

Joint Egyptian Japanese Scientific Cooperation (JEJSC)



The Second JE-HydroNet Symposium on the Nile River System and the Delta of Egypt

The Science and Technology Development Fund (STDF) & The Japan Society for the Promotion of Science (JSPS)

JEHYDRONET: MODERN METHODOLOGIES FOR THE MANAGEMENT, MONITORING AND PLANNING OF INTEGRATED WATER RESOURCES IN NILE RIVER lلمنهجيات الحديثة للإدارة والرصد والتخطيط المتكامل للموارد المائية في نهر النيل

"Problems Facing Nile River System and Delta of Egypt"



March 20-21, 2012

The German University in Cairo, New Cairo City, Egypt

Co-sponsored by:

National Water Research Center, Assiut University, Alexandria University, The German University in Cairo Egypt

Disaster Prevention Research Institute, Kyoto University, Japan

Organizing members of the symposium

Prof. Dr. Ibrahim El-Shinnawy (CoRI, NWRC, Egypt)

Prof. Dr. Mahmoud Senousy (Assiut University, Assiut, Egypt)

Prof. Dr. Mohamed Soliman (HRI, NWRC, Egypt)

Dr. Sameh Kantoush (The German University GUC, New Cairo, Egypt)

Dr. Haytham Awad (Alexandria University, Alexandria, Egypt)

Dr. Mohamed Saber (Assiut University, Assiut, Egypt)

Dr. Ahmad Seif-El-Nasr (Assiut University, Assiut, Egypt)

Egyptian Speakers

Prof. Dr. Mahmoud Abou Zeid Arab Water Council

Prof. Dr. Shaden Abdel-Gawad NWRC

Prof. Dr. Ibrahim El-Shinnawy

Prof. Dr. Nahed El-Araby

Prof. Dr. Ashraf El-Ashaal

Prof. Dr. Medhat Aziz

Prof. Dr. Sameh Saker

Prof. Dr. Ashraf El-Sayed

Dr. Ibrahim El-Sayed

Prof. Dr. Bayoumi Attia MWRI

Prof. Dr. Ibrahim El-Dimeery The German University, GUC

Prof. Dr. Laila Gamal Mahran

Dr. Sameh Kantoush

Ambassador Dr. Walid Abdel-Nasser

Eng. Lama Mosad El-Hatow

Ministry of Foreign Affairs

IFC, World Bank Group

Prof. Dr. Mahmoud Senousy Assiut University

Dr. Ahmed Seif-El-Nasr

Dr. Mohamed Saber

Eng. Claus Koehn Consulting German Company

Prof. Dr. Rawya Kansoh Alexandria University

Dr. Haytham Awad

Japanese Speakers

Prof. Dr. Tetsuya Sumi Kyoto University

Prof. Dr. Satoru Ushijima

Prof. Dr. Yasuhiro Takemon

Prof. Dr. Yoshinobu Sato

Dr. Toshio Hamaguchi

Dr. Daisuke Nohara

Prof. Dr. Gregory De Costa Open Polytechnic of New Zealand

Eng. Mohamed Reda Soliman Kyoto University

Eng. Masahiro Abe

Eng. Ahmed Kamal

Invited Japanese

Japanese Embassy in Egypt, JICA office, JSPS office, Private Companies

Themes of the Symposium

- 1- Flash Flood and Runoff Modeling
- 2- Water Resources Management and Climate Change
- 3- Reservoir Sedimentation and River Basin Ecosystem
- 4- Ground Water and Sea Water Intrusion
- 5- Dam impacts and Nile River Basin Ecosystem

