Message from the President



We wish all the best for the year and look forward to a productive and successful year for you personally and for IWRA family.

The past year 2005 has been a good one for IWRA. We have made strides on many fronts. We have successfully completed the XIIth World Water Congress in New Delhi, India. This is our major and to continue the spirit of triennial event, which was held one year ahead of regular schedule, a one time shift to remain in full synchronization with other major world water events. We had several new features in this Congress where we could engage the politicians, policy makers, and decision makers at all levels in addressing their national and local water issues so that we all can learn from each other practical experiences. We had a substantial number of world water thinkers as well, bringing to our attention urgent water issues and reminding us not to be complacent

searching for truth, solutions, and help for the needy. The Congress provided an excellent learning experience, which was accompanied by an excellent dose of cultural events and surrounded with traditional Indian hospitality. We thank all of those who took on the painstaking job of organizing, presenting, sponsoring, and participating in this Congress and making it the success it deserved. A full report is available in December 2005 issue of Water International.

(Continued on page 2)

Report from XIIth World Water Congress in New Delhi

The XIIth World Water Congress of IWRA was held in New Delhi. India from November 22 to 25, 2005. The Congress was well attended with 500 participants from more than 50 countries. The meeting was inaugurated by the Honorable Union Minister of Water Resources of India. Several ministers and senior officials were in attendance. The congress featured eight Keynote speakers, the Ven Te Chow Memorial Lecture, nine special sessions, ten technical sessions of oral presentations, and five poster presentation sessions. The main theme of the congress was "Water for Sustainable Development: Towards Innovative Solutions."

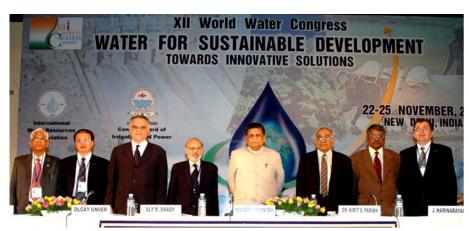
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The congress theme was covered in nine broad topics: (1) integrated water resources management, (2) water infrastructure development, (3) economics and financing of water, (4) water governance, (5) water security and risk management, (6) capacity building for water resources management, (7) surface and ground water management, (8) water resources for urban development, and (9) rural water development.

A number of Congress Awards were awarded at the conclusion of the

Congress recognizing the Best Paper presentation at the Congress, Junior Professional, Young Woman Professional, Best Poster, and Best Special Session Awards. A complete Congress Report and a listing of awardees have been printed in Water International Volume 30, No. 4, December 2005. To obtain a complete set of the proceedings contact: Mr. G.N. Mathur, Secretary, Central Board of Irrigation and Power, Malcha Marg, Chanakyapuri, New Delhi, India. Email cbip@cbip.org.



Standing from left to right: G.N. Mathur, Jun Xia, Olcay Unver, Aly M. Shady, H.E. Shri Santosh Mohan Dev, Kirit S. Parikh, Shri J. Harinarayan, Ben Dziegielewski

Message from the President

(Continued from page 1)

As we concluded one Congress, preparation is already underway for the next one. Montpellier, France has been selected as the venue of the XIIIth Congress in 2008, and Recife, Brazil will host the XIVth Congress in 2011.

IWRA's search for talent and excellence was very rewarding. Our Awards and Recognition program this year identified 25 stars worthy of being recognized for their outstanding achievements, contributions, and services to the world water community. Please join me to congratulate the winners. Our thanks for all those dedicated members who took the time to nominate, screen, and select these worthy candidates.

Our membership drive is in full swing. We have admitted more

than 100 new members in 2005. Word of mouth is our best communication to potential new members. You can play your part by recruiting new members. You can qualify to join the President Club if you can recruit five new members. IWRA will be stronger with broader-based membership.

The process of renewal is full steam ahead with the nomination of the candidates for the new Executive Board being underway, and the list will be ready on time for the March issue of *Water International*.

I am grateful for the support and assistance given to me by all members of the Executive Board who have singularly and collectively given their best to the Association in making it an institution open to all and creating the inclusive and welcoming environment especially for younger professionals from around the world. You too can make the difference by actively taking part in these and other IWRA activities.

> Aly M. Shady, P. Eng. President IWRA

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Don't Forget to renew your IWRA membership today!

Winners of the President Award for Excellence and Service 2005 Presented at XIIth World Water Congress in New Delhi



G.N. Mathur (India), Secretary General of the Organizing Committee of the XIIth World Water Congress. He is the Secretary of the

Central Board of Irrigation and Power, New Delhi, India and is serving as Director and member of the Executive Board of IWRA. The Award is given in recognition of his outstanding efforts and contribution in successfully organizing the XIIth World Water

Congress in India in a two-year record time. He extended the traditional warm Indian hospitality to all participants from more than 50 countries and went out of his way to provide care and comfort to all.



