading research facilities, such as the CSIRO Centre of Excellence for 3D printing and the Australian Synchrotron. With the decline of the mining boom and increasing globalisation, Australia’s future economic prosperity and competitiveness will be built upon its adaptiveness, innovation and entrepreneurship.
International gatherings such as this IIW Annual Assembly and International Conference provide a unique opportunity for industry and practitioners in the host country to access international knowledge and expertise, while raising local industry’s international profile and showcasing the country’s own capabilities.

**Technical outcomes**

**IIW Working Units**

Meetings of the IIW Technical Working Units (WUs), which includes 16 Commissions (C), four Select Committees and two Study Groups looking at all aspects of welding technology and the industries it serves, took place throughout the week. These WUs bring together engineers, trainers, academics from universities and research institutes, as well as top R&D personnel and executives from leading global companies from all IIW member countries. There they present and discuss the latest advances in welding and related technologies as well as common challenges for the industry, such as the worldwide shortage of competent welding personnel.

**Focus areas of the 23 WUs can be divided generally into Processes, Structural Integrity and Industrial Applications, and Human Factors. Topics covered range from the physics of welding and fracture mechanics to power beam processes and additive manufacturing.**

As there is often an overlap in the interests of the WUs, a number Commissions held joint sessions to minimise repetition and get a cross-feed of knowledge and discussion between experts from different fields.

For example, the members of C-XVI *Polymer joining and adhesive technology* and C-V *Non-destructive testing and quality assurance of welded products* held a joint seminar at the Melbourne Annual Assembly. There are many synergies between these two Commissions in the rapidly advancing polymer joining sector in the areas of development of advanced materials, the need for standardisation and enhanced inspection methods. One strong driving trend for development of these materials is to lessen the weight of vehicles and aeroplanes to reduce fuel consumption, which in turn reduces carbon dioxide emissions. Collaboration between the Commissions is expected to continue in the future with additional industry-focused joint sessions dealing more specifically with hybrid components, advanced Carbon Fibre Reinforced Polymer (CFRP) materials and adhesively joined parts that are important for industry and will require inspection.

Commission VI, which is responsible for the collection, standardisation and electronic delivery of welding-related terminology, held meetings with representatives of both C-VIII *Health, safety and environment* and C-IV *Power beam processes* in order to gather expert opinion on the latest terminology being used in these fields worldwide and establish controlled terminology for use by all practitioners. This in turn will enhance clarity of communication in both research and industry environments at an international level.

Commission XIV *Education and training* plays a leading role in a project to assist and guide IIW Member Societies to build their own country’s National Welding Capability (NWC). The Commission, drawing
attendance from across the other WUs and open to all Member Societies, focuses on education, training, qualification and certification as a significant building block within such a NWC.

Two sessions were held during the assembly, with world-class speakers showcasing elements of the NWC project, such as Ms Jane Stokie, Director of Skills Competitions with WorldSkills International. The group shared their experience in areas including skills development and resources, image of welding as a career, personnel and company certification and management systems, and digital training and simulation.

Member Societies interested in building their own NWC benefited from the presentations and discussion. The IIW Working Group for Regional Activities and Liaison with Developing Countries (WG-RA), in association with C-XIV, also offers workshops on building NWC which bring together representatives of organisations, governments, training bodies and industry in a member country to evolve a plan for future development and improved quality of life.

Meetings of the IIW International Authorisation Board (IAB) and its working groups furthered the development and delivery of the IIW Qualification and Certification Programmes. There are currently 45 IAB Authorised National Bodies (ANBs) around the world which have awarded more than 120,000 individual qualification diplomas since 1998 with a current annual growth of over 10,000 diplomas.

Other groups meeting at the Annual Assembly worked in areas such as standardisation, research and collaboration, regional activities, and communications and marketing of IIW.

**International Conference**

Entitled ‘From concept to decommissioning: The total life cycle of welded components’, the conference held on the Thursday and Friday provided the opportunity for assembly participants and people from outside IIW to hear papers presented by experts from Australia and around the world.

Papers addressed the total life cycle of welded components, from initial concept, design and manufacturing, through installation, maintenance and repair, to asset management, life extension and decommissioning with particular focus on:

- welding as part of the manufacturing process
- welding automation
- fitness for purpose and service
- repair and life extension.

