


# CURRICULUM VITAE

Tarek MERABTENE

طارق مرابطين

## 1. Personal and Contact Information

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

## 2. Academic Background

<u>Title:</u>	<u>Attend period</u>		<u>University/Institute</u>	<u>Major &amp; Thesis Title</u>
	<u>Form</u>	<u>To</u>		
<b>Ph. D.</b>	<b>April 1996</b>	<b>March 1999</b>	<b>Kyushu University</b> Institute of Environmental Systems, College of Engineering. Fukuoka, <b>Japan</b>	<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
<b>Master Degree</b>	<b>Sep. 1988</b>	<b>June 1990</b>	<b>Ecole Nationale Polytechnique (ENP)</b> Algiers, <b>Algeria</b>	<u>Major:</u> Civil Engineering <u>Minor:</u> Water resources and hydraulics Engineering. <u>Thesis title:</u> Analysis and optimization of Water Supply Networks.
<b>State Engineer</b>	<b>Sep. 1983</b>	<b>June 1988</b>	<b>Ecole Nationale Polytechnique (ENP)</b> Algiers, <b>Algeria</b>	<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. Professional and Industrial Experience**

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

<b>From:</b>	<b>To:</b>	<b>Position</b>	<b>Institution</b>
03/2018	Present	Director of International Affairs	<b>University of Sharjah Office of International Relations</b>
01/2004	08/2007	Chief Scientist & Project Manager	<b>UNESCO International Centre for Water Hazard and Risk Management (UNESCO-ICHARM),</b> Public Works Research Institute (PWRI), Tsukuba Science City, <b>Japan.</b> ( <a href="http://www.icharm.pwri.go.jp">www.icharm.pwri.go.jp</a> )
07/2002	01/2004	Principal Engineer	<b>Institute of Hydrology and Water resources, co. ltd., Tokyo, Japan</b> Dispatched to <b>CTI Engineering Co., Ltd.</b> <b>River and Water Resources Department</b>
04/2000	08/2001	Senior Engineer	<b>Construction Technique Institute (CTI) Eng., Co., Ltd.,</b> River and Water Resources Department, 3-21-1 Nihonbashi Hama-cho Chuo-ku, Tokyo 103-8430, Japan. <b>Phone:</b> +81 (3) 3638 – 2561, <b>Fax:</b> +81 (3) 3638 – 2560, ( <a href="http://www.ctie.co.jp/english/index.html">http://www.ctie.co.jp/english/index.html</a> )

### **4. Academic Experience**

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

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

## **5. List of Publications and Research Activities**

### **Books:**

- 1- A. Kawamura and T. Merabtene. (2017). “Chapter 13: Evolutionary Computing (Genetic Algorithm): Chow’s Handbook of Applied Hydrology.” Singh Edt. McGraw-Hill Publishing, ISBN: 978-0-07-183509-1.
- 2- **Book Background Paper: Merabtene T. (2013):** Methodology to asses Policy Effectiveness and Valorize Cost Efficient of Water Development Projects, **Water Governance in the Arab Region**, United Nation Development Programme. Publishing, ISBN: 978-92-1-16366-4.
- 3- **WANA Water Policy Brief on Regional Solutions for Water Scarcity in West Asia and North Africa (2012).** *Authors:* 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. (Authors name in Alphabetic order). **Also: Member of the consultancy and editorial board of the policy brief**
- 4- **Book Chapters: Lead 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:** Case Studies: Water A Shared Responsibility

### **Technical Report:**

1. Yoshitani J., Takamoto , **Merabtene T. (2007).** Factor Analysis of flood disasters in Bangladesh. *PWRI Publications*, Tsukuba, Japan, ISSN 0386-5878, No. 3963.
2. Yoshitani J., Takamoto , **Merabtene T. (2007).** Factor Analysis of flood disasters in Sri Lanka. *PWRI Publications*, Tsukuba, Japan, ISSN 0386-5878, No. 3964.
3. Yoshitani J., Takamoto , **Merabtene T. (2007).** Factor Analysis of flood disasters in Philippines. *PWRI Publications*, Tsukuba, Japan, ISSN 0386-5878, No. 3965.
4. **Merabtene T., A. Pathera (2006).** Proceedings of the International Workshop on Water Disaster Risk Management. *PWRI Publications*, Tsukuba, Japan, ISSN 0386-5878, No. 4278.
5. **Merabtene T., Junichi Y., Ikeda K., Kuribayashi D., (2006).** Proceedings of the International Workshop on Water Hazard and Risk Management. *PWRI Publications*, Tsukuba, Japan, ISSN 0386-5878, No. 3985.
6. **Merabtene T., Junichi Y., Onishi T., (2006).** Proceedings of the International Workshop on Flood Management in Asia. *PWRI Publications*, Tsukuba, Japan, ISSN 0386-5878, No. 3992.
7. **Merabtene T. and Junichi Y., (2005).** Technical Report on Global trends of Water-related Disasters. *PWRI Publications*, Tsukuba, Japan, ISSN 0386-5878, No. 3993.
8. **Merabtene T., Jinno K., and Kawamura A., (1999).** Drought Risk Management and Decision Support System for the Water Resources System in Fukuoka City. *Kyushu University Publication*, Ref: IES No. 15, 1999.