Dr. I. H. Olcay Ünver (Turkey),
Chairman of the
International Steering Committee for
the XIIth World
Water Congress
and Vice–President

of IWRA (2003-2006). The Award is given in recognition of his able leadership in organizing and conducting of the XII Congress of

IWRA. Dr. Unver is currently a Visiting Distinguished Professor at Kent State University, Kent, Ohio, U.S.A. He obtained his Ph.D. from University of Texas. He has worked for the Government of Turkey assuming progressively advanced positions with the Southeastern Anatolia Project (GAP) reaching the top rank of President of the GAP organization. He also taught at several universities. He

has been involved with several international water organizations in leading roles (such as the World Water Council, International Hydropower Association). He received numerous awards and recognition most recently he has been inducted into the World Development Hall of Fame, World Development Federation, USA, 2005.



IWRA Executive Board Meeting in New Delhi

Twelve Board members attended the IWRA Board meeting in New Delhi (Aly M. Shady, Torkil Jonch-Clausen. Lillian del Castillo-Laborde, Shuichi Ikebuchi, G.N. Mathur, Olcay Unver, Olli Varis, Jun Xia, Karin Kemper, Toshkatsu Omachi, Caroline Figueres, Walid Abderrahman, and Ben Dziegielewski). The meeting was also attended by several guests including: Kenji Tanaka (Japan), Samira Pavesi (Brazil), Tariana Carvalho (Brazil), Françoise Jean (France), Pierre Chevallier (France), and Raja Sengupta (Canada).

The discussions opened with presentations on the potential venues of the future Congresses. Pierre Chevallier presented the venue for the XIIIth IWRA World Congress on Water Resources to be held in Montpellier, France during the last week of August or the first week of September in 2008. The presentation concluded with a short video about Montpellier. Ms. Tariana Carvalho made a short presentation on the candidacy of Recife, Brazil to host the XIVth World Congress on Water Resources in 2011. Her presentation also concluded with a short video about Recife.

After presentation of the Executive Office and Treasury reports by Ben Dziegielewski, the discussion focused on the expansion of IWRA membership around the world. One concern was that IWRA has only some 300 members from developing countries and that under the current Board there is no reversal of the trend of declining membership in developing countries. A number of suggestions were made for increasing IWRA membership including allocation of funds to increase membership from developing countries through a vigorous membership drive campaign.

Other issues discussed during the meeting included (selection



From left to right: Walid Abderrahman (Saudi Arabia), G.N. Mathur (India), Françoise Jean (France), and Pierre Chevallier (France)



From left to right: Tariana Carvalho (Brazil), Samira Pavesi (Brazil), Caroline Figueres (The Netherlands), and Karin Kemper (Germany)



From left to right: Kenji Tanaka (Japan), Shuichi Ikebuchi (Japan), Toshkatsu Omachi (Japan), and Walid Abderrahman (Saudi Arabia)



From left to right: Lillian del Castillo-Laborde (Argentina), Raja Sengupta (Canada), and Jun Xia (China)

(Continued from page 3)

and approval of venues for the next two IWRA Congresses, (2) preparations for granting special IWRA awards during the New Delhi Congress, (3) search for the host of the executive office and editorial office of IWRA in 2006, (4) calendar for the 2006 elections of IWRA Officers and Directors, and (5) IWRA activities at the Fourth World Water Forum in Mexico City in March 2006.

Detail information about the meeting can be found on IWRA Website at www.iwra.siu.edu/board/index.html.

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From left to right: Pierre Chevallier, Tariana Carvalho, Toshkatsu Omachi, Er. M. Gopalakrishnan, Olcay Unver, Aly M. Shady, Benedito Braga, Caroline Fiueres, Lillian del Castillo-Laborde, G.N. Mathur, Jun Xia, and Ben Dziegielewski

XIIth World Water Congress Awards

On the occasion of the XIIth World Water Congress, participants were requested to vote on the award in each of the categories shown below. The Awards were presented at the final session of the Congress to the winners.

Best Paper presentation at the Congress: "Integrated Modelling for Drainage System of Kolkata" by Dr. Guna N. Paudyal, India.

Dr. Guna Paudyal, a native of Nepal with 25 years experience in a dozen of countries, is a Senior Water Resources Engineer at DHI Water & Environment. Dr. Paudyal acquired expertise is in flood hydrology, flood modeling and management. The paper presented the modeling of drainage network for the city of Kolkata, India. This was based on hydraulic, hydrodynamic and water quality models for open channels and underground network. The models could predict the discharges at a number of specified points where such outlets, weirs, and pumps provide valuable information on flood levels, duration and extent under various scenarios. The result is



Junior Professional Award Winner: Markus Fischer (Germany)

a good optimization of the design of this large and complex system.

