



International Association of Hydrogeologists

ANNUAL REPORT FOR 2011^{1,2}

SUMMARY

2011 has been another good year for the Association. Although IAH did not have a full congress in 2011, the offer from South Africa to join with them in their biennial conference was greatly appreciated. Thus in September some 320 participants gathered in the refurbished CSIR conference centre in Pretoria for an intensive three day programme of keynote presentations, parallel technical sessions and poster presentations. The very full meeting programme nevertheless allowed time for IAH Council to meet and for the IAH Annual General Meeting and meetings of the Early Career Hydrogeologists Network and IAH commissions.

The present Council set itself the task of undertaking a strategic look at all of the operations of IAH. Important components of this have been the review of the commissions and a “Forward Look” at the way the Association should develop up to 2020. Following the Forward Look meeting in 2010, a comprehensive strategy and plan of action was prepared and distributed to the Association’s members in 2011.

One immediate action from the Forward Look was undertaken by Sophie Vermooten (Netherlands) to establish an IAH “LinkedIn” group. A variety of questions and discussion threads have already been set up by the group, and by the end of 2011 some 500 members had joined.

2011 saw the completion of the review and overhaul of IAH’s commission structure with the demise in July of the old commissions and establishment of a group of rejuvenated and new commissions and networks, the details of which are reported below.

Despite the continuing global economic uncertainty, IAH has had another good year financially. The Association’s total income was almost the same in 2011 as in 2010, reflecting the stability of membership numbers reported elsewhere in this report. Combined income from the journal contract, book and journal royalties and donations was also more or less the same as in 2010. The total resources expended in 2011 were somewhat lower than in 2010, with the result that IAH had an operating surplus of income over expenditure of €790. Currency fluctuations over the year produced net foreign exchange losses of €5700, converting the small operating surplus to a net loss of €4900 and leaving a total balance of funds of €309,400. Overall, IAH remains in a strong financial position at the end of 2011.

MANAGING THE ASSOCIATION

Executive and Council

The governing body of IAH is its Council, which is responsible for determining the Association’s general policy. Council is elected every four years and the present Council will

¹This report is intended to be read with the Financial Statement for the Association for 2011.

² This report is only distributed via the IAH website. A shorter version of this report providing highlights of the year’s activities with a summary financial statement is sent to all members.

serve until the Annual General Meeting of the Association to be held in Canada in 2012. Council met in Pretoria on 18th September immediately before the conference.

The IAH Executive Committee, consisting of the President, Secretary General, VP Finance and Membership and VP Scientific Programme is responsible for the day to day operation of the Association's business and activities, in conjunction with the Secretariat. The Executive met at UNESCO in Paris from 10th to 12th February 2011. Recent experience suggests that meeting once a year is not sufficient to properly direct and oversee IAH's work and the Executive met again in the UK from 16th to 18th June and on 17th September in Pretoria.

Current Members of the IAH Council

There were no changes to the membership of Council during the year.

President	Willi Struckmeier	Germany
Secretary General	Shammy Puri	United Kingdom
Vice President, Finance and Membership	Antonio Chambel	Portugal
Vice President, Scientific Programme Coordination	Ken Howard	Canada
Vice President, North America	Leonard Konikow	United States
Vice President, Latin America and the Caribbean	Luiz Amore	Brazil
Vice President, Sub Saharan Africa	Segun Adelana	Nigeria
Vice President, Middle East and North Africa	Mohammed Aboufirass	Morocco
Vice President, Western Europe	Didier Pennequin	France
Vice President, Eastern Europe and Central Asia	Igor Zektser	Russia
Vice President, Asia	Shivendra Nath Rai	India
Vice President, Australasia and the Pacific	Ian Acworth	Australia
Past President	Stephen Foster	UK

In addition to its elected members, Council is able to co-opt other members of the Association to enable it to undertake its work more effectively. At present, co-opted members who are invited to report to and participate in Council meetings as non-voting advisers are the editor of the Hydrogeology Journal, Cliff Voss, the books editor, Nick Robins, the representative of the Early Career Hydrogeologist's Network, Judith Flügge, and the Executive Manager John Chilton.

Membership and Finance

Membership

At the end of 2011 the Association had 3784 members, almost exactly the same as a year earlier. It is gratifying that membership has continued to hold up well during these tough economic times. The 4000 total still remains elusive, but further growth in higher and middle income countries is essential for the long-term professional and financial viability of IAH. To this end, we need to make much more focused efforts to encourage students of hydrogeology and young groundwater professionals to join the Association.