Tuesday, 20th March 2012

9:00 – 10:00 Symposium Registration at the GUC

Opening Session

Chaired by: Prof. Shaden Abdel-Gawad, NWRC

Time	Title of presentation	Presenter
10:00 — 10:10	Opening Remarks and Guest Welcome,	Prof. Shaden Abdel-Gawad, (NWRC, Egypt)
10:10 – 10:20	Guest Welcome by the GUC representative	Prof. Dr. Ibrahim El-Dimeery (University Counselor & BOT Member, GUC, Egypt)
10:20 — 10:30	Relationships Between Egypt and Japan: Education, Science and Political Aspects	Ambassador Dr. Walid Abdel- Nasser (Ministry of Foreign Affairs, Egypt)
10:30 – 10:50	GUC: 10 Years of Success	Prof. Dr. Laila Gamal Mahran (Vice President for Student Affairs, GUC, Egypt)
10:50 – 11:10	Japan Egypt Hydro Network: Modern Methodologies for The Management, Monitoring and Planning of Integrated Water Resources in Nile River	Prof. Tetsuya Sumi (Kyoto University, Japan)
11:10- 11:35	Coffee Break	

Session 1: Flash Flood and Runoff Modeling

Chaired by: Prof. Husam Fahmy, NWRC and Dr. Sameh Kantoush, GUC

Note: Allocated time for Oral Presentations: 15 min. talk + 10 min. discussion

11:35– 12:00	Warning system and national Strategy for Flash Flood Management in Egypt	Prof. Dr. Sameh Saker (NWRC, Egypt)
12:00- 12:25	Integrated Water Resources Management:	Prof. Rawya Kansoh
	Lessons Learned in the Past Two Decades	(Alexandria University, Egypt)
	in Arab Region, Egypt	
12:25-12:50	Hydrological Simulation of Flash Floods	Dr. Mohamed Saber (Assiut
	Considering Prevention and Mitigation	University, Egypt)
	Strategies at The Nile River and Wadi El-	
	Arish, Sinai Peninsula, Egypt	

12:50-13:15	Conflict on Water Resources Development between Multiple Nations in the Nile River Basin	Eng. Masahiro Abe (Kyoto University, Japan)
13:15 – 14:20	Lunch	

Session 2: Water Resources Management and Climate Change Chaired by: Prof. Moustafa Gaweesh, NWRC and Dr. Haytham Awad, Alexandria University			
14:20 – 15:00	Keynote: Impact of Climate Change in Water Resources on the Nile Basin	<i>Prof. Bayoumi Attia,</i> (MWRI, Egypt)	
15:00 – 15:40	Analysis of Long-Term Heat and Water Balance Change using GCM Output in the Nile River Basin / Study on Climate Change Impacts in Japan	Prof. Yoshinobu Sato (Kyoto University, Japan)	
15:40 – 16:05	Adaptation to Climate Change Impacts on Coastal Zone of the Nile Delta	Prof. Ibrahim El-Shinnawy (NWRC, Egypt)	
16:05–16:30	Two Dimensional Hydrodynamic, Pollutant Transport Model of El-Burulus Lagoon, Egypt	Eng. Mohamed Reda Soliman (Kyoto University, Japan)	
16:30– 16:55	Assessment of Impacts of Climate Change on Water Resources in Egypt	Eng. Lama Mosad El-Hatow (Ph.D. Candidate TU Delft and Erasmus University, Netherlands)	
16:55 – 17:20	Impacts of SLR on Drainage Systems of Coastal Zones of the Nile Delta	Dr. Ibrahim El-Sayed (NWRC, Egypt)	
Poster Session 17:20– 18:45	For the Young Researchers Chaired by Prof Mohamed Fawzi Bakri NWRC		
18:45 – 20:45	Reception Dinner		

Two Prizes:

- 1. Prof.Nagy prize for the best presentation (only Student Oral presentations).
- 2. **Prof.Kojiri prize** for the best Poster (only for Student Poster presentations)

The prizes will be decided by the Egyptian and Japanese Professors Committee.