**Journal papers:**

1. Numerical modeling of liquid spills from the damaged container and collision of two rising bubbles in partially filled enclosure using modified Volume-Of-Fluid (VOF) method Engineering Analysis with Boundary Elements, **2023**, vol. 154, pp 83-121.
2. Parameter Estimation and Assessment of Infiltration Models for Madjez Ressoul Catchment, Algeria. Dahak, A., Boutaghane, H., **Merabtene, T.** *Water (Switzerland)*, **2022**, 14(8), 1185.
3. Numerical simulation of merging of two rising bubbles with different densities and diameters using an enhanced Volume-Of-Fluid (VOF) model. Garoosi, F., **Merabtene, T.**, Mahdi, T.-F. *Ocean Engineering*, **2022**, 247, 110711.
4. Rainfall trends and intensity-frequency-duration relationships in Sharjah City, UAE., Yilmaz, A.G., Shanableh, A., Merabtene, T., Atabay, S., Kayemah, N., *International Journal of Hydrology Science and Technology*, **2020**, 10(5), pp. 487–503
5. Greywater reuse experience in Sharjah, United Arab Emirates: Feasibility, challenges and opportunities. Shanableh, A., Khalil, M.A., Mustafa, A. Abdallah, M., Idris, A.E., Yilmaz, A., **Merabtene, T.**, Siddique, M., Al-Ruzouq, R., Imteaz, M.A., Darwish, N., Bardan, M.A., Salim, G., (2020), *Desalination and Water Treatment*, Volume 179, March 2020, Pages 211-222.
6. Potential groundwater zone mapping based on geo-hydrological considerations and multi-criteria spatial analysis: North UAE”. Rami Al-Ruzouq, Abdallah Shanableh, **Tarek Merabtene**, Mohsin Siddique, Mohamad Ali Khalil, AlaEldin Idris, Esam Almulla, (2019), *Catena* 173, 511-524.
7. Abdallah Shanableh, Rami Al-Ruzouq, Abdullah Yilmaz, Mohsin Siddique, **Tarek Merabtene**, Monzur Imteaz (2018). Effects of Land Cover Change on Urban Floods and Rainwater Harvesting in Sharjah, United Arab Emirates. *Water (Switzerland)* **2018**, 10(5), 631; <https://doi.org/10.3390/w10050631>. (Jr. IF: 1.832).
8. Siddique M., **Merabtene T.**, and Yoshimitsu Tajima (2017). Wave transformation and hydrodynamic characteristics of wave breaking models coupled with Boussinesq Equations. *Journal of Hydraulic Research Volume 55, 2017 - Issue 6*, <http://dx.doi.org/10.1080/00221686.2017.1289261>. (IF: 1.471).
9. **Merabtene T.**, Siddique M. and Shanableh A. (2016). Assessment of Seasonal and Annual Rainfall Trends and Variability in Sharjah City, UAE. *Advances in Meteorology, Volume 2016, Article ID 6206238, 13 pages*. <http://dx.doi.org/10.1155/2016/6206238>. (Jr. IF: 1.107).
10. Mounir Afilal, **Tarek Merabtene**, Karim Rhofir and Abdelaziz Soufyane. (2016). Decay rates of the solution of the Cauchy thermoelastic Bresse system. *Zeitschrift für angewandte Mathematik und Physik (ZAMP): Applied Mathematics and Physics Journal*, Vol. 33. Article 712. Springer DOI 10.1007/s00033-016-0712-5. (IF: 1.54)
11. Shanableh, A., M. Imteaz, K. Hamad, M. Omar, **T. Merabtene**, M. Siddique. (2016). Potential Impact of Global Warming on Whiting in a Semi-Enclosed Gulf. *International Journal of Global Warming, Volume 13, Issue 3-4, UnderScience Publisher, Switzerland*. <https://doi.org/10.1504/IJGW.2017.087210>. (2013-IF: 0.765).
12. W. Radeef, A. Shanableh, and T. Merabtene. (2016). Impact of Date Palm Seed Size on Biogas Production from Date Seeds/Wastewater Treatment Sludge Mixtures. *Int. J. of Thermal & Environmental Engineering*. Volume 13, No. 1 (2016), pp. 1-6.
13. W. Radeef, A. Shanableh, **T. Merabtene**. (2016). Impact of Date Palm Seed Size on Biogas Production from Date Seeds/Wastewater Treatment Sludge Mixtures. *International Journal of Thermal and Environmental Engineering*. Vol. 13, No. 1, pp. 1-6.

14. **Merabtene, T., Siddique, M., and Shanableh, A., (2016):** Review of Engineering Programs towards Sustainable Future of Water Resource Engineering and Management in UAE. **Chapter in the book of Quality Assurance in Engineering Education. UoS Publication.**
15. Siddique, M., Ventakachalam, S., and **Merabtene, T., (2016):** Improving the Learning Experience of Engineering Students through Various Methods of Homework. **Chapter in the book of Quality Assurance in Engineering Education. UoS Publication.**
16. AL-Ruzouq, R., Shanableh, A., **Merabtene, T. (2015).** Geomatics for mapping of groundwater potential zones in northern part of the United Arab Emirates-Sharjah City. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, 2015, 40(7W3), pp. 581–586.
17. **Merabtene T. (2013):** Methodology to asses Policy Effectiveness and Valorize Cost Efficient of Water Development Projects, **Background Paper, Water Governance in the Arab Region,** United Nation Development Programme. Publishing, ISBN: 978-92-1-16366-4.
18. Shanableh, A., Imteaz, M., **Merabtene, T.,** Ahsan, A. (2012). A framework for reducing water demand in multi-storey and detached dwellings in the united arab emirates. *WSUD 2012 - 7th International Conference on Water Sensitive Urban Design: Building the Water Sensitive Community, Final Program and Abstract Book*, 2012.
19. Merabtene, T., Gokhan, Y.A. (2011). Flood risk management in the mena region: Challenges and opportunities. *Gi4DM 2011 - GeoInformation for Disaster Management*, 2011
20. Shanableh, A., **Merabtene, T.,** Omar, M. and Imteaz, M.A., (2011). Impact of Surface Ocean Acidification on the CO<sub>2</sub> Absorption Rate. *International Journal of Global Warming*. Vol. 3, No. 1–2, pp. 163–172.
21. Mahdi T., **Merabtene T., (2010).** Automated numerical analysis tool for assessing potential bank failures during flooding, *Natural Hazards Journal, Special Issue on "Modelling of River Hazards" (2010)*, Vol. 55, pp. 3-14, DOI 10.1007/s11069-010-9570-1.
22. **Tarek Merabtene,** Junichi Yoshitani. (2006). Water-related Disasters: Trends and Challenges. *Japanese Journal of Risk Analysis*, Vol. 19, Nov. 11-12, 2006.
23. 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. *JSCCE Annual Journal of Hydraulic Engineering*, Vol. 47, pp. 91-96.
24. **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.
25. **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. *JSCCE Annual Journal of Hydraulic Engineering*, Vol. 43, pp. 157-162.
26. A Kawamura, K Jinno, T. Merabtene, (1999). Study on Decision Support System for Management of Water Supply Systems Using Risk Analysis, *水資源研究センター-研究報告*, 31-40
27. **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.
28. **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 Publishing*, Vol. 57(3), pp. 107-120.

29. Development of an Expert system for Tank model by using visual basic, T. Merabtene (1997), 土木学会西部支部研究発表会講演概要集 24, 190-191

## **Conference Papers:**

1. Optimization of a Conceptual Rainfall-Runoff Model using Evolutionary Computing methods. Ahli, Hamad; Merabtene, Tarek; Seddique, Mohsin. Proceedings - International Conference on Developments in eSystems Engineering, DeSEVolume 2021-December, Pages 424 - 431 2021 14th International Conference on Developments in eSystems Engineering, DeSE 2021, Sharjah, UAE.
2. Applying Latent Dirichlet Allocation Technique to Classify Topics on Sustainability Using Arabic Text. Al Qudah Islam, Hashem Ibrahim; Soufyane Abdelaziz; Chen Weisi; Merabtene Tarek. Lecture Notes in Networks and Systems Volume 506 LNNS, Pages 630 - 638 2022 Computing Conference, 2022.
3. Greywater reuse policies and practice in the city of Sharjah, United Arab Emirates, Abdallah Shanableh, Mohamed Abdallah, Rami Al-Ruzouq, **Tarek Merabtene**, Mohsin Siddique, Abdullah Yilmaz, Ghaiath AlMustafa, Mohamad Khalil, Asam Al Mulla, Mayyada Al Bardan, Ghada Salim, Alaeldin Idris, (2018), 10th International Conference on Water Sensitive Urban Design: Creating water sensitive communities (WSUD 2018 & Hydropolis 2018, Australia, Pub. Engineers Australia.
4. Amireche, M., **Merabtene, T.**, Bermad, A., Boutoutaou, D. (2017). Comparative assessment between GR model and tank model for rainfall-runoff analysis using Kalman filter- application to Algerian basins. Conference Paper, MATEC Web of Conferences, 2017, 120, 05006, Open Access
5. Shanableh, A., Al-Ruzouq, R., Siddique, M., ...Yilmaz, A., Imteaz, M. (2017). Impact of urban expansion on potential flooding, storage and water harvesting in the city of Sharjah, United Arab Emirates. MATEC Web of Conferences, 2017, 120, 09007.
6. Maachou, R., Lefkir, A., Merabtene, T., Hamriche, A., Bermad, (2017). Contribution to optimize decision parameters in activated-sludge process using ANFIS model. A. MATEC Web of Conferences, 2017, 120, 05001
7. **Tarek Merