

CURRICULUM VITAE

Tarek MERABTENE

طارق مرابطين

1. Personal and Contact Information

Family name:	Merabtene	<u>Mailing Address:</u> University of Sharjah College of Engineering Civil and Environmental Eng. P.O. Box 27272 Sharjah United Arab Emirates Tel: + 971– (0)6 – 5050 – 924 Fax: + 971– (0)6 – 5050 – 924 Mobile: + 971 – (0)50 – 129 – 1087 Email: tmerabtene@sharjah.ac.ae merabtene@gmail.com	
First name:	Tarek		
Gender:	Male		
Date of birth:	23 December 1963		
Nationality:	Algeria		
Marital Status:	Married		

2. Academic Background

<u>Title:</u>	<u>Attend period</u>		University/Institute	Major & Thesis Title
	Form	To		
Ph. D.	April 1996	March 1999	Kyushu University Institute of Environmental Systems, College of Engineering. Fukuoka, Japan	<u>Major:</u> Civil Engineering <u>Minor:</u> Water resources and hydraulics Engineering. <u>Thesis title:</u> Decision Support System for Drought Management of Water Resources Systems
Master Degree	Sep. 1988	June 1990	Ecole Nationale Polytechnique (ENP) Algiers, Algeria	<u>Major:</u> Civil Engineering <u>Minor:</u> Water resources and hydraulics Engineering. <u>Thesis title:</u> Analysis and optimization of Water Supply Networks.
State Engineer	Sep. 1983	June 1988	Ecole Nationale Polytechnique (ENP) Algiers, Algeria	<u>Major:</u> Civil Engineering <u>Minor:</u> Water resources and hydraulics Engineering. <u>Thesis title:</u> Study of dynamic stability of earth dam reservoirs subject to earthquakes.

3. Teaching and Research Philosophy

3.1. Teaching

Strive to attain the highest standard of scholastic excellence. To this end I believe to possess the art of communication to make each and every student in my class, despite their discrepant intellectual abilities, to understand advanced topics and realize the need for progress. Science is dynamic and evolutionary, so I always endeavor to discover creative means that fosters engineering education and develop innovative set of courses to adapt to changes. I am computer skilled teacher with advanced mathematics background, so advanced and complex sciences are my enthusiasm into teaching. While making the best use of modern technologies, I use a wide range of delivery method. I also make best use of my interdisciplinary network of professionals to foster a rich scientific environment with practical design expertise and up-to-date challenges to solve the continuously emerging water problems.

Academic Advising:

Part of my duty as faculty is to ensure students advising from their first academic year to graduation. Every semester as a faculty I have around 50 students under my direct supervision as academic adviser.

Summary of course taught:

As can be verified from the annual faculty evaluation, available upon request, my evaluations have been always among the College top faculty and far above the university average faculty evaluation records. The following summary of course taught and average number of students involved in my classes clearly indicates my ability to work under high pressure.

Table 1. **Summary of Teaching Assignments Fall 2008 to Spring 2012**

Teaching Assignments	Number of Sections	Number of Credit hours	Number of students
Fluid Mechanics	17	51	435
Dynamics	2	6	46
Introduction to Thermal Science	2	9	76
Numerical Methods	5	15	179
Hydraulics	2	6	62
Sp. Topics in Water Resources	1	3	27
Water Resources Engineering	3	9	48
Senior Design Project 1	13	26	186
Senior Design Project 2	6	24	112
Teaching duties as of Spring 2012	51	140	1,171

3.2. Research

To solve local complex problems, science should be developed and owned by the people of the nation that needs it and will benefit from it. Thus my overall objective is to promote academic research and concurrently applied research of interest and benefits to the Arab and Gulf region in general. My knowledge of artificial intelligence and modern technologies (i.e., GIS, satellites and remote sensing) will be a valuable means to achieve my goals. My experience to attract donors within a highly competitive environment will help me ensure a continuous research programs.

Summary of Publication Records

- 8 papers in peer reviewed on refereed journals (4 Ph.D. related)
- 18 papers in peer reviewed conferences published as proceedings
- 32 invited talks and experts group participation
- 8 Technical reports
- 3 Book chapters (+1 to be publish by Cambridge Press expected 2013)
- 12 Research grants

Major research area of interests

- Water hazards and risk management (Flood, Sediment transport, Drought, Environment)
- Hydrologic Modeling and Climate Change
- Water governance and research on sustainability issues: Indicators development to assess the effectiveness of adopted water policy and achievement of MDGs.
- Application of Artificial Intelligence to Water and Environmental Engineering problems
- Integrated water management under Climate Change and Climate Variability scenarios
- Hydraulics research: Analysis and Optimization of Water Distribution Systems.

4. Professional and Industrial Experience

For reviewer readability details of duties and achievements are presented in the next section.