Second Day Program

Wednesday, 21st March 2012

15:20-15:30

Coffee Break

Note: Allocated time for Oral Presentations: 15 min. talk + 10 min. discussion

Time ana	Prof. Mohamed Soliman , NWRC Title of presentation	Presenter
9:00-9:30	Keynote:	Prof. Tetsuya Sumi
9:00-9:30	Reservoir Sedimentation Managment in Japan	(Kyoto University, Japan)
9:30-10:00	Keynote: Egypt and the Nile Basin: Between past, present and future	H.E.Prof. Mahmoud Abou-Zeid (Water Arab Council)
10:00 — 10:25	Monitoring of Sedimentation Process in Lake Nasser/Nubia	Prof. Medhat Aziz (NWRC, Egypt)
10:25 – 10:50	Reservoir Sedimentation Management in the Nile River Basin and Integrated Development Project of Lake Nasser	Dr. Sameh Kantoush (GUC, Egypt)
10:50 – 11:15	River Basin Ecosystem Management	<i>Dr. Yasuhiro Takemon</i> (Kyoto University, Japan)
11:15-11:40	Eutrophication Assessment of Lake Burullus, Egypt	Prof. Ashraf El-Said (NWRC, Egypt)
11:40– 12:05	Multiphase modeling for fluid-structure interactions with high-performance parallel computations and their application to hydraulics problems	Prof. Satoru Ushijima
12:00 - 13:00	Lunch	

Session 4: Ground	Water and Sea Water Intrusion	
Chaired b	y: Prof. Ahmed Khater, NWRC	
and Dr. N	Iohamed Saber, Assiut University	
13:00 - 13:40	Keynote: Assessment and Management of	Prof. Gregory De Costa,
	Coastal Ground Water Subject to Salinity	Open Polytechnic of New
	Intrusion	Zealand, New Zeland
13:40 - 14:05	Basin-scaled Groundwater Modeling and	Prof. Toshio Hamaguchi
	Fundamental Consideration of Seawater	(Kyoto University, Japan)
	Intrusion	
14:05 - 14:30	Ground water and Salt Water Intrusion in	Prof. Nahed Alaraby
	the Nile Delta of Egypt	(NWRC, Egypt)
14:30 – 14:55	Surface and Ground Water Interaction	Prof. Mahmoud Senousy
	Detection and Protection: Case Study 1	(Assiut University, Egypt)
14:55 - 15:20	Surface and Ground Water Interaction	Dr. Ahmed Seif (Assuit
	Detection and Protection: Case Study 2	University, Egypt)
	·	

Session 5: Dam Impacts and Nile River Basin Ecosystem			
Chaired by: Prof. Mahmoud Senousy, Assiut University			
and Dr. Ahmed Seif-El-Nasr, Assiut University			
15:30 – 16:10	Keynote: Dam Impacts on the Down Stream Region	<i>Prof. Alaa Alzawahry</i> (Cairo University, Egypt)	
16:10 – 16:35	Evaluation of the Performance of	Prof. Ashraf El-Ashaal	
	Existing Dams	(NWRC, Egypt)	
16:35 - 17:00	Real-time Reservoir Operation	Prof. Daisuke Nohara (Kyoto	
	Considering Meteo-Hydrological	University)	
	Information -Practices, studies and issues		
	in Japan-		
17:00-17:25	Impact of High Aswan Dam on the Nile	Prof. Karima Attia (NWRC,	
-,,,,,	River	Egypt)	
17:25 - 17:50	Development of Optimization Models for	Dr. Haytham Awad	
	Energy Production and Harvesting in	(Alexandria University,	
	Existing and Proposed Egyptian	Egypt)	
	Hydraulic Structures	6J F /	
17:50 - 18:15	Environmental management of the	Eng. Klaus Koenhlein	
	Barrage Projects: Case studies Nage	(German Consulting	
	Hammadi and Assiut new Barrages	Company, Germany)	
18:15 – 19:15	Closing Discussions / Summary / Future Prof. Tetsuya Sumi /Prof. Ibrahim El-Sh	• •	