Junior Professional Award:
"Controlled Flood Polder-An
Effective Method for Reducing
Floods in the Midde Reaches of
Rivers" by Mr. Markus Fischer,
Germany.

Markus Fischer is a Scientific Assistant at the Institute of Hydraulic and Water Resources Engineering at the Technische Universität München since 2004.

Young Woman Professional:
"Water Allocation to Eco-systems
Incorporating Environmental
Flows in Decision Making" by Ms.
Louise Korsgaarde, Denmark.

Louise Korsgaard graduated in Physical Geography from the University of Copenhagen in 2001. She is currently undertaking her Ph.D. studies at the Technical University of Denmark. Institute of Environment and Resources in cooperation with DHI Water and Environment and the National Environmental Research Institute (NERI). Her M.Sc. project was on the impact of land use on river water quality in Malaysia, and the title of her Ph.D. is "Quantification of Environmental Flows in Integrated Water Resources Management." In 2002, she worked with bio-indicators (diatoms) as a research assistant at NERI. In 2004 she joined ViSKon Aps., and has



Young Woman Professional Award Winner: Louise Korsgaarde (Denmark)

(Continued on page 6)

The Ven Te Chow Memorial Lecture Award 2005

Professor Benedito Braga (Brazil), past President of IWRA, received the 2005 Ven Te Chow Memorial Lecturer Award for his lifetime achievements in water resources management, for his contributions to the development of IWRA, and for his numerous international activities to promote rational and efficient water management. Professor Braga's contributions to water management are numerous. Technologically, his research work in the areas of development and application of mathematical models for the operation of multiple reservoir systems, rainfall-runoff models, multi-objective decision-making models, and decision-support systems for real time management of water resources systems have not only advanced the frontiers of knowledge but also have made water management practices significantly more efficient in Brazil as well as in other countries of the world. One of the most impressive aspects of Professor Braga's contributions has been the application of the models he has developed to solve the water problems in Brazil. These range from the implementation of an urban flood warning system for the metropolitan region of Sao Paulo through advanced telemetry, weather satellite and radar information, and formulation of a flood control master plan for metropolitan Sao Paulo with structural and non-structural measures, to hydrologic regionalization of extreme stream flow events for the states of Sao Paulo and Mato Grasso do Sul and real time management of irrigation on demand in Pernambuco state. His work has significantly improved water management practices all over Brazil.

As a Professor of Hydraulic Engineering at the University of Sao Paulo, Professor Braga has trained numerous water profession-



Professor Benedito Braga

als in a career at the University of Sao Paulo spanning over two decades. His teachings and research have contributed to the development of a new cadre of technocrats in Brazil who are technically competent, socially aware, and environmentally sensitive. Viewed from any direction, this is a very major achievement which can only bode well for the future of his country. Professor Braga has played a very important role to make IWRA one of the most important professional water organizations of the world. He has successfully chaired many IWRA committees, and because of his manifold contributions he was elected as President of the Association. He has received the most prestigious prize of IWRA, the Crystal Drop Award. Among his many international contributions are Vice Presidency of the World Water Council; Membership of the Program Committee of the International Hydrological Program of UNESCO that formulated its 1995-2000 program; Coordinator UNEP-UNESCO-ABRH of Project on the impact of reforestation on the hydrologic cycle in the Amazon basin; and Chairmanship

of the International Steering Committee, which guided the technical aspects of the organization of the Second World Water Forum.

Nationally, Professor Braga played an important role in the involvement of the Brazilian Water Resources Association – ABRH. and in the definition of the new water management model in the country. Under his presidency, ABRH started its role as an important player in the decisionmaking scene in the water resources of Brazil. Since January 2001 he has been a member of the Board of Directors of the National Water Agency of Brazil - ANA. During these last four years, Professor Braga has helped the implementation of a very modern and sophisticated water management system in Brazil. The basin committee of the Paraiba river basin, extending through three states, is now in full operation. Water charges and water permits are implemented together with a basin plan that integrates different sectors and levels of government. Water quality targets are included in the plan through a river classification system.

The Ven Te Chow Memorial Lecture is named after Dr. Ven Te Chow (1919-1981), Founder and First President of IWRA, an imminent water scientist who has



(Continued on page 6)

The Ven Te Chow Memorial Lecture Award 2005

(Continued from page 5)

been a leading figure in water resources in the second half of the 20th Century. Dr. Ven Te Chow is long remembered for his role in founding the International Water Resources Association (IWRA) and guiding it through its formative years. A prolific worker and organizer, he made time for service on delegations, committees, and professional conferences in the United States and over twenty other countries. His honors included five doctorates, four special awards and three fellowships, and he authored over two hundred monographs, books, and technical papers covering the whole spectrum of water resources throughout the world. He was a remarkable man who, according to the doctoral citation from the University of Waterloo, had "done more than any other living person to advance the field of water resources in the United States and in the world."