From:	To:	Position	Institution
01/ 2004	08/ 2007	Chief Scientist & Project Manager	UNESCO International Centre for Water Hazard and Risk Management (UNESCO-ICHARM), Public Works Research Institute (PWRI), Tsukuba Science City, Japan. (www.icharm.pwri.go.jp)
07/ 2002	01/ 2004	Principal Engineer	Institute of Hydrology and Water resources, co. ltd., Tokyo, Japan Dispatched to CTI Engineering Co., Ltd. River and Water Resources Department, 3-21-1 Nihonbashi Hama-cho Chuo-ku, Tokyo 103-8430, Japan. Phone: +81 (3) 3638 – 2561, Fax: +81 (3) 3638 – 2560, (http://www.cite.co.jp/english/index.html)
04/ 2000	08/ 2001	Senior Engineer	Construction Technique Institute (CTI) Eng., Co., Ltd., River and Water Resources Department, 3-21-1 Nihonbashi Hama-cho Chuo-ku, Tokyo 103-8430, Japan. Phone: +81 (3) 3638 – 2561, Fax: +81 (3) 3638 – 2560, (http://www.ctie.co.jp/english/index.html)

5. Academic Experience

For reviewer readability details of duties and achievements are presented in the next section.

From:	To:	Position	Institution
09/ 2008	Present	Assistant Professor	University of Sharjah College of Engineering , Civil and Environmental Engineering, P.O. Box 27272 Sharjah, United Arab Emirates
09/ 2007	07/ 2008	Lecturer	Higher Colleges of Technology (HCT) Civil Engineering Department, Abu Dhabi Men's College, P.O. Box 25035 Abu Dhabi, United Arab Emirates
09/ 2001	06/ 2002	Assistant Professor	United Arab Emirates University, Department of Civil and Environment Engineering, College of Engineering, P.O.Box 15551, Al-Ain, United Arab Emirates
03/ 1999	04/ 2000	Post Doctoral Scholar	Kyushu University, Institute of Environment Systems, College of Engineering. 6-10- 1 Hakozaki, Fukuoka, 812-8581 , Japan
09/ 1990	08/ 1995	Lecturer (Prior to Ph.D.)	Ecole Nationale Polytechnique d'Alger (ENP), Department of Hydraulics Engineering, 10 Avenue Hassan Badi, Algiers, Algeria

Details of duties and achievements during my professional and academic positions

Details of Main Duties in Professional and Industrial Jobs

From:	To:	Position	Institution
01/2004	08/2007	Chief Scientist & Project Manager	UNESCO-ICHARM: International Centre for Water Hazard and Risk Management, Japan.

Main duties and achievements

(1) Projects Management & other Contribution as Senior Scientist:

- **Project manager:** United Nations World Water Assessment Programme (WWAP): Main duties: coordinated Japan case study contribution to WWAP, wrote the proposal, compiled the inputs of involved ministries, and produced the case study report (see Chapter 14 (Case Studies pp. 481-483) of the World Water Development Report 2 (WWDR 2).
- **Project manager:** Development of Risk Management Indicators for WWDR 2. Main duties were to develop Flood Risk Indicators to assess policy effectiveness in flood risk mitigations (Japan case study). My major scientific contributions are published in Chapter 10 (Managing Risks) of the WWDR-2.
- **Project manager:** Asia Pacific Water Forum (APWF), in charge to develop the thematic policy recommendation report (water disaster management) for the APWF summit.
- **Project officer:** "Decision Support System for reinforcing flood damage mitigation systems in developing countries using GIS, satellite and telemeter data and remote sensing technologies". Under this project I secured a scholarship for a postdoctoral to work at ICHARM.
- **Project officer:** "Reducing Social Vulnerability to flood risks", A joint research proposal between ICHARM, WMO and UNESCO-IHP. The proposal is submitted for funding under the IHP-VII research programs.

(2) Research Manager on Water Risk Assessment, Modeling and Management:

- Write research proposals (e.g., Community Self-Reliance and Flood Risk Reduction for ADB) and support the ongoing research on flood forecasting and warning systems for developing countries,
- Provide technical support for the implementation of the Global Flood Alert System (GFAS) of the International Flood Network (IFNet) involving GIS and remote sensing applications.
- Organize workshops and symposiums. To date I organized six international workshops/symposium and meetings among which are: The Asian Regional Workshop on Concept of Policy Effectiveness in Flood Mitigation Initiatives (Singapore 2004); The PWRI-WMO flash flood workshop and the three preparatory workshops for the establishment of ICHARM which were participated by world renowned scientists. Some of my reports are available online at <http://www.icharm.pwri.go.jp>. (see Publications).

(3) Participate at UN Water meeting and provide consultancy to WMO and UN-ISDR:

- Participate in international workshops and meetings as delegate of ICHARM including the meetings of UN-Water Coordinating Group on Indicators as well as to provide technical and scientific support to the World Meteorological Organization (WMO) and the UN International Strategy for Disaster Reduction (ISDR), including scientific review of proposals submitted to WMO and ISDR for funding. - Invited Speaker at the Session on Basin Policy Scenarios to Secure Sustainability (2nd APHW Conf.).

(4) Perform Administrative duties and organize experts training courses:

- Edited ICHARM newsletters and brochures, prepared training manual and material and teach for JICA training programs at ICHARM, organize meetings with clients, and perform budget analyses and fiscal planning, among others as required.