IAH Membership by Region (end of year figures)

Region	2004	2005	2006	2007	2008	2009	2010	2011
North America	697	704	695	685	669	672	654	632
Latin America and the Caribbean	300	213	211	207	194	177	177	197
Sub-Saharan Africa	159	206	202	204	200	247	231	233
North Africa and the Middle East	86	84	78	90	90	74	99	97
Western Europe	1573	1539	1485	1545	1497	1766	1726	1656
Eastern Europe	235	338	351	365	355	145	125	122
Asia	218	238	265	263	288	214	191	191
Australasia and the Pacific	455	502	477	496	493	599	582	656
Total	3725	3824	3763	3857	3786	3894	3785	3784

The table shows recent membership trends by region, emphasising the need for us to pay greater attention to promoting membership in Asia, the Middle East and North Africa, Eastern Europe and in Latin America. For the last-mentioned, the decline in membership appears to have been arrested, but overall there remains considerable scope for strengthening our membership in all regions.

Taking account of IAH's continuing sound financial performance, Council decided in September 2011 not to raise the membership fees for 2012, and the headline fee rate therefore remains at €75, with corresponding rates for the other categories of membership.

Sponsored membership

Individual IAH members, National Chapters and members of the general public continue to make contributions to support our Sponsored Members Scheme. This enables membership to be offered to groundwater professionals from developing countries who are not able to pay their own membership fee. At the end of 2011, we had a total of 242 sponsored members. We know that sponsored membership is greatly appreciated by the recipients, and in 2009 IAH established a separate Sponsored Membership Fund with an initial sum of €12,600 to augment this component of the Association's activities and we continue to seek suitable candidates for sponsorship.

Corporate Membership

Corporate Membership has remained steady, and at the end of 2011 we had 44 Corporate Members. We also now have our first corporate sponsor, DHI-WASY.

Finance

Fluctuations in currency exchange rates can make direct year-on-year comparisons difficult. For example, in euro terms, income from membership fees apparently increased by about €9,000 over 2010, although the overall membership numbers were almost exactly the same and the sterling increase was only about £2000. Combined income from the journal contract and book and journal royalties was as budgeted but down by €10000 on the previous year in which a substantial "windfall" was received from Springer. Investment income fell to zero, but part of our reserve has now been invested in a charity-oriented building society account so this will pick up again in 2012 but still remain modest while interest rates are so low. Donations, mainly in the form of external support for travel for IAH Executive members, were up substantially so that overall income was some €3000 greater in 2011 than in 2010.

The total resources expended in 2011 were some €10000 lower than in 2010, with the result that the Association had an operating surplus of income over expenditure of €790. Of the major items of expenditure, journal printing, salaries, publicity, websites and databases were much the same as in 2010. Travel costs were some €27,000 higher in 2011 than in 2010. These reflect the increased cost of travel for Council, Executive and Secretariat associated with the conference in Pretoria, the extra executive meeting in the middle of the year, and the meeting of the journal editorial team. During the year there were also additional visits connected with the representation of IAH at conferences and at international meetings of UNESCO and our other UN partners. These are part of the Association's efforts to meet the Forward Look objectives of raising the profile of IAH, promoting membership, and advocating for groundwater at major international fora.

As mentioned above, fluctuations in currency exchange rates can make direct comparisons difficult. If our primary intention had been to operate to a balanced budget, this would be considered to be as close as it was realistically possible to get. However, the summary statement shows that currency fluctuations over the year produced net foreign exchange losses of €5700. This converts the small operating surplus to a net loss of €4900, leaving a

total balance of funds of €309,400 carried forward at the end of the year. Despite setting a deficit budget, overall expenditure was less than planned, mainly because use of the Burdon, Education and Development and Sponsorship Funds has been less than anticipated. While it is incumbent upon the Executive and Secretariat to act responsibly on behalf of the membership with the Association's funds, at the same time there is a need to use our resources for the benefit of members, and ways will continue to be explored for achieving this aim. Overall, IAH remains in a strong financial position at the end of 2011. The full 2011 financial report is available at http://www.iah.org/publications_annual_reports.asp.