The **Houdrement Lecture** was delivered by Mr Stuart Cannon of the Australian Department of Defence on the role of welding technology in warships.

Dr Martin Prager, Executive Director of the Welding Research Council delivered an invited lecture on welded pressure components.

The traditional keynote IIW Houdrement Lecture was given by Mr Stuart Cannon on ‘The role of welding technology in the performance of warships past, present and future’. Mr Cannon holds the position of Research Leader: Naval Architecture in the Maritime Division of the Defence Science and Technology (DST) Group, part of Australia’s Department of Defence. DST is the second largest public-funded R&D
organisation in Australia. His paper highlighted the critical role of welding in defence shipbuilding, and linked effectively with the presentation on Australia’s Future Submarines given at the opening ceremony.

The business of IIW

The General Assembly of the association held on 10 July received reports on the activities of the IIW and ratified these and the financial figures, proposed membership fees and budget for the coming year.

IIW CEO Dr Cécile Mayer provided an update on a number of new initiatives being implemented by the Institute. These initiatives include a major website upgrade, production of a series of corporate brochures, and the relocation of the administrative office to Yutz in the north east of France, though winter meetings will continue to be held in Paris.

Mr Doug Luciani (Canada), the current IIW Treasurer, was confirmed as the IIW President Elect, taking up his three-year term of office in 2017.

As the terms of office of Vice-President Mrs Hülya Gedik-Sadiklar (Turkey) and Mr Jouko Lassila (Finland) as Director were successfully completed, the General Assembly approved as incoming Directors Dr Mustafa Koçak (Turkey), Dr Arun Kumar Bhaduri (India) and Mr David Landon (USA). Mr Jouko Lassila was reappointed to the Board as a new Vice-President.

The Technical Management Board (TMB) supports and coordinates the activities of the WUs and is chaired by Dr Luca Costa (Italy). Four members of the TMB had completed their terms of office, Dr Michail Karpenko (New Zealand), Dr Vladimir Ponomarev (Brazil), Prof. Veli Kujanpää (Finland) and Dr Michael Rethmeier (Germany), and they were thanked for their participation. The assembly approved the appointment of Prof. Kenneth MacDonald (Norway) and Prof. Manabu Tanaka (Japan) as representatives...
from the WU Chairs. Board of Directors appointments Prof. Xiaoyan Li (P.R. China) and Mr Christoph Gerritsen (Belgium) were approved for the next three years, and a one-year extension of membership was approved for Assoc. Prof. Tuba Karahan (Turkey).

A total of 116 decisions were adopted by the various IIW WUs during the Annual Assembly, including 73 documents recommended for publication in the IIW’s peer-reviewed journal, *Welding in the World* and three recommendations for publication as an IIW book.

Included in this total were 13 recommendations relating to standards made by the WUs to the Working Group Standardisation. The IIW is a standardising body approved by the International Organization for Standardization (ISO) to develop standards in the field of welding and related processes. There are currently 49 on-going standardisation projects and among those 24 are new standards or standards in the preparation stages.

C-XVII Brazing, Soldering and diffusion bonding and SC-QUAL Quality management, for example, suggested the establishment of a formal Joint Working Group to prepare and maintain an ISO standard on *Quality Requirements for Brazing of Metallic Materials* with three levels (Comprehensive, Standard and Elementary) all contained within a single standard. The purpose of this project is to create a parallel standard, primarily as a plugin to ISO 9001, to cover activities concerning brazing.

A number of recommendations were made to the Board of Directors regarding the Chairs of the various WUs, as shown in Table 1.