Rewarding achievement:

- Played a leading role during the process of establishment of UNESCO-ICHARM and also to bring PWRI at the front line of the major contributors to the World Water Assessment Programme of the United Nations, WMO and ISDR programs. I am member of the UN Water Expert Group on Indicators Development.
- Some of my internationally recognized scientific contributions are published in the 2nd report of WWDR, the world most comprehensive book on global freshwater assessment published triennially by the United Nations.
- Practical experience and technical advanced knowledge in water policy development, water management and hydrologic modeling, water disaster risk management, and GIS, among others.

From:	To:	Position	Institution
04/2000	12/2004	Senior Engineer	Construction Technique Institute (CTI) Eng., Co., Ltd., River and Water Resources Department, Japan.

Main duties and achievements

Period of 2000-2002

- Storm-water drainage management for Nagoya City: Main Duties: reviewed current urban flood design criteria, issued project documentations. Used Mike 11 for hydrologic Analysis.
- Conducted feasibility studies of many aspects of water resources management; e.g. "Feasibility study of a water supply dam in Okinawa Prefecture"; Duties: designed the rainfall-runoff modeling for the semi ungauged basin, analyzed the areal distribution of rainfall (used and compared different optimization techniques)
- Coordinated meeting with clients; assisted in project implementation, capital budget preparation and elaborated reports and project documentations; Conducted a project on urban flood management;
- Conducted a project on environmental risk assessment;
- Developed computer applications for rainfall-runoff modeling;
- Developed some routines for the Japanese version of DHI-Mike 11 and Mike-SHE
- Assisted in conducting two projects for the Japan Case Study (UNESCO-WWAP);
- Water law and legislation: Searched and documented the water legislations worldwide;
- Conducted several design projects of urban hydrology, storm drainage projects, and environmental assessment (risk assessment in particular). Particular application "Storm drainage and storm-water management for Nagoya City" main Duties: review of current urban flood design criteria, issue project design documentations.

Period of 2002-2004: Principal Engineer of Institute of Hydrology and Water resources, co. ltd., Tokyo, dispatched to work at CTI Engineering co. ltd.:

1. Project Manager:

- Preparatory Jobs for the establishment of Japan Water Forum (JWF):
Main Duties: Prepared proposals and managed 3 projects: 1) Water Action Contest, World, Water Voice Project, and Virtual Water Forum. Specifics: Team coordination, principal projects investigator, Chairperson of the Water Action Contest Assessment Committee, managed and coordinated the contest during the Forum, compiled the entries or the water voices, compiled the outcomes of the Virtual Forum's Session, produced periodic progress reports to client, coordinated meeting with client, elaborated project documentations, edited the reports of the three projects.

2. - Global Flood Alert System (GFAS) project:

- Conducted and reported on the use of radar data (TRMM and GPM) in flood forecasting
- Flood Hazard Mapping: Produced flood inundation and flood risk maps.
- Environmental Risk Analysis of Lake Biwa: Conducted the environmental risk assessment part of the project.

3. Administration:

- Coordinated international jobs.
- Officer of the Secretariat of the 3rd WWF.
- prepare for national and international experts group meeting, seminars and conferences, produce related documentations, represent the company in international events.
- Analyzed and documented a study on the managerial aspects and structures of the top 500 world consulting companies and bring recommendation to the Board of director on the new area of expertise for as a proposal for the re-management of CTI Eng. Co., Ltd. Based on the analysis CTI has created CTI International.

Details of Main Duties in Academic Jobs

From:	To:	Position	Institution
09/2008	Present	Assistant Professor	University of Sharjah, United Arab Emirates
<p>1) Teaching for graduate and under-graduate studies <i>Courses:</i> Fluid Mechanics, Water resources management and engineering design, Surface hydrology, Groundwater hydrology, Hydraulics engineering, and Environmental engineering.</p> <p>2) Student advising: as faculty it is part of our duty to supervise 50 students from their first year at the university to graduation. Follow up their curriculum and assist students at risk.</p> <p>3) Community and university services: Member of the College Council, Students Welfare Committee, Engineering Laboratories Development Committee, among others.</p> <p>4) Research: undertake research in the field of my expertise (water resources management, hydrology, and water disaster risk management). I periodically publish papers in peer reviewed scientific journals and conference proceedings and wrote book chapters, including the World Water Development Report 2 as detailed in my CV.</p>			
09/2007	07/2008	Lecturer	Higher Colleges of Technology (HCT) United Arab Emirates
<p>1) Teaching under-graduate studies <i>Courses:</i> Fluid Mechanics, Water resources management, Groundwater hydrology, Hydraulics engineering.</p>			
09/2007	07/2008	Assistant Professor	United Arab Emirates University, United Arab Emirates

Main duties and related achievements

1) Teaching in Bachelor and Master programs:

- BS Degree: subjects taught are Special topics in water resources, Environmental engineering, Fluid mechanics, Applied physics for engineering and Applied mathematics for engineering.
- Master Degree in water resources: subjects taught are Special Topics on Groundwater Management, and Industrial Seminars animated by field experts at the national level.
- Master Degree in Environment Science: subjects taught are Advanced Environment Engineering (and Air pollution control and risk assessment -not in curriculum but requested by my MS students-).