Trading Activities

The company World-Wide Groundwater Limited was established as the trading subsidiary of the Association. There was very little activity in 2007 and 2008 and in 2009 Council agreed to make the company dormant and to transfer its assets back to the parent company. The company was re-activated at the beginning of 2011 to facilitate the Association to undertake consultancy work in partnership with FAO and UNESCO on a GEF (global environment facility) project on groundwater governance. Thus in 2011 the Association received from FAO two contract payments of a total of some €62,000. These funds were disbursed from WWGW to provide instalment payments for four consultancy contracts for the preparation of thematic papers required for the project.

Staff

Executive Manager John Chilton and Executive Assistant Kellie Nicholson are now well settled into their respective posts. Routine administration of the Association is functioning well and they are able to devote more time to initiatives such as the Forward Look, education and development, website and publicity and recruitment and national chapters. To facilitate further development of these initiatives, the Secretariat recommended that the Association's bookkeeping and accounting capacity should be strengthened. The recommendation was that this should be achieved by engaging a bookkeeping contractor rather than by employing an additional staff member within the Secretariat. Council agreed to this proposal at its meeting in Pretoria, and the Secretariat proceeded with a successful advertising and contracting process at the end of 2011 for start at the beginning of 2012.

In the meantime, Sharon Warden has continued to provide her assured touch on all membership issues, and worked with Samui at the end of 2010 and early 2011 to implement improvements to the database and renewals processing. Once a few early technical glitches had been ironed out, the increased efficiency has become apparent in time savings for Sharon. Technical Editorial Adviser Sue Duncan maintains the high standard of her work on the journal and has become a key member of the editorial team. The Association will continue to provide support for its staff to take up suitable training opportunities.

THE IAH FORWARD LOOK

On taking office in 2008, the new Council set itself the task of undertaking a strategic look at the way the Association should develop up to 2020. This was undertaken by a questionnaire in April 2010 and the Forward Look meeting at Reading University in July 2010. The results of these activities and recommendations arising from them were presented to Council in Krakow in September 2010. Council agreed that the Executive should develop the long list of possible actions into an overall strategy for IAH up to 2020. This was done early in 2011 and a brochure outlining the strategy was prepared and distributed to members with the Hydrogeology Journal and is available on the IAH website. The extensive, structured list of activities is grouped within five themes – the internal development of IAH, education and professional development, informing and influencing global policy, enhancing alliances and partnerships, developing the science of hydrogeology and activities are assigned priorities in

terms of importance and identified as those for the immediate, short-term, those for the next two to five years and those for the longer term over the Forward Look's ten year timescale. For some of the suggested activities, their feasibility needs to be investigated and the human and financial resources that would be required to take them up need to be further defined. Progress with implementation during 2011 included the improved database mentioned above, review of IAH's conferences, improved communication with members and national chapters and completion of the reform of the commissions, as outlined below.

SCIENTIFIC AND PROFESSIONAL ACTIVITIES OF THE ASSOCIATION

The Pretoria Conference

Following the decision of the Irish National Chapter that they could not proceed with arrangements to host the 2011 congress in Dublin, the Geological Society of South Africa and the South African National Chapter of IAH agreed to host us at their own biennial meeting. This took place at CSIR in Pretoria in September 2011. Although the 320 or so participants were dominantly from within South Africa, IAH colleagues from a number of countries in Europe, elsewhere in Africa and Asia were also there to take advantage of the excellent facilities offered by the recently re-furbished CSIR Conference Centre and its attractive grounds.

The intensive three day technical programme provided clear insights into the groundwater issues causing greatest concern in South Africa – groundwater level recovery and new groundwater discharges from disused mines, acid mine drainage, recent drought experiences along the south coast and in the north, exploration and development of groundwater with limited data, bringing science and policy together to manage groundwater and the potential impacts of climate change. The invited national and international keynote presentations nicely complemented these by providing broad overviews of the important roles that groundwater and groundwater professionals can play in helping to achieve water security in both rural and urban contexts.

IAH Council met on the Sunday immediately before the conference and the Association's AGM and the early career hydrogeologists' meeting took place on the Monday evening. IAH maintained a booth in the main foyer of the conference centre which generated some additional memberships and a lot more interest amongst potential members, and also took orders for a good number of IAH books. Overall, the conference was a great success, and we are very grateful to the local the organising committee for making IAH so welcome and for finding space for us in the programme so that the business needs of the Association were met and so that we could also contribute to the technical programme of the conference.