Professor Braga and Ms. Marana Chow

The Ven Te Chow Memorial Lecture is presented at each of the World Water Congresses organized by IWRA. Professor Braga presented his Lecture at the XIIth World Water Congress under the title "Water for Development: The Challenges of the Developing World." Ms. Marana Chow the daughter of Dr. Chow presented the award to Professor Braga. The previous Ven Te Chow Memorial Lecturers are: in 2003 Asit Biswas (Canada), "Globalisation and Water Management: Implications for

the future" in Madrid, Spain; in 2000 Janusz Kindler (Poland) "Integrated Water Resources Management: The Meanders" in Melbourne, Australia; in 1997 Glenn E. Stout (USA) "Sustainable Development Requires the Full Cooperation of Water Users" in Montreal, Canada; in 1996 Ben Chie Yen (USA) "River as a System: An Engineer's View" in Chicago, Illinois, USA.; in 1994 Andras Szollosi-Nagy (Hungary) "Water Science Issues at the Dawn of the 21st Century: A call for IWRA's help"; in 1991 Malin Falkenmark (Sweden) "Environment and Development: Urgent Need for a Water Perspective" in Rabat, Morocco; and 1988: Vujica M. Yevjevich (USA) "On Future Professional Activities of the International Water Resources Association, USA."



XIIth World Water Congress Awards

(Continued from page 4)

been working part time as a water resources consultant in Malaysia.

Best Poster: "Situation after Applying SODA Mattress on the Mekong River Bank Protection Work" by Mr. Umeda Kazu and Mr. Kobayshi Rokuro, Japan.

Umeda Kazuo graduated in Civil Engineering in 1981 and obtained M. Eng. degree in 1983 both



Best Poster Winner: Umeda Kazu (Japan)

from the Kyoto University, Japan. He is a registered Professional Engineer. He started his career as a River Engineer, then in Ministry of Construction in Japan and has been conducting research on water-related issues as Director of 2nd Research Department, Infrastructure Development Institute, Japan since April 2004.

Best Special Session: Water Resources and Sustainable Development – China's Practices and Experience

The special session has featured many innovative and outstanding presentations covering the breadth and depth of the complex water resources development challenges for China. The topics included the policies, strategies, mega projects, and opportunities for science-based decision making in the water sector. The participants were a large delegation, from universities, government and research centers, and the largest from any country other than India. It was composed of a mixed range of experienced and young professionals with several female members. The team was lead by Senior Official H.E. Dr. Jiao Yong the Vice Minister from Ministry of Water Resources of China demonstrating the high level of commitment for dialoguing with the world community of practice.



IWRA Updates

Montpellier, France to host XIIIth World Water Congress August 24-28, 2008



(Languedoc research Institute on Water and Environment – ILEE), a supporting partner, *Verseau-Développement* (Verseau-Development), and a reception partner, the Enjoy-Montpellier group to host the XIIIth world Water Congress in the City of Montpellier, France from August 24 to 28, 2008. The proposed main theme of the XIIIth



From left to right: Pierre Chevallier, Er. M. Gopalakrishnan, G. N. Mathur, Olcay Unver, Aly M. Shady, French Embassy Representative, Jun Xia, and Ben Dziegielewski

Congress is "Water Resources and Global Changes." Details on the theme and topics will be available

in the first announcement scheduled for March 2006.



Recife, Brazil to host XIVth World Water Congress November 2011

IWRA has selected the City of Recife in the North East of Brazil as the venue for the XIVth World Water Congress. Recife is becoming a destination for conventions and tourism with more than 72 events in 2005. The Recife Convention and Visitors Bureau are planning a major expansion and renovation of the main facilities to handle mega meeting in the future. These facilities

will be ready in time for the XIVth World Water Congress in 2011. The major Brazilian partner is Associação Brasileira de Recursos Hidricos (ABRH) (Brazilian Water Resources Association), which is a nongovernmental, nonprofit organization to join people and institutions interested in water resources planning, management and development in Brazil. In Brazil, water was previously consid-

ered as an abundant renewable natural resource that could satisfy all the demands without restrictions. In the 1990s, several countries became aware that water was a finite, valuable and vulnerable resource, and ABRH has been spreading these ideas and concepts in Brazil and has been stimulating Brazilian government and society to understand and accept the new water paradigms.