2) Research projects:

- Wrote three research proposals. Two out of the three proposals were externally funded, namely "Groundwater recharge from dam" and "decision support system for groundwater modeling and management".
- With the later project I also secured a Ph.D. scholarship for one student to study at UAE University.

3) Supervised BS and Master graduation theses:

- one Master degree thesis on "Analysis and Optimization of water supply systems"; and
- one undergraduate thesis on "groundwater modeling and recharge".

4) Administrative jobs including participation in organizational and scientific committees.

- Member of the Applied Mathematics Steering Committee.
- Member of the Post-Graduation Scientific Committee
- Assisted the management of the two Master degree programs in Water Resources and in Environment Engineering.
- Served the committee for curriculum reform to acquire ABET-accreditation, and Textbook Review Committee, along other administrative duties as required by the Faculty of Engineering.

College and Department Award

- Awarded “99% of excellence” in teaching and curriculum innovation using advanced technologies; and “95% of excellence” for research fund raising, from the Chair of the Department of Civil and Environment Engineering, UAE University.
- Promoted Chairperson of the College Applied Physics Steering Committee after 4 months of service.
- Co-Author to write the Proposal for Dam Recharge Assessment project in UAE.
- Made several field visit to water infrastructure in UAE, participated to GCC joint research workshops, provided consultancy to the UAE Ministry of Agriculture on ground water recharge of new projects.

03/ 1999	04/ 2000	Post Doctoral Scholar	Kyushu University, Japan
Research and Teaching assistant <ol style="list-style-type: none"> 1) Main duty was to apply Artificial Intelligence methods to the management of a multi-resources system in Fukuoka City Japan. The research outcome is published in the Journal of Hydrologic Processes Vol. 16, pp. 2189-2208. 2) Teaching tutorials of applied mathematics to undergraduate students 			
09/ 1990	08/ 1995	Lecturer (Prior to Ph.D.)	Ecole Nationale Polytechnique d’Alger (ENP), Department of Hydraulics Engineering, 10 Avenue Hassan Badi, Algiers, Algeria
<ol style="list-style-type: none"> 1) Teaching under-graduate studies <i>Courses:</i> Fluid Mechanics, Water resources management, Surface hydrology, Hydraulics engineering, 2) Student advising and supervision of capstone projects: 			

6. List of Publications and Research Activities

Book Chapters:

1. **Kawamura, A. and Merabtene, T. (2015):** Chapter 14: Evolutionary Computing in Hydrology (Genetic Algorithm). Handbook of Applied Hydrology, Mc GrawHill, Edt., ISBN 92-3-104006-5.
2. **Book Chapters: Contributing Author (2006),** “UN World Water Development Report 2 (WWDR-2), BERGHAHN BOOKS, ISBN 92-3-104006-5.
 - a. **Chapter 10:** Managing Risks, and
 - b. **Chapter 14:** TCASE Studies: Water A Shared Responsibility,
3. Rania Abdel Khaleq, Mohamed J. Abdulrazzak, Zafar Adeel, Aziza Akmouch, Abdelrahman Al-Tamimi, Khadija Darmane, Jauad El-Kherraz, Norreddine, Ghaffour, Mukhtar Hashemi, Shoaib Ismail, Mazda Kompanizare, **Tarek Merabtene**, Walid Saleh, Raya Marina Stephan, and Faisal Taha: **(2012):** WANA Water Policy Brief on Regional Solutions for Water Scarcity in West Asia and North Africa. *This policy brief has been published and adopted by WANA Countries during the 6th World Water Forum.*

Technical Reports:

1. Tanaka, S., Takeuchi, K., Terakawa, A., Tokioka, T., Rabindra, O., Yoshitani, J., Takemoto, N., **Merabtene, T.**, Hapuarachchi, P., Fukami, K., Imamura, H., Inomata, H., Pathirana A., **(2006):** **UNESCO-ICHARM Strategies and Action Plan** for 2006-2008. *Technical Note of PWRI No. 4039*, ISSN 0386-5878, 75p.
2. Yoshitani, J., Takemoto, N., **Merabtene, T.**, **(2006):** Factor analysis of water-related disasters in Bangladesh. *Technical Note of PWRI No. 4068*, ISSN 0386-5878, 75p.
3. Yoshitani, J., Takemoto, N., **Merabtene, T.**, **(2006):** Factor analysis of water-related disasters in The Philippines. *Technical Note of PWRI No. 4068*, ISSN 0386-5878, 78p.
4. Yoshitani, J., Takemoto, N., **Merabtene, T.**, **(2006):** Factor analysis of water-related disasters in Sri Lanka. *Technical Note of PWRI No. 4066*, ISSN 0386-5878, 123p.
5. **Merabtene, T.** and Yochitani, J., **(2005):** Technical Report on the Global Trends of Water-related Disasters, *Technical Note of PWRI No. 3985*, ISSN 0386-5878, p. 169.