The IAH Commissions

The strong science base of the Association is its Commissions, some of which have a long history of activity and publication but they need to be able to respond to new issues and challenges, and to find new partners for their work. A review has been undertaken as part of the overall Forward Look process. Following a detailed questionnaire survey of the existing commissions in 2009, a report with proposals for reform of the structure and operation of the commissions was presented by Ken Howard to the IAH Executive in Paris in 2010. The report's recommendations were accepted in full by Council in Krakow in September 2010. The report is available on the IAH website at <http://www.iah.org/downloads/commsrev.pdf>.

In future there will be provision for four categories of groups – commissions, networks, working groups and panels – each with slightly different objectives, activities, outputs,

obligations and ways of working. A formal “call for proposals for commissions and networks” was issued early in 2011. This enabled existing commissions to re-establish themselves as commissions or networks, and encouraged applications for new groups and subject areas. Applications closed at the end of March 2011 and were reviewed at the Executive meeting in June 2011 and the recommendations approved by Council immediately afterwards. All existing Commissions were dissolved on 30 June 2011 and new commissions and networks established from 1 July 2011, ie the following day.

The table below summarises the outcome. The second column records the type of group for which the application was made and the third and fourth columns the recommendations to Council for the category and initial length of tenure respectively. One reason they are not all the same length is to phase the work of reviewing so they do not all come due at once.

Name	Application	Recommendation	Tenure (years)
<i>Existing Commissions: re-applications</i>			
Commission on Aquifer Dynamics and Coastal Zone Management	Network	Network	4
Commission on Groundwater and Climate Change	Commission	Commission	4
Commission on Hydrogeology in Urban areas	Network	Network	5
Commission on Hydrogeology of Karst	Commission	Commission	6
Commission on Managing Aquifer Recharge	Commission	Commission	5
Burdon Network on Developing Countries	Network	Network	4
<i>New applications</i>			
Groundwater and the Millennium Development Goals	Commission	Network	4
Ensuring Sustainability in Drinking Water Needs Through Capacity Building in Rural Areas	Commission	Network	4
Early Career Hydrogeologists' Network	Network	Network	4
Groundwater Outreach to Decision Makers	Commission	Commission	4
<i>Subsequent applications approved</i>			
Regional Groundwater Flow	Commission	Commission	4
Mineral and Thermal Waters	Commission	Commission	4
Groundwater and Ecosystems	Network	Network	4

The proposed new networks on Groundwater and the Millennium Development Goals (MDGs) and Sustainability of Drinking Water require further development and refinement in terms of their geographical spread, technical scope and potential for overlap with each other and with the Burdon Network. The new groups for young professionals and for outreach were strong proposals which address the messages from the Forward Look process that the Association needs these to help fulfil its long-term educational objectives, and we are very pleased to see these established.

No applications for renewal were received in the general call from the existing commissions on Groundwater Dependent Ecosystems, Transboundary Aquifers, Groundwater Protection, Hydrogeological Maps and Mineral and Thermal Waters. According to the already agreed review process, these commissions ceased to exist from 1 July, although re-applications related to groundwater dependent ecosystems and mineral and thermal waters were received and approved later in 2011, as was the new commission on Regional Groundwater Flow. The proposal received in 2011 from the Commission on Groundwater in Hard Rocks was incomplete and at the time of writing work is underway to re-establish the commission.

National Chapters

The number of National Chapters now stands at 44, although not all could be said to be fully functional. Active National Chapters are a major means of bringing scientific and

professional benefits to members, and efforts to promote new Chapters continue in several other countries where:

- groundwater is central to national development;
- there are significant numbers of groundwater professionals and
- where IAH ought to be stronger than it is at present.

The British National Chapter, African Vice President and IAH Secretariat continue with their efforts to establish new chapters in Malawi and Tanzania. The Vice President for Eastern Europe and Central Asia has been promoting the establishment of chapters in several of the central Asian countries.

National Chapters have been active in support of regional and national meetings. Reports of these appear in the IAH Newsletter, and more such reports are always welcome. Annual reports received from National Chapters are posted on the IAH website. In March 2011 the Moroccan Secretariat of State for Water and the Moroccan IAH National Chapter organised a workshop in Rabat to celebrate World Water Day. Nearly 100 water resources professionals from the public and private sectors and the universities debated the management and protection of groundwater and pleaded for its rational utilisation. The meeting was presided over by Jamal Mafoud, the Secretary of State for the Environment and IAH President Willi Struckmeier.