IWRA at WWF4

IWRA is making a contribution to enhancing the debate on the overarching theme of the World Water Council's Fourth World Water Forum, namely, "Local Actions for a Global Change." The Forum Secretariat has accepted IWRA's proposal number TS0551 for a two-hour long mega session with the theme "The Role of Water Infrastructure in Developing Local Actions for Meeting Global Water Challenges for Sustainable Development." The session was approved within the framework theme "Water for Growth and Development" and will be organized on March 17, 2006 in Mexico City. For more information contact Aly M. Shady at president-2@iwra.net.

IWRA Membership

Membership in IWRA is beneficial to the individual as well as the organization. Since the beginning of 2005 we have welcomed 134 new members. The list of members who joined last year was published in the October issue of the IWRA Update. Below is the list of new members who joined the ranks of IWRA since then:

| Etah Arung | Cameroon |
|-------------------|-------------|
| Usha Baanna | Nepal |
| Adriana Bruggeman | Syria |
| Fulvio Celico | Italy |
| Pierre Chevallier | France |
| Kyeong-Ae Choe | Philippines |
| Mao Dehua | China |
| | |

| Shao Dongguo | China |
|---------------------|-------------|
| Janet Hren | USA |
| Roberto Hurtado | Mexico |
| Shaofeng Jia | China |
| M.A. Jowhari | India |
| Atef Kassem | Canada |
| Benjamin Katz | USA |
| Nuri Seckin Kayikci | Turkey |
| Puspa Raj Khanal | Nepal |
| Douglas Krause | USA |
| Thomas La Point | USA |
| Mandy Lawson Unit | ed Kingdom |
| Jin-Yong Lee | Korea |
| Zhang Liping | China |
| Patricia Luis-Manso | Switzerland |
| | |

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IWRA Member News

IWRA Membership

(Continued from page 7)

| Darrin Magee | USA |
|-------------------------|------------|
| Andrew Marr | Australia |
| Rita Martins | Portugal |
| Satish Narkar | India |
| Muritala Oke United | Kingdom |
| Garrett O'Keefe | USA |
| Kendra Okonski | USA |
| Keith Porter | USA |
| Robert Renner | USA |
| Kobayashi Rokuro | Japan |
| Ram Deep Sah | Nepal |
| Prakash Sanglikar | India |
| Ali Sedighi | USA |
| Hari Ram Sharma | India |
| Robert Shibatani | USA |
| Manmohanjit Singh | India |
| Suzanty Sitorus United | Kingdom |
| Aus-Ali Tushabe | Uganda |
| Michael Van Der | C |
| Valk The No | etherlands |
| Gangsheng Wang | China |
| Zhonggen Wang | China |
| Xiang Zhang | China |
| Zhiwei Zhou | China |
| Marharashstra Hydrology | • |
| Project | India |
| Geoscience Australia | Australia |
| Environmental Research | |
| and Wildlife | USA |
| | |

These and previously listed 134 new members come from all six continents (see table below).

| Continent | New Members |
|----------------------------------|-------------|
| Africa | 10 |
| Asia | 31 |
| Australia and Oceania | 9 |
| Europe | 31 |
| North America | 50 |
| South America | |
| and Caribbean | 3 |
| All new members since 01-01-2005 | 134 |

Any member who recruits five new members will qualify to join the President Club and receive Blue Ribbon. Membership application can be done online by visiting our website at http://www.iwra.siu.edu/

Michael E. Campana (USA) has been appointed the first Director of Oregon State University's Institute Water and Watersheds (water.oregonstate.edu). He will assume his post on June 1, 2006. The IWW is a campus-wide unit established to promote, facilitate, and support water resources research, teaching, in-reach, and outreach at OSU. The IWW concept was developed by the water faculty at OSU and selected as one of six strategic initiatives to be funded by the Provost's Office. Professor Campana has been at the University of New Mexico since 1989; before that he was at the Desert Research Institute since 1976. At UNM he currently directs the Water Resources Program and is the Albert and Mary Jane Black Professor of Hydrogeology. His specialties are water resources in developing countries, curriculum development, and transboundary water resources management.

Luis E. Garcia (Guatemala) has recently led an international and national team for CNA for a midterm evaluation of Mexico's National Water Resources Program. After retiring from the Inter-American Development Bank as Principal Water Resources Specialist, where he worked for 15 years, he has continued working as an international consultant in water resources. Recently, Dr. Garcia was appointed as member of the Steering Committee of the Global Water Partnership (GWP) for the next three years. He is also presently collaborating with the Secretariat and the Organizing Committee for the Americas in the preparation of the Regional Document of the Americas for the Fourth World Water Forum, to be held in Mexico City in March 2006. He previously served as Chair of IWRA's Membership Committee and presently is Chair of the Publications Committee.