**Table 1 Recommendations regarding Chairs of IIW Working Units**

<table>
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<tr>
<th>Commission I</th>
<th>Additive Manufacturing, Surfacing and Thermal Cutting</th>
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<tr>
<td>Mr Doug Kautz (USA) was elected as Vice-Chair</td>
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<tr>
<th>Commission III</th>
<th>Resistance Welding, Solid State Welding and Allied Joining Processes</th>
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<tr>
<td>Prof. Dr Hee Seok Chang (R.O. Korea) was elected as Vice-Chair</td>
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<tr>
<th>Commission V</th>
<th>Non-destructive Testing and Quality Assurance of Welded Products</th>
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<tr>
<td>Dr Uwe Zscherpel (Germany) was elected as Chair of Sub-Commission A Radiography-based weld inspection techniques replacing the retiring Prof. Dr rer. nat. Uwe Ewert (Germany)</td>
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<tr>
<td>Mr Bastien Chapuis (France) was elected as Chair of the new Sub-Commission Structural Health Monitoring</td>
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<th>Commission XI</th>
<th>Pressure vessels, boilers and pipelines</th>
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<td>Ms Teresa Malfi (USA) was elected for a third term as Chair</td>
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<th>Commission XII</th>
<th>Arc welding processes and production systems</th>
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<tr>
<td>Prof. Yoshinori Hirata (Japan) was elected for a third term as Chair</td>
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<tr>
<td>Dr Hee Jin Kim (Republic of Korea) was elected as Vice-Chair</td>
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<tr>
<th>Commission XIV</th>
<th>Education and Training</th>
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<td>Mr Carl Peters (USA) was elected as Chair replacing the retiring Mr Christopher Smallbone (Australia)</td>
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<tr>
<th>Commission XV</th>
<th>Design, Analysis and Fabrication of Welded Structures</th>
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<td>Mr Doug Hawkes (Australia) resigned as Chair of Sub-Commission XV-B Design with a replacement to be appointed</td>
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<th>SC-QUAL</th>
<th>Quality management</th>
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<tr>
<td>Mr Robert Shaw (USA) was elected for a second term as Chair</td>
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In addition, C-V Non-destructive testing and quality assurance of welded products recommended the closure of four Sub-Commissions whose work was complete, and the creation of a new Sub-Commission on structural health monitoring.

The Board of Directors, which met twice during the assembly, approved the establishment of a Task Group Structure of the IIW Technical Working Units – 2020 to work with the TMB and Commission Chairs to formulate a roadmap for the development and advancement of IIW’s technical output and global relevance.

IIW people

Like any organisation, the character of IIW and the effectiveness of its activities reflect the high quality of the people involved. All positions except those in the General and IAB Secretariats are voluntary, with individuals committing their time and expertise to the common goals of the Institute, often but not always with the support of their employer.

The Melbourne Annual Assembly, like the 68 held in previous years, provided an opportunity for the ‘IIW family’ to network, meet old friends and make new ones, and enjoy each other’s company at events such as the welcome reception, Australian evening and closing celebration.

The Wednesday night dinner saw the closing of the Annual Assembly and the time-honoured passing of the IIW flag to the organisers of the following year’s event.

The 70th IIW Annual Assembly and International Conference will be held in Shanghai, P.R. China from 25 to 30 June 2017. Subsequent assemblies are planned for Turkey (2018), Bratislava-Slovakia (2019) and Singapore (2020).

Visit the IIW website www.iiwelding.org for more details about upcoming Annual Assemblies, as well as IIW International Congresses held in regions around the world.

Prof. Yixiong Wu (left) and Prof. Qiang Chen receive the IIW flag on behalf of the 2017 Annual Assembly organisers from Mr Roger Griffiths, WTIA President

Delegates and guests enjoyed the meal, camaraderie and later dancing at the closing celebration for the Annual Assembly

Young professionals

A particular focus in recent years has been on attracting younger people to participate in IIW, and a Board of Directors Task Group - Young Leaders (TG-YL) has been working with representatives of that peer group on initiatives such as conferences, mentoring and social media and communication.

Two events were held in Melbourne aimed at this new generation of experts and both were well attended.

The first ‘Icebreaker meeting’ promoted enthusiasm as a key ingredient in success, and by dividing the delegates into mixed groups from different countries to discuss questions such as ‘what can IIW do for you’,
‘what can you do for IIW’, excellent communication and networking was built. Nominated spokespersons from each group were identified, and invited to give feedback to a meeting of the TG-YL later in the week.

The theme of ‘enthusiasm’ was carried through to a second networking event for the young professionals which generated some excellent ideas and consolidated the way forward for the group.