The above technical note can be downloaded from: http://www.icharm.pwri.go.jp/publication/technical_note.html

Journal papers:

1. **Merabtene T., 2013:** Methodology to Asses Policy Effectiveness and Valorize Cost Efficient of Water Development Projects, **Background Paper of the Arab Water Report: Water Governance in the Arab Region**, United Nation Development Programme, ISBN: 978-92-1-16366-4
2. Shanableh, A., **Merabtene, T.**, Omar, M. and Imteaz, M.A., **2011** "Impact of Surface Ocean Acidification on the CO2 Absorption Rate", *International Journal of Global Warming*, Vol. 3, No. 1–2, pp. 163–172.
3. Mahdi T., **Merabtene T.**, **2010**, "Automated numerical analysis tool for assessing potential bank failures during flooding, *Journal of Natural Hazards*, Special Issue on "Modelling of River Hazards" (2010), Vol. 55, pp. 3-14, DOI 10.1007/s11069-010-9570-1.
4. Koreeda N., Nakashima T., Moriyama S., **Merabtene T.**, Jinno K., Kawamura A., Nishiyama K., **2003**, “Applicability of JMA-MSM-GPV to River Basin Risk Management and Disaster Measures,” *JSCE Annual Journal of Hydraulic Engineering*, Vol. 47, pp. 91-96.

5. **Merabtene T.**, Jinno K., Kawamura A., and Olsson J., **2002**, “Risk assessment for optimal drought management of water supply systems using genetic algorithm,” *Journal of Hydrologic Processes*, Vol. 16, pp. 2189-2208.
6. **Merabtene T.**, Jinno K., and Kawamura A., **(1999)**, “Decision support system for optimal drought management of Fukuoka City water resources: Application to the 1994/95 drought conditions,” *JSCE Annual Journal of Hydraulic Engineering*, Vol. 43, pp. 157-162.
7. **Merabtene T.**, Jinno K., Kawamura A., and Olsson J., **(1998)**, “Drought management of water supply systems: A decision support system approach,” *Journal of the Faculty of Engineering, Kyushu University*, Vol. 58(4), pp. 183-197.
8. **Merabtene T.**, Jinno K., Kawamura, A., and Matsunaga, T., **(1997)**, “Interactive user interface for rainfall-runoff analysis by tank model,” *Journal of the Faculty of Engineering, Kyushu University*, Vol. 57(3), pp. 107-120.

Conference Papers:

1. **Merabtene, T.**, Siddique, M., and Shanableh, A., **(2015)**: Review of Engineering Programs Towards Sustainable Future of Water Resource Engineering and Management in UAE. In: Proceedings of the Joint 7th IFEE and 3rd TSDIC, 17-19 March, 2015, Sharjah, UAE (Ref. # 89).
2. Siddique, M., Ventakachalam, S., and **Merabtene, T.**, **(2015)**: Improving The Learning Experience Of Engineering Students Through Various Methods Of Homework. In: Proceedings of the Joint 7th IFEE and 3rd TSDIC, 17-19 March, 2015, Sharjah, UAE (Ref. # 85).
3. Barakat, S., Altoubat, S., Maalej, M., **Merabtene, T.**, and Al-Ruzouq, R., **(2015)**: Program Assessment -National Standards (Qfemirates) Vs. International Standards (Abet) -The Master Of Science In Civil Engineering (Msce) Program At The University Of Sharjah As Case Study. In: Proceedings of the Joint 7th IFEE and 3rd TSDIC, 17-19 March, 2015, Sharjah, UAE (Ref. # 86).
4. Radeef, W., Shanableh, A., **Merabtene, T.** **(2015)**: “Comparison of Biogas Production from Sludge Mixed with Raw Date Seeds and Oil-Extracted Date Seeds”, In: Proceedings of the Joint 7th IFEE and 3rd TSDIC, 17-19 March, 2015, Sharjah, UAE (Ref. # 97).
5. Radeef, W., Shanableh, A., **Merabtene, T.** **(2015)**: “Biogas Production through Co-digestion of Date Palm Seeds and Wastewater Treatment Sludge”, In: Proceedings of the 3rd International Conference on Water, Energy, and the Environment, 24-26 Mar.2015 Sharjah, UAE (Ref. # 54)
6. Shanableh A., Imteaz M., **Merabtene T.**, and Ahsan A., **(2012)**: “A Framework for Reducing Water Demand in Multi-Storey and Detached Dwellings in the United Arab Emirates”, Proceedings of 'Building the water sensitive community', the 7th International Conference on Water Sensitive Urban Design (WSUD 2012), Melbourne, Australia, 21-23 February 2012.
7. **Merabtene T.**, Gokhan Y. A., **(2011)**: “Flood disasters in the MENA Region: Challenges and Opportunities”, International Conference on Geo-information for Disaster Management (GI4D), Antalya, Turkey, 2011. Paper Online at: <http://www.isprs.org/proceedings/XXXVIII/GI4DM/PDF/OP57.pdf>
8. **Merabtene T.**, **(2010)**, “Supranational Policy Imperatives: Innovations to Mainstreaming Water Scarcity in the Policy Agenda of WANA region.”, WANA Forum Consultation Workshop on Rethinking Policy to Cope with Water Scarcity in WANA region, Jordan, Aman. Paper online at: <http://www.slideshare.net/WANAforum/supranational-policy-imperatives-tarek-merabtene>.
9. **Merabtene T.**, Yoshitani, J. Shanableh A., **(2009)**: “Risk indicators to Assess Policy Effectiveness in Flood Risk Management”, 3rd WFEO-JFES-JSCE Joint International Symposium on Disaster Risk Management, September 3rd 2009 in Fukuoka, Japan.