Benedito Braga (Brazil), IWRA Fellow and past President, has been confirmed by the Chamber of Deputies of Brazilian Parliament for the second four-year term for the position of Head Director of the Brazilian National Water Agency (Agencia Nacionale de Aguas -ANA). The Agency was created in July 2000 with the mandate to enforce the National Policy on Water Resources, NPWR, passed by Parliament in 1997. Professor Braga's responsibilities on the Board of ANA include the oversight of the Department of Programs and Projects and the Department of Water and Soil Conservation. In the last 20 years served as Professor and Vice-Chairman of the Department of Hydraulic Engineering, Member of the Committee of Undergraduate Studies, Chairman of the Committee on Environmental Engineering at Escola Politecnica, University of Sao Paulo and in different positions at Departamento de Aguas e Energia Eletrica of the State of São Paulo.

Mahmoud Abu-Zeid (Egypt), IWRA Fellow and past President, has been reappointed as Minster of Water Resources and Irrigation of Egypt for a third term. He has been also reelected as a member of the Peoples Assembly of Egypt (Parliament). He will continue his responsibilities for water management of Egypt to meet the ever increasing demand for the 75 million inhabitants. In this capacity he will continue his cooperative efforts to collaborate with the nine riparian states sharing the river Nile under the Nile Basin Initiative (NBI) supported by a host of bilateral and multilateral organizations. He will continue his leadership as President of the Arab Water Council, a nascent organization that includes all the 22 Arab States focusing on water issues of their concern.

IWRA Member News

(Continued from page 8)

Ramesh Kanwar (USA), Professor and Department Chair of Agricultural and Biosystems Engineering at Iowa State University, was elected Fellow of the American Society of Agricultural and Biological Engineers. Dr. Kanwar is an internationally-recognized expert and authority in the area of irrigation, drainage, and water quality. His research and other professional work have taken him to more than 30 countries. Dr. Kanwar is being honored and recognized for a distinguished career in soil and water engineering as a researcher, teacher, administrator, and developer of water management programs worldwide.

Patricia Wouters (United Kingdom) currently acts as Director of the International Water Law Research Institute, University of Dundee, which has recently been formally

recognized by the UNESCO General Conference as the first UNESCO Centre of Water Law, Policy, and Science. The Dundee UNESCO Centre will continue its work internationally, with a focus on the operational interface of water law, policy, and science. Dr. Wouters holds B.A., LLB from the University of Ottawa: LLM from Berkelev. DES, and PhD from the Graduate Institute of International Studies & University of Geneva. Dr Wouters was invited to the Max-Planck Institute for Comparative Public and International Law in Heidelberg as a Guest Researcher, during which time she completed her Ph.D. research work.

Bruce Hooper (USA) Associate Professor of Geography at Southern Illinois University has completed a Universities Council on Water Resources, 2005 Water Studies Fellowship with the U.S. Army Corps of Engineers Institute for Water Resources, Alexandria, Virginia. His research was focused on the development and testing of universal indicators to measure the effectiveness of river basin organizations. A recurring theme in the indicators research is the degree of institutional, organizational, and social capacity to undertake IRBM. The second stage of the work involves applying a subset of the universal indicators to selected US basins. The project outputs will include a White Paper on river basin organization performance indicators, a practical manual for evaluating RBO performance, suited for further development as a web-based evaluation tool, and briefings to promote the use of the manual with Corps staff at IWR, with UCOWR, UNESCO, and the World Bank.





Dr. John "Jack" Stuart Gladwell, died at age 73 on Monday, January 2, 2006. Dr. Gladwell was a member of IWRA since 1982 and was elected IWRA Fellow in

1992. He was born in the Republic of Panama, the only son of an American businessman and a British colonialist. He served in the US Army and was a Mason since 1957. Dr. Gladwell held two bachelors degrees from Trinity University and Texas A&M Univer-

sity, an MS of Civil Engineering from Texas A&M, and a Ph.D. from the University of Idaho. Dr. Gladwell was a professor of Civil Engineering, did extensive water resources and hydraulic research, and ended his professional career as an international diplomat for 12 years with UNESCO in Paris, France. Regarded as a world expert, he authored numerous publications and technical journals and lectured internationally on hydrology and water management. Dr. Gladwell was greatly admired for his intelligence, honesty, integrity, humility, and

humor. He enjoyed a rich life without focus on worldly goods, but accumulated the wealth of human affection and admiration. He struggled with a rare neuromuscular disease, primary lateral sclerosis (PLS), and was treated with dignity and respect by his medical and care teams. He died embraced by his loving and adoring wife of 45 years, Gail, and his two daughters, Jennifer Hiemstra and Carolyn Gladwell. Internment of ashes and memorial service will take place at St. Luke's Cathedral in Panama in April 2006.