An enthusiastic group of Young Professionals attended the Icebreaker Event on the Sunday evening (left) and cemented new friendships at the networking gathering on Tuesday evening held in the Red Desert Dreamings Gallery at the Hilton Hotel (right)

One outcome that was clearly identified was the need for better connections between young graduates and post-graduates and potential employers. IIW was seen to be in an excellent position to both promote the value of such young professionals to industry, and facilitate job opportunities. The recent initiative to run IIW Welding Research and Collaboration Colloquia in a range of countries, providing a forum for presentations and linking students with industry funded research projects, is an exciting first step along this pathway.

Most participants expressed a desire to have greater opportunities to present their work to IIW, and to access more easily the enormous knowledge bank within the Institute. Mentoring and discussion groups through social media were also a high priority.

There was clearly a true willingness by those that attended to not only enhance their own experience within the IIW Annual Assembly but also to pave the way for many other young professionals to come behind them. The ideas received will be incorporated into strategies for the IIW going forward to ensure leverage off the success in Melbourne to increase attendance at future Annual Assemblies.

**Recognition of attendance**

Throughout the week, presentations of lapel pins and certificates were made to individuals who had attended ten or more Annual Assemblies.

Prof. Dr-Ing. Bruno de Meester was congratulated on attending 40 assemblies, in which time he was a member of the IIW Board of Directors and Vice-President, Chair of the TMB, Chair of C-IX *Behaviour of metals subjected to welding*, Chair of the Editorial Board and an Editor of *Welding in the World*.

Four people; Dr Arpad Kövês (Slovenia), Mr Henk Bodt (The Netherlands), Dr-Ing. Vaclav Minarik (Czech Republic) and Prof. Dorin Dehelean (Romania) received pins for 20 years’ attendance.

A further six people were acknowledged for 10 years’ attendance; Dr Marc Harzenmoser (Switzerland), Mr Ismo Meuronen (Finland), Mr Henryk G. Pisarski (UK), Ms Anne Rorke (Australia), Mr Mika Sirén (Finland) and Dr Nadezhda Volkova (Russian Federation).
From left: Prof. Dr John C. Lippold, Prof. Dr-Ing. Bruno de Meester (40 years’ attendance), Prof. Dr-Ing. Thomas Böllinghaus and Prof. Dr Ian Richardson

Mr Henk Bodt, a member of the IAB Board, receives his 20-year attendance award from IIW President Prof. Gary Marquis and IIW CEC Dr Cécile Mayer

Dr Arpad Kövês has been Slovenia Delegate to C-XII Arc Welding Processes and Production Systems for 24 years

Prof. Dorin Dehelean has served two terms on the Board of Directors and played a significant role in IIW activities in Eastern Europe over 20 years

During the past 10 years Mr Henryk G. Pisarski has been the UK Delegate to C-X and an Expert on the avoidance of fracture in welded structures in C-XI

Dr Nadezhda Volkova has worked in IAB Groups A & B, SC-QUAL and IAB Board Working Group ‘Global Strategy of IWI/IAB ETQ&C systems’ for 10 years
2016 awards

The IIW Annual Awards were made during the opening ceremony of the Annual Assembly, introduced by Dr Cécile Mayer, IIW CEO and Mr Geoff Crittenden, WTIA CEO and presented by representatives of the sponsoring Member Society. Many IIW Awards are named to pay tribute to eminent individuals who played a major role at some point in the industry’s history.

Awards for Outstanding Technical Achievement

THE HENRY GRANJON PRIZE

Outstanding papers devoted to research into welding and related technologies authored by younger members of the welding community.

Dr Sayed Mohammad Goushegir received the Category A award for his paper on ‘Friction spot joining of aluminum-CFRP hybrid structures’.

Category B winner Ms Carolin Fink was presented her award by Dr Sylvain de Lescazes, President of the Institut de Soudure which sponsors the Granjon Prize.

CATEGORY A – Joining and Fabrication Technology

Dr Sylvain de Lescazes, President of the Institut de Soudure which sponsors the award, presented the award to Dr Sayed Mohammad Goushegir (Germany) for his paper ‘Friction spot joining of aluminum-CFRP hybrid structures’.