10. Shanablah A., **Merabtene T.**, Omer M., (2009), "Impact of Surface Ocean Acidification on the CO₂ Absorption rate", Global Conference on Global Warming 2009, Istanbul, Turkey.
11. **Merabtene T.**, (2007), "WWAP Case Studies and Capacity Building", Invited paper, Proceeding of the 3rd Southeast Asia Water Forum, 22nd - 24th October 2007, Kala Lumpur, Malaysia.
12. Junichi Y. and **Merabtene T.**, (2006), "Toward Sustainable Integrated Flood Management", Proceeding of the 4th Mekong Annual Flood Forum, May 2006, Cambodia.
13. **Merabtene T.**, Yoshitani J., and Pathirana A., (2006), "Status of Water Disaster Databases and Limitations for Planning.", Proceeding of the International Symposium on Managing Water Supply for Growing Demand, International Hydrologic Program (IHP), Bangkok, Thailand. 16-20 October 2006, pp. 125-131.
14. Terakawa A., Yoshitani J., Ikeda T., and Kuribayashi D., **Merabtene T.**, (2005), "Sustainable Development and Emerging Research Programmes in Flood Hazard Mitigation and Risk Management", Proceeding of the Conference on Monitoring, Prediction, and Mitigation of Water-related Disasters (MPMD), January 12-15 , pp.349-354.
15. **Merabtene T.**, Junichi Y., Kuribayashi D., (2004), "Managing Flood and Water-related Risks: A Challenge for the Future," Proceeding of the 2nd Conference of Asia Pacific Association of Hydrology and Water Resources, Vol. 2, pp.756-787.
16. **Merabtene T.**, Junichi Y., and Kuribayashi D., (2004), "Flood Risk Index: A Global Indicator for the Assessment of Flood Mitigation Measures," 2nd United Nation Expert Group Workshop on Risk Management, February 26-29, WMO, Geneva, Switzerland. [i.e., Selected Indicator for the Risk Chapter of the second World Water Development Report (WWDR)].
17. **Merabtene T.**, Junichi Y., Kuribayashi D., (2004), "Assessment of policy effectiveness in flood mitigation measures: Japan Case Study", Report of the Special Session on Policy Management, 2nd Conference of the Asia Pacific Association on Hydrology and Water Resources Conference, Suntec City, Singapore.
18. Kawamura A., Jinno K., and **Merabtene, T.**, (2001), "Decision support system for the water supply system in Fukuoka, Japan", Proceeding of Korea Water Resources Association, pp.15-24.
19. Olsson J., Uvo C.B., **Merabtene T.**, Kawamura A., and Jinno K., (2000), "Estimating basin rainfall and runoff from atmospheric circulation: a case study in Kyushu Island," Western Pacific Geophysics Conference, Proceeding of Eos Trans. AGU, 81(22), H51B-08, Tokyo, Japan.
20. **Merabtene T.**, Jinno K., and Kawamura A., (1999), "Development on Integrated decision support system for the water supply system in Fukuoka City, Japan," Handbook & Proceedings of the Water 99 Joint Congress, Vol. 1, pp. 341-347.
21. **Merabtene T.**, Jinno K., and Kawamura A., (1998), "Development of a risk assessment decision support system for optimal control of water supply systems," a **3rd Prize winning Paper**, Proceeding of Award-Winning Papers of Int. Water Supply Symposium in Tokyo'98, pp. 105-112.
22. **Merabtene T.**, Jinno K., and Kawamura A., (1998), "Integrated decision support system for drought management of water supply systems," Proceeding of the 11th Congress of the Asia and Pacific Division of the International Association for Hydraulic Research (IAHR-APD), Jack-Jakarta, Indonesia, pp. 109-118.
23. **Merabtene T.**, Jinno K., and Kawamura A., (1997), "Decision support system for the water resources management," Proceeding of the 5th Japan Symposium on Water Resources, Tokyo, Japan, pp. 461-466.