Russian colleagues held an “International Conference on Groundwater and Drinking Water” in April in a resort close to Moscow. Willi Struckmeier gave a speech on the world-wide groundwater situation in the opening session. The meeting was well organised, well attended and provided room for information exchange and discussions of participants mainly from Eastern Europe and Central Asia.

The Irish National Chapter held its 31st annual conference in Tullamore in April on the theme of “Evolving hydrogeology”. 165 people attended, and Willi Struckmeier was an invited keynote speaker. In September the Spanish National Chapter held a three day conference in Zaragoza at which the final session was devoted to an appreciation of former IAH president Emilio Custodio, at which a book dedicated to him was presented.

The Executive and Secretariat continues to support existing national chapters and to promote new ones. At the end of 2011 efforts were underway to establish a new IAH chapter in Sweden and a meeting to set up the chapter took place early in 2012. At a conference in El Salvador, IAH Executive member Antonio Chambel convened a meeting to explore the possibility of setting up an IAH chapter for Central America.

Services to Members

Publications

The Hydrogeology Journal (HJ) continues to grow in stature as a premier scientific publication for groundwater professionals. The Journal continues with eight issues per year, with a total of 1615 pages for 2011 and a current target for 2012 of 1650 pages. The balance between high impact factor and the overall objective of maintaining geographical spread of authors and content should be maintained, but it is highly desirable to sustain the SCI above 1.0 and in the same range as comparable journals. The latest (2010) impact factor is 1.326.

The number of manuscripts submitted to HJ continues to increase – up from 200 per year in 2003 to over 300 in 2008 and 330 in 2011. The number of accepted papers in 2011 was 128, meaning that the acceptance rate which was around 50% in recent years has fallen to about one third. “Immediate rejects” at the time of submission without review, where the content is judged to be outside the scope of the journal or of very poor scientific quality, have risen from 20% in 2003 to 38% currently.

The time from submission to online publication is currently approximately 9 months and to printing about 12 months. This is a welcome improvement on the 11 and 16 months respectively of two years ago. Citation evidence shows the importance to the Journal of good theme issues and good review articles. The 2012 theme issue will be on the economics of groundwater.

News and Information continued to be collated and edited by the IAH Secretariat and the usual three issues were produced during the year. 2010 saw the complete re-design of the newsletter layout, introducing a larger format and full colour printing. During 2011, we have tried to broaden the scope of the newsletter to include news about groundwater as well as IAH news. The IAH electronic newsletter was produced four times during the year, with a distribution of about 6000.

Progress with book publication remains slow, and only one new book was published by Taylor & Francis on behalf of IAH during 2011. This was the blue book ICH 27 edited by Holger Treidel, Jose Luis Martin-Bordes and Jason Gurdak: *Climate change effects on groundwater resources; a global synthesis of findings and recommendations: UNESCO-GRAPHIC case studies*. This publishing collaboration has worked out well and the book is being extensively promoted by IAH, Taylor and Francis and UNESCO.

Preparation of Selected Paper volumes from the Lisbon and Krakow congresses is underway, and discussions are in hand with the organisers of the conference in South Africa for a Selected Paper volume. The ICH blue book edited by John Mather, Nick Howden and others on the *History of Hydrogeology* has nearly 20 accepted contributions which have been revised and returned to authors for approval. Most papers have been amended by authors and the graphics improved. Work is now underway on the production of the book which is planned for publication in the latter part of 2012.

Various other leads are being followed up. Book sales are doing well but a wider and larger market is being sought outside IAH through increased distribution of journal review copies and within the Association by additional advertising in the Journal and in the newsletter.

On-line Services

Some upgrading of the IAH website was completed in late 2009 with changes to the member's login, streamlining of membership renewals and addition of an "IAH meetings" section within the members' area. Having established the required pages, the Secretariat has gradually populated them during 2010 and 2011 with the minutes of Council meetings and AGMs and other meetings so they can form a comprehensive archive of records of the Association.