New Publications by IWRA Members

John Nicklow (USA) published a book entitled "Comprehensive Water and Wastewater Treatment Plant Hydraulics Handbook for Engineers and Operators." This is an advanced comprehensive reference on the hydraulic analysis and design of water and wastewater treatment facilities. As a working handbook for engineers, operators, students, and practitioners, it covers both the practical and theoretical

aspects of plant hydraulics. It brings together the principles of proper hydraulic design and characterization of treatment facilities, and presents them in a manner that can be easily understood. With more than 100 solved problems, special emphasis is placed on the application of these principles, and is an invaluable reference for the study and practice of treatment plant design. The book has

been published by MWH Soft, Inc., Pasadena, California. For more information visit http://www.mwhsoft.com/page/p_bookstore.

Giuseppe Rossi (Italy), Professor of Hydrology in the Department of Civil and Environmental Engineering (DICA) at the University of Catania

(Continued from page 12)

Calendar of Water Events

*Indicates IWRA co-sponsored events. Contact Executive Director Ben Dziegielewski at benedykt@siu.edu to inquire about obtaining IWRA co-sponsorship of events.

February 6–17, 2006

Integrated Water Resources Management in the Middle East

Kibbutz Ketura, Israel

The workshop is organized by the Arava Institute for Environmental Studies (AIES) and NATO Advanced Study Institute (ASI). The purpose is to expose the participants to diverse approaches in dealing with the water crisis and to provide them with the necessary literacy and sensitivity to communicate across disciplines and borders. For more information contact Danielle Saranga <ScienceforPeace@gmail.com> or visit: http://www.natowater.org/site/index.php/nato.

March 22, 2006

Fourth World Water Forum

Mexico City, Mexico

This is the largest international event of the World Water Council on water policies. It is organized every three years since 1997. The 2006 Forum will be organized by the National Water Commission/Mexico and World Water Council. For more information contact Ricardo Martínez Lagunes at: ricardo.martinez@cna.gob.mx or visit WWC website: http://

www.worldwaterforum4.org.mx.

*March 28–30, 2006

Kuwait First International Water Conference and Exhibition

Radisson SAS Hotel, Kuwait

The conference and exhibition will be an open forum for the discussion of current water policies, research, projects, and water management in Kuwait and the GCC. It aims at providing an interdisciplinary forum for scientists, researchers, practitioners, and policy makers to discuss current critical water research, for the purpose of strengthening the connection between research, and policy. For more information please visit: http://promedia-international.com/Water/index.html.

April 22–25, 2006

2nd Hydropower for Today Conference

Hangzhou, China

This second Conference has the theme "Policy Stimulating Hydropower Development" and will cover the latest news in hydropower field. The deadline for submitting the paper for the conference is March 1, 2006. For any questions related to this event, contact the Conference Coordinating Team via email at wangyansong@inshp.org or yaodan@inshp.org.

May 9–10, 2006

International Conference on the Application of Meteorological Extremes (CAMEX)

Pilanesberg, South Africa

The conference is organized by the Long-Range Forecasting Group of the South African Weather Service. It will cover: (1) scientific issues – identification and modeling of meteorological extremes on time scales ranging from "nowcasting" to climate prediction; (2) economic aspects – the value of extremes forecasts and its relationship to measures such as forecast skill and decision-analysis procedures; and (3) dissemination – format and communication channels between information providers and users. For more information contact Dr. Emsie Klopper at: emsie@lawwindow.co.za.

May 23–25, 2006

Integrated Water Resources Management and Challenges of Sustainable Development

Marrakech, Morocco

This congress will be a unique occasion for the different specialists in the field of water resources management to present and exchange information about the last developments in their works regarding integrated water resources management. The main themes include: (1) tools and technologies applied to the integrated management of water resources; (2) impact of climatic changes, new hydraulic structures and socio-economic development on water resources; and (3) quantitative and qualitative aspects of the integrated and sustainable water resources management. For more information visit the website: http://www.ucam.ac.ma/gire3d or contact Dr. Nour-Eddine Laftouhi <nour and contact Dr. <nou

*June 8-10, 2006

Hydrological Sciences for Managing Water Resources in the Asian Developing World

Guangzhou, China

Population pressure and societal transformations have brought numerous resource and environmental problems to Asian countries, among which water is of crucial concern. Also, the Asian Monsoon climate makes water problems even more complicated and challenging. Finding solutions for managing water resources plays a vital role in putting Asia's development on a sustainable track. For more information contact Dr. Tao Jiang or Mr. Dong Ke, Department of Water Resources & Environ-

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ment at Zhongshan University in Guangzhou 510275, P. R. China. Email: eesjt@zsu.edu.cn; eeskd@zsu.edu.cn or visit the conference website at: http://cwre.zsu.edu.cn.mwra.