<u>Invited Talks and Participation to Experts Groups Seminars and Workshops:</u>	
1. Apr. 2015	Invite delegate: Middle East Smart Landscape Summit 2015
2. Nov. 2014	Invite delegate: Arab Future Cities Summit AFCSD2014, Dubai,10-11 Nov. 2014, -
3. May. 2014	Invite delegate: Middle East Smart Landscape Summit, 2014
4. June 2014	Key-Note Speaker and Round table Chair: Water Management in Oil and Gas conference (8-11 June, Abu Dhabi, 2014),
5. Mar. 2014	Key-Note Speaker: Environmental Management Strategies in Arab Countries, Hamdan Bin Mohammed Smart University, Dubai, 2 nd March 2014.
6. Nov. 2013	Invite Speaker and Author: Water Governance in the Arab Region: Managing Scarcity and Securing the Future, Manma, Al Bahrain, 27 -29 Nov. 2013
7. Feb. 2011	Invited expert, WANA Forum Consultation meeting on the Challenges of Water Scarcity in WANA Region, Aman, Jordan, 22 to 24 Feb. 2011.
8. Feb. 2008	Invited expert, 2nd Kickoff meeting of the World Water Forum, Istanbul, Turkey.
9. Jul. 2007	2nd Governing Council Meeting of the Asia Pacific Water Forum, National Water Agency, Singapore.
10. Jul. 2007	Second Expert Group Meeting for Disaster Management Theme of the Asia Pacific Water Forum, Asian Development Bank, Manila, The Philippines.
11. Mar. 2007	Invited expert, 1st Kickoff meeting of the, 18 to 20 March, 2007, Istanbul, Turkey.
12. Mar. 2007	Chairperson, "Session 5 River Basin Flood Management", The International Congress on River Basin Management, 22 to 24 March, 2007, Antalya, Turkey. .
13. Feb. 2007	First Meeting of the Governing Council of the Asia Pacific Water Forum (APWF), PUB National Water Agency, Feb.21-22, Singapore.
14. Feb. 2007	First Expert Group Meeting for Disaster Management Theme of the Asia Pacific Water Forum, Asian Development Bank, Manila, The Philippines.
15. Feb. 2007	Invited speaker "Hydrology delivering Earth System Science to Society", HESSS Conference, Feb.28-Mar.2, Tsukuba, Japan.
16. Nov. 2006	First Coordination Meeting for Theme B: Disaster Management of the Asia Pacific Water Forum, Asian Development Bank, Manila, The Philippines.
17. Sep. 2006	UNESCO-ICHARM delegate, Launching Ceremony of the Asia Pacific Water Forum (APWF), and expert group meeting of the APWF Disaster Management Theme, Manila, The Philippines.
18. Mar. 2006	Delegate of the UNESCO_ICHARM, 4th World Water Forum, Mexico.
19. Oct. 2007	Session, the 3rd Southeast Asia Water Forum, Kala Lumpur, Malaysia.
20. Sep. 2006	Launching Ceremony of the Asia Pacific Water Forum (APWF), and expert group meeting of the APWF Disaster Management Theme, Manila, Philippines.
21. Mar. 2006	4th World Water Forum, Mexico. Delegate of the International Centre for Water Hazard and Risk Management (ICHARM) and Delegate of Japan Ministry of Land, Transport and Infrastructure.
22. Oct. 2005	Invited speaker and rapporteur, "Session on Risk Management and Mitigation for Flood and Sediment related Disasters", The 14th Conference on Public Works Research and Development in Asia", Japan National Research Institute for land and Infrastructure, Tsukuba, Japan.
23. Oct. 2005	Session organizer, "Special Session on Flood Forecasting and Warning", The 14th Conference on Public Works Research and Development in Asia", Japan National Research Institute for land and Infrastructure, Tsukuba, Japan.
24. Nov. 2005	Managing Risk Expert Group Meeting, World Meteorological Organization, Geneva, Switzerland.
25. Jan. 2005	Managing Risk Expert Group Meeting, UN International Strategy on Disaster Reduction, Germany.

26. Apr. 2005	UN Water Expert Groups Meeting on Indicators for WWDR 2. United Nations, Switzerland.
27. Nov. 2004	International Seminar on Water Resources Environmental Impact Assessment, Tokyo, Japan.
28. Nov. 2004	World Water Assessment Programme Synthesis Workshop and Expert Group Meeting for Chapters and Indicators Development, Nov. 8-9, UNESCO Paris.
29. Sep. 2004	Preparatory meeting for the creation of US-Japan Water-Panel under the UNJR intergovernmental Scientific Programme, US Embassy, Japan.
30. Jul. 2004	1st Preparatory Meeting for the establishment of the International Flood Initiative/Programme, PWRI, Tsukuba, Japan.
31. Mar. 2004	Status Review Workshop on Preparation of Chapters, Indicators and Case Studies for the production of 2nd WWDR, Organized by the UNESCO-WWAP Secretariat, Paris, France.
32. Nov. 2003	1st United Nation Expert Group Workshop on the development of indicators for the 2nd WWDR report, Organized by UN-European Commission for the Environment, Switzerland.
33. Oct. 2003	International Hydrological Programme, 11th IHP Regional Steering Committee, meeting for Southeast Asia and Pacific, October 2003, Fiji.
34. Aug. 2003	1st General Assembly of IFNet, Water Week in Stockholm, Sweden.
35. Mar. 2003	3rd World Water Forum (WWF.3), Japan, Senior Officer for WWF 3 Secretariat
36. Mar. 2003	WWF 3 Ministerial Conference, WWF 3 Secretariat Officer
37. Dec. 2002	The 2nd Preparatory Meeting on IFNet, Kyoto, Japan
38. Dec. 2001	UAE Water and Environment Research Strategic Plan Meeting, Abu Dhabi