These developments are part of a continuing process. The Forward Look questionnaire responses and discussions at the meeting in Reading certainly emphasised the need for major improvement of the website and the services provided by it. In late 2010 and early 2011 the opportunity was taken to include capacity in the database to enable IAH to seek further information from its members, as discussed in the Forward Look. Other changes are required by Data Protection legislation, and so the database was upgraded to a secure web-based system that would make it fully web-compliant and increase its security against potential hackers. Furthermore the data would be "real time" for everyone accessing it and, as per the old system, regularly backed up. Our website contractor was asked to undertake the work and set up the new system in readiness for the 2011 renewals. The process took longer than anticipated, largely owing to the complexity of IAH's membership categories, and our Membership Secretary Sharon Warden must be thanked for patiently liaising with the contractor during this time.

Work to improve the main IAH website will be undertaken in stages. IAH has, for example, been advised that it should upgrade its site as the existing one does not meet current web compliance protocols. It may, therefore, have accessibility issues which mean it may not be readily picked up by search engines. The pages containing basic information on the Association, National Chapters, Commissions, publications and so on could certainly be improved.

The development of the IAH website needs additional contributions to those from the Secretariat and the designers for website development. These would include content providers such as the commissions and national chapters, operators of linked “daughter” websites or pages and users from amongst the broader membership. Website development also needs to take account of two key aspects coming from the Forward Look discussions and reinforced by the young scientists meeting and other discussions in Krakow – firstly education, training and courses and secondly careers and job advertising. Even if IAH decides that major effort in either or both of these areas is outside the scope of our activities and/or beyond our resources, we at least need to give them consideration as they are clearly important to the membership. Following extensive consultations with members including the Early Career Network in Pretoria, at the end of 2011 work was underway to prepare a design specification and brief so that web design companies could be invited to make proposals for the work of re-development of the IAH website. This work is proceeding in 2012.

Meetings

Through its Commissions and National Chapters, IAH organised, sponsored or co-sponsored some 12 national and international groundwater meetings during 2011. Apart from those mentioned elsewhere in this report, these included the second international course for young hydrogeologists in Poland, the IGWC conference on the impact of climate change on groundwater resources in Madurai, India, the 9th international hydrogeological congress of Greece and the 7th Argentine congress of hydrogeology.

The work of the Burdon Network on Hydrogeology in Developing Countries

The Burdon Network has been somewhat less active in 2011 than in recent years. Following the success of the earlier book distributions to African colleagues in 2005, 2007 and 2008, a further distribution was undertaken in late 2010. A planned distribution in 2011 did not take place but will be done in 2012. The responses indicated that we had lost contact with a number of our African members, and efforts will be made to try to trace them. Through the Burdon Network the Association has now signed an MoU with the African Groundwater Network. This will enable the Burdon Fund to be used to support the activities of the African Groundwater Network including by providing material, resource persons and financial support to participants at training events organised by the African Groundwater Network.

IAH Awards

As is the normal custom, the IAH annual awards were announced at the General Assembly meeting in Pretoria. The Presidents’ Award is made in recognition of outstanding international contributions to the development or application of groundwater science and to furthering the Association and its mission to promote understanding and management of groundwater resources. IAH President Willi Struckmeier announced that the 2011 recipient was Professor Ken Howard, who has fully met both criteria during his career.

Ken graduated from the University of Exeter in 1974 with Combined Honours in Physics and Geology, and then obtained an MSc in Hydrogeology at the University of Birmingham in 1975. He continued there to complete a Ph D under the wise guidance of Professor John Lloyd on the hydrochemistry of the Lincolnshire Chalk aquifer. In 1981 Ken moved to the

University of Toronto at Scarborough, becoming a full professor of hydrogeology with tenure in 1997. His research interests are broad and have ranged widely over the hydrogeological spectrum, with special interest in the impacts of human activities on the quantity and quality of groundwater resources in many parts of the world. He has authored or co-authored 103 books and refereed journal articles and 44 full conference papers, produced numerous conference abstracts and made many invited presentations at conferences around the world.

Ken has been an IAH member since 1987 and was Regional Vice-president for North America from 2000 to 2008. He is currently Vice-president for Scientific Programme Coordination and in this role has successfully led the review and reform of the Association's science commissions reported above. He is, however, probably best known to IAH members as the Chair from 1997 to 2011 of the Commission on Groundwater in Urban Areas. This has been one of the Association's most consistently active Commissions, due in no small measure to the skill and enthusiasm of his leadership.