August 20–26, 2006

World Water Week in Stockholm

Stockholm, Sweden

The World Water Week in Stockholm is the leading annual global meeting place for capacity-building, partnership-building and following up on the implementation of international processes and programs in water and development. It includes topical plenary sessions and panel debates, scientific workshops, independently organized seminars and side events, exhibitions and festive prize ceremonies honoring excellence in the water field.

September 4–6, 2006

Water Pollution 2006 - Eighth International Conference on Modeling, Measuring and Prediction of Water Pollution

Bologna, Italy

The meeting's chief objective is to provide a forum for discussion for scientists and managers working in different aspects of water pollution. It is organized by Wessex Institute of Technology, UK and University of Coimbra, Portugal. For more information visit: www. wessex.ac.uk/conferences/2006/water06/index.html or contact: Rachel Green Email: enquiries@wessex.ac.uk

September 11–13, 2006

Environmentally Sound Technology in Water Resources Management

Gaborone, Botswana

The conference is sponsored by the International Association of Science and Technology for Development (IASTED) and is being organized by the University of Botswana. For more information visit: www.iasted.org/conferences/2006/Botswana/estw.htm or contact Sarah Hamza <calgary@iasted.org>.

September 26–28, 2006

3rd International Symposium on Integrated Water Resources Management

Bochum, Germany

The symposium will be hosted by the Ruhr-University Bochum, Germany – Institute for Hydrology, Water

Management, and Environmental Engineering under the auspices of the International Association of Hydrological Sciences (IAHS) – International Commission on Water Resources Systems (ICWRS), together with UNESCO-IHE Delft and the Institute for Environment and Human Security of the United Nations University Bonn. This third symposium will address the very important subject of how to cope with water-related vulnerability of societies. This vulnerability relates to many aspects of water resources: environmental risks, floods, droughts, pollution, water logging, and options to create resilience against these risks. The contact for the conference is Mrs. Jana Radoi, at <water@conventus.de>.

October 16-18, 2006

Wise Water Resources Management: Towards Sustainable Growth and Poverty Reduction Bangkok Thailand

This will be the 3rd Asia Pacific Association Hydrology and Water Resources (APHW) Conference and it will feature the regional characteristics and water problems, lessons from the past, sound utilization of water resources, climate change, variation and disasters, and wise water resources management. The National Research Council of Thailand and the Association of Researchers in collaboration with APHW would like to invite academics, researchers, policy makers and water related professionals to attend this Conference. For further information contact: http://www.thirdaphw.org or Ms. Choosri Keedumrongkool, The National Research Council of Thailand, 196 Phahonyothin Rd., Chatuchak, Bangkok 10900, Tel: 662 579 2285, 662 940 6369, Fax: 662 561 3049; E-mail: choosri@thirdaphw.org.

May 2-5, 2007

4th Asian Regional Conference and

10th International Seminar on Participatory Irrigation Management

Tehran, Iran

The meetings are sponsored by ICID, INPIM, World Bank, IWMI, and the Iranian National Committee on Irrigation and Drainage (IRNCID). For further information visit: www.pim2007.org or contact Secretary General, IRNCID, Mr. S. A. Assadollahi at: irncid@gmail.com.

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New Publications by IWRA Members

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recently published a book entitled "Drought Management and Planning for Water Resources," co-edited with J. Andreu, F. Vagliasindi and A. Vela and published by CRC Taylor and Francis, Boca Raton. The book presents the main results of an European INCO-MED project "Water Resources Management under Drought Conditions," coordinated by DICA and developed by research centers on governmental agencies of Cyprus, Egypt, Israel, Jordan, and Spain. The book deals with criteria and tools for facing drought risk and water shortage in supply systems through several Case Studies, also with reference to the European Water Framework Directive.

Bruce Hooper (USA) published a book entitled "Integrated River Basin Governance: Learning from International Experience." The book is designed to help practitioners implement integrated approaches to river basin management (IRBM). Drawing on both past and present river basin and valley scale catchment management

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examples from around the world, the book develops an integration framework for river basin management. The book focuses on the social, economic, organizational, and institutional arrangements of river basin management. Methods are outlined for implementing strategic and regional approaches to river basin management, noting the importance of context and other key elements which have been shown to impede success. The successes and failures of river basin management are discussed, and lessons learned from both are presented. Full contents list available online at: http://www.iwapublishing.com/pdf/1843390884 ContentsIRBMHooper.pdf



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Ben Dziegielewski, Editor 4535 Faner Hall Southern Illinois University Carbondale, IL 62901-4516 USA Email: benedykt@siu.edu

Fax: 618.453.6465