Research Grants:

Period	Research Title and Institute	Grant
2010/2012	Analysis of EM-DAT Disaster Database for Development of Policy Indicators to Assess the Effectiveness of Water Disaster Management Policies.	Research cooperation between Tarek Merabtene (CEE-UoS) and Center for Research on the Epidemiology of Disasters, CRED, University of Louvain, Belgium,
2009 / 2012	Sea water intrusion and the effects on groundwater quality and desalination processes considering the effects of climate change and sea level rise.	British Council for Research Cooperation between Exeter Univ., UAE Univ. & Sharjah Univ.
April 2006 to March 2009	PI: World Water Assessment Programme, UNESCO-ICHARM, Japan.	Ministry of Land, Transport, and Infrastructure (MLIT), Japan.
April 2005 to March 2007	Regional Coordinator of “Theme B: Disaster Management”, Asia Pacific Water Forum.	Japan Water Forum and Asian Development Bank (ADB)
April 2005 to March 2007	Manager and Moderator of the Weblog Forum for “Theme B: Disaster Management”, Asia Pacific Water Forum, see: http://www.apwf2.org/weblog/disaster/archives/200702/00059.php#more .	Japan Water Forum and Asian Development Bank (ADB)
April 2005 to March 2007	Writing of the Policy Recommendation Paper for “Theme B: Disaster Management”, Asia Pacific Water Forum, , See http://www.apwf2.org/weblog/disaster/category/concept_paper.php	Japan Water Forum and Asian Development Bank (ADB)

April 2006 to March 2009	Co-PI: Food risk and Projects: Development of Policy Measurement Index	Ministry of Land, Transport, and Infrastructure (MLIT), Japan.
April 2004 to March 2006	PI: Analysis of emerging trends and issues in water resources and environmental conditions in Japan river basins, UNESCO-ICHARM, Japan.	Ministry of Land, Transport, and Infrastructure (MLIT), Japan.
Dec. 2001 to August 2002	Co-PI, Assessment of groundwater recharge function of Al-Bih, Al-Tawiyen & Ham Dams using numerical models. UAE University, United Arab Emirates	Former: Ministry of Agriculture & Fisheries, UAE
April 1999 to March 2000	PI: Drought risk decision support system for the Fukuoka City water resources management. Project.No: IES 15, 1999, Kyushu University, Japan.	Ministry of Education, Culture, Sports, Science and Technology (MEXT)
June 1992 to June 1994	Co-PI: Simulation of hydrometeorological parameters by the principal components analysis method. Ecole Nationale Polytechnique (ENP), Algeria.	Ministry of Education and Scientific Research, Algeria
Sep. 1990 to Sep. 1992	Co-PI: Development of a stochastic model for water resources management. Project No: JEV 19052. Ecole Nationale Polytechnique (ENP), Algeria.	Former Algerian Ministry of Environment and Forest

7. Other Relevant Information

Membership of Professional Organizations

- World Federation of Engineering Organization (WFEO), Committee Engineering and the Environment (WFEO-CEE), Task Group on Disaster Risk Management (DRM/WFEO-CEE).	2008 to date
- Sharjah Environmental Awareness Committee, Delegate of Sharjah University.	2008-2010
- Japan Society of Civil Engineers, JSCE Professional Member	1996-2007
- International Association of Hydraulic Engineering and Research (IAHR),	2004-2010
-International Association of Hydrological Sciences (IAHS/AISH), member 2004.	2004-2009

Computer Skills:

- . Software development: Visual Basic and C++
- . Programming language: Matlab, Fortran, Visual Basic, and C.
- . Spreadsheet and Word-processing: Microsoft office packages.
- . E-learning: Blackboard, Computer assisted teaching techniques.

Professional and social contributions (Volunteer work)


- **2008-2010:** Sharjah Environmental Awareness Committee, Delegate of UoS.
- **2004 - Present:** UN-Expert Group on Risk Management
- **2001 - 2003:** WWF3- Officer and Water Voice Messenger, Certificate No 00111
- **2004- 2006:** PTA Chairperson, K International School, Tokyo, Japan.
- **July 1997:** Participation to the 11th Chikugo River Festival by creating a Computer Assisted Rainfall-Runoff Simulation Model that can be manipulated by children. The work was reported by Nishi Nihon (East Japan) Newspaper, July 1997, page 25.

Languages:

Written Professional, and Reading and Speaking Fluency
Arabic, English, French, and Japanese

Declaration:

I, the undersigned, declare that the information included in this Curriculum Vitae are true and can be verified by providing, whom it may concern, with all authentic supporting documents and/or using online scholar search. References and details of duties and achievements for each position hold in Japan, the United Arab Emirates and Algeria are available upon request.

A handwritten signature in black ink, appearing to read 'Tarek Merabtene', written in a cursive style.

Dr. Tarek Merabtene, *Sharjah, UAE, 08 February 2015*