The General Assembly approved the award of Honorary Membership to Mario Hernandez from Argentina. Mario has been professor of hydrogeology at La Plata University since 1980 and a long-time adviser on groundwater matters to the government. He has been a stalwart of the Association for many years, and was president of the Argentine National Chapter and members may recall his role in seeing the 202 Mar del Plata IAH congress through from inception to successful conclusion. Mario was president of ALHSUD for eight years and during this period consistently encouraged links with IAH by promoting IAH publications and welcoming IAH speakers to the ALHSUD biennial conference. Mario was not in Pretoria to receive the award, and an opportunity was found to present the award to him at the GEF project regional consultation for Latin America in Montevideo in April 2012.

Finally, Willi Struckmeier informed the meeting that the recipient of the 2011 IAH Distinguished Associate Award was to be the Hon. Maria Mutagamba, Minister of Water and Environment in the Government of Uganda since 2006. She became prominent regionally as a member since 2001 of the Nile Basin Council of Ministers in charge of Water Affairs (Nile-COM) and as President of the African Ministers Council for Water (AMCOW) from 2004 to 2006. Through her involvement in AMCOW, Maria played a key role in the creation of the Africa Groundwater Commission to spearhead groundwater issues on the African continent. In 2008, through her leadership, Uganda hosted the first ever conference on Groundwater and Climate Change which attracted a wide cross section of participants including Members of Parliament, representatives of international organisations, high level policy makers and technocrats, civil society representatives and academicians from all over the world. She has been prominent in promoting the growth of the water sector in Uganda where groundwater development and management has been the key focus for meeting both national development objectives and the Millennium Development Goals. IAH is pleased to acknowledge Maria Mutagamba's leadership and personal contribution to the enhancement of groundwater development and management worldwide and in Africa in particular with this award. She was unable to be at the conference in Pretoria, but President Willi Struckmeier was able to present the award at the African Water Week conference in Cairo in May 2012.

The Time Capsule Project

The Time Capsule Project continues its efforts to record the work and life of some of the pioneers of hydrogeology and of IAH. During 2011, interviewing of Ghislain de Marsily was completed with a discussion of the evolution of his career from research on modelling and stochastic methods through to his current interest in the problem of water and feeding the growing global population. The material is being prepared for publishing, together with a recording of an overview of water issues for the 21st century given by Ghislain at Neuchâtel in November 2011. Two proposed interviews did not take place; John Bredehoft declined to be interviewed and it has not yet been possible to find a suitable person to interview Emilio Custodio, although this is being pursued.

In 2012, plans are going ahead to interview Alan Freeze with some support from the Sandia National Laboratories, Gedeon Dagan with support from the Technion Institute for Technology, Jean Margat with the support of BRGM, John Cherry with some support from the Canadian National Chapter of IAH, and Mary Anderson. Suitable interviewers for all of these have been invited and accepted. It is planned to tape part of the material for Jean Margat during a field visit he will lead to areas in Morocco where he started his career.

Visits to the Time Capsule website were up from 3600 in 2010 to 4700 in 2011, with the Theis interview being the most in demand. The Time Capsule site is well linked to others, including the Wikipedia page on hydrogeology and several hydrogeology courses. In terms of external sponsoring of the project, 2011 was again not a good year, and the work continues to depend on funding from the main IAH budget. This will continue during 2012 as part of our continuing efforts to meet the Association's educational objectives. The work of the Time Capsule can be seen via the IAH website or at <http://timecapsule.ecodev.ch>.

International Liaison

IAH believes that groundwater is not well enough understood and appreciated in the integrated water resources management arena. The Association continues to advocate for improved governance and policy provisions, backed up by suitable institutional arrangements to help rectify this situation. To this end, IAH is maintaining, and strengthening where possible, its membership of UN-Water, the World Water Council and the Global Water Partnership.

Willi Struckmeier represented IAH as partner of UN-Water at Stockholm World Water Week and participated in a UN-ESCWA Workshop on Shared Water Resources in Beirut and an IAEA Workshop on IWRM in the Philippines. He also attended the Water, Energy and Food Security Nexus Conference in Bonn/Germany in November. In December, BGR and EuroGeoSurveys organised a Workshop on Groundwater Bodies in Europe in Berlin that was attended by a good number of IAH members in Europe.

The IAH Commissions and Networks remain a key component of our international liaison efforts. The Commission on Groundwater and Climate Change collaborates with the UNESCO-IHP GRAPHIC project, leading to the publication of a book in the IAH International Contributions to Hydrogeology Series.