Doctor Goushegir spent a number of years working as a materials engineer in the steel industry before joining Helmholtz-Zentrum Geesthacht in 2011. He is currently developing friction spot joining, an innovative metal-polymer joining technology. Dr Goushegir holds a Bachelor’s Degree in Materials Engineering, a Master’s Degree in Ceramic Composites, and a Doctorate in Joining Technology.

CATEGORY B – Materials Behaviour and Weldability

Ms Carolin Fink, also from Germany, was awarded the prize for her paper ‘An investigation on ductility-dip cracking in the base metal heat-affected zone of wrought nickel base alloys - metallurgical effects and cracking mechanism’.

Ms Fink is a currently a Postdoctoral Research Associate in the Department of Materials Science and Engineering at The Ohio State University. Her research interests include weld cracking and materials degradation phenomena, in particular hot cracking and liquid metal embrittlement, welding metallurgy and weldability of nickel base alloys, welding of dissimilar metals and weldability testing.

ANDRÉ LEROY MEDAL

The production of an outstanding large-circulation multimedia application intended for use in welding and allied education and training at any level.

Also sponsored by the Institut de Soudure the award was presented by Dr Sylvain de Lescazes to Ms Teresa Melfi from The Lincoln Electric Company representing the winner, Mr John Petkovsek (USA) for the Lincoln Electric Welding Safety Interactive DVD and Application.
Lincoln Electric’s Welding Safety DVD and Application is designed to educate arc welders about the safety hazards they may encounter while arc welding and the safe practices they should follow. The content in the program is intended to be understood by welders at all experience levels, welding instructors and students, casual welders, professional welders and their supervisors and employers. Available in several languages, the DVD and application are available free-of-charge via the Lincoln Electric website.

Mr Petkovsek is the Director of Environment, Health and Safety for Lincoln Electric worldwide. He is involved in a range of environment, health and safety initiatives and is currently the Vice-Chair of IIW Commission VIII Health, safety and environment.

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**WELDING IN THE WORLD BEST PAPER AWARD**

*The best industrial, research or academic paper published in the IIW’s journal, Welding in the World.*

Prof. Dr John C. Lippold, Chair of the Editorial Board and one of the three Editors of *Welding in the World*, presented the award for the paper ‘Evaluation of the factors influencing the strength of an HSLA steel weld joint with softened HAZ’, authored by W. Maurer, W. Ernst, R. Rauch, R. Vallant and N. Enzinger.

Dr Wilhelm Maurer (Austria) accepted the award on behalf of the authors. Dr Maurer is a Research and Development Project Manager for voestalpine Stahl GmbH, focused on welding of high strength steels. He is also a trainer for International Welding Engineer, Technologist and Specialist levels. Dr Maurer studied mechanical and industrial engineering, and received his PhD for his thesis on ‘The effect of a soft zone on the strength properties of high strength welded joints’.

**UGO GUERRERA PRIZE**

*Proud winners of the Ugo Guerrera Prize for the design and fabrication by Arup and Yongnam of the roof of the National Stadium at the Singapore Sports Hub, with Dr Luca Costa (right)*
Awarded every three years, the Ugo Guerrera Prize recognises an individual or team for the fabrication of an outstanding welded construction, particularly for its design, materials or fabrication methods.

The award is sponsored by the Italian Institute of Welding and was presented by Dr Luca Costa from IIS Progress who is also Chair of the IIW TMB.

Arup and Yongnam won the prize for the design and fabrication of the roof of the National Stadium at the Singapore Sports Hub. Lead Representative for the project at Arup, Ms Jane Nixon (Australia) accepted the award on behalf of the team.

Completed in 2014, the movable roof on the 55,000 seat National Stadium is the world’s largest free-span dome, with a span of 310 metres and a raise of 85 metres. The structure is formed by a series of criss-crossing triangular trusses made up of circular hollow sections. Connections needed to consider fatigue plus ultimate limit design, which led to the design and installation of formed, profile cut, tube-to-tube connections.

Awards for Career Achievements and Exceptional Contributions to the IIW

YOSHIKAI ARATA AWARD

To an individual whose extraordinary achievements in fundamental research in welding-related science and technology have been recognised as significant contributions to the progress of welding engineering.

The 2016 winner of the Yoshiaki Arata Award was Dr Wayne Thomas, from the United Kingdom. As he was not able to be present, Prof. Yoshinori Hirata, Head of the Japanese Delegation which sponsors the award, made the presentation to Mr Mike Gittos of TWI on his behalf.

Dr Thomas, formerly Principal Research Engineer and Consultant at TWI in the UK, joined the organisation in 1983. The author of over 100 technical papers, Dr Thomas was responsible for the invention and development of various technologies, one of the most notable being Friction Stir Welding in 1991. His other innovations include hydro-pillar processing and plunge welding, third-body friction joining, thermo-mechanical material processing, and centrifugal exothermic cladding and welding.

WALTER EDSTRÖM MEDAL

Recognises an individual who has demonstrated outstanding leadership and contributed to the advancement of the IIW.

Mr Mathias Lundin, the Head of the Swedish Delegation, presented the award on behalf of the sponsor, the Swedish Welding Institute.

Dr Roland Boecking, Head of the German Welding Society, received the award on behalf of Prof. Dr-Ing. Prof. h.c. Ulrich Dilthey (Germany) who was unfortunately not able to be present.
Prof. Dilthey has been a member of the German IIW Delegation since 1970, attending over 40 IIW Annual Assemblies. A member of the IIW Board of Directors for 10 years, Prof. Dilthey was IIW President from 2011 to 2014. He has been an active member of many important Board working groups, as well as Chair of the IIW TMB, and the IIW IAB. Prof. Dilthey also contributed to numerous Working Unit documents, particularly in Commissions IV and XII and in Study Group 212.

**ARTHUR SMITH AWARD**

*Sponsored by the United Kingdom Delegation, the Arthur Smith award recognises an individual for dedicated service to the objectives of IIW over a number of years, particularly in the work of the Commissions.*

Mr Norman Cooper, head of the UK Delegation, presented the award to Mr Carl-Gustaf Lindewald from Finland.

Mr Lindewald has worked in the welding industry since 1977. He was a member of Finland’s Welding Society Governing Council and was both Secretary and Chair of the Governing Board, representing Finland in IIW IAB activities. He has been an active member of Commission VI *Terminology*, Working Group Standardisation and Select Committee Quality since 1982. He was instrumental in the creation of WGA3a (Welder’s Guidelines), and in strengthening cooperation between IIW and ISO.

**THOMAS MEDAL**

*Awarded to an individual who has been involved in IIW/ISO international standards activities and can deliver a lecture on the incorporation of global studies into the standardisation of welding technology. The Medal is sponsored by the American Welding Society (AWS).*

Mr David McQuaid, President of the AWS, presented the medal to Mr Robert E. Shaw (USA).

Mr Shaw was the Chair of Commission XV *Design, analysis and fabrication of welded structures*, and chairs the IIW Select Committee on *Quality management in welding and allied processes*. He has been involved in a number of IIW Working Groups, including Standardisation, Regional Activities and the TMB. He is a long-standing member of the AWS D1 Structural Welding Committee and serves on a number of standards committees with the American Institute of Steel Construction and ISO. To facilitate the exchange of global best practices in steel construction, welding and related standards, Mr Shaw has presented numerous lectures, seminars and workshops around the world.

**HALIL KAYA GEDIK AWARD**

*Recognises a scientist or engineer who has made outstanding contributions to the advancement of welding science and technology.*
The award is sponsored by the Turkis Delegation and was presented to Dr Tokihiko Kataoka (Japan) by Mrs Hülya Gedik-Sadiklar, Chair of the Board of Gedik Holding, and President of GEV – Gedik Education and Social Benefits Foundation.

As Senior Researcher and Deputy Manager of JFE Steel Corporation’s Joining and Strength Research Department, Doctor Kataoka developed J-STAR® Welding. This is an ultra-low spatter CO₂ gas shielded arc welding process, which is delivering significant improvements in large industrial projects. A graduate in industrial technology from Osaka University, Doctor Kataoka has presented his novel findings to Study Group 212 The physics of welding and has been published in several major journals.

Dr Tokihiko Kataoka received the Halil Kaya Gedik Award from Mrs Hülya Gedik-Sadiklar for his contributions to the advancement of welding science and technology.

Dr Daniel Almeida’s IIW Regional Activities Award was present to Prof. Americo Scotti (left) on his behalf by Mr Roger Griffiths, President of the sponsoring Australian Member Society.

IIW REGIONAL ACTIVITIES AWARD

Recognises an individual who has improved the global quality of life through optimum use and innovation of welding and joining technologies in their region or internationally.

The award is sponsored by the Welding Technology Institute of Australia (WTIA) in honour of Mr Christopher Smallbone’s 40 years of contributions to IIW regional activities. This year the winner was Dr Daniel Almeida, from Brazil, who unfortunately could not be present.

Mr Roger Griffiths, President of the WTIA presented the award to Prof. Americo Scotti who accepted on behalf of Dr Almeida.

Dr Almeida has worked tirelessly to make IIW’s programmes accessible for the benefit of the economy and the people of Brazil and South America. He led the Brazilian Welding Association in securing authorisation to deliver IIW International Welding Engineer and Specialist qualifications in that country. Doctor Almeida helped organise two very successful IIW International Congresses in South America, in 2008 and the 1st Pan American Congress in 2014. He also facilitated Peru’s IIW membership.

Service Awards

FELLOW OF IIW

Recognises individuals who have made distinguished contributions to welding science and technology, and promoted and sustained the professional stature of the field.

Dr Luca Costa, Chair of the IIW TMB presented the certificates to the new IIW Fellows.

Prof. John Norrish (Australia)

With over 50 years’ experience, Prof. Norrish moved from the UK to Australia to take up the Chair of Materials Welding and Joining at the University of Wollongong in 1995. Author of the book ‘Advanced welding processes’, Prof. Norrish is a member of the Welding in the World Editorial Committee, the Vice-Chair of Commission XII, and in 2005 won the prestigious IIW E.O. Paton Award for contributions to welding
research. His research includes welding automation, mechanisation and robotics, GMAW process optimisation, and laser hybrid welding.

**Dr Mustafa Koçak (Turkey)**

Having led several European research projects, Dr Koçak specialises in advanced welding technologies, microstructure, fatigue, residual stress and fracture assessment of welded structures. Dr Koçak is currently developing new projects at the GKSS Research Center in Turkey. He has served IIW as a member of Commissions X, XI and XV for 25 years and the TMB, as a guest editor of *Welding in the World*, and a co-editor of the IIW White Paper.

**Dr Damian J. Kotecki (USA)**

Dr Kotecki’s 37-year career in welding research was spent with Battelle Memorial Institute and The Lincoln Electric Company. He holds eight patents related to welding filler metals and upon retirement in 2007, established a welding consulting practice. He joined IIW Commission II in 1978, served as Chair for over 10 years, and continues as a regular participant in this and Commission IX. He has served on Working Group Standardisation since 1991, on the TMB from 1999 to 2005, and on the IIW Board of Directors from 2004 to 2014, including six years as Treasurer.

**Prof. Kazutoshi Nishimoto (Japan)**

Prof. Nishimoto is a Professor at Osaka University and has worked with the Fontana Corrosion Centre at Ohio State University as well as the Technical Research Centre of Finland. He has made significant research contributions especially in welding metallurgy, publishing more than 220 peer-reviewed papers in science journals and 16 textbooks. He has served in various IIW capacities, most notably on the Board of Directors and the TMB.

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**SERVICE RECOGNITION AWARD**

Dr Luca Costa also presented a Service Recognition Award to Mr Christopher Smallbone, from Australia.

Mr Smallbone has served as the Chair of Commission XIV *Education and training* for the past 6 years. He has been instrumental in facilitating the collaboration and cooperation between the IIW IAB, IIW ANBs all over the world, and members of all IIW Working Units in order to promote global uptake of the IIW Education, Training, Qualification and Certification Programmes. His vision and drive culminated in the acceptance of the IIW Qualification Programme by the General Assembly in 1994 and its launch in 2000.
In conclusion, the 69th IIW Annual Assembly and International Conference in Melbourne, Australia was clearly a great success for all who attended. The event generated new ideas, and fostered a whole range of new collaborations which will benefit the industry worldwide.

The work of the IIW continues to thrive, supported by enthusiasm and commitment from Member Societies and individual participants of all ages who will meet again in Shanghai, P.R. China from 25 to 30 June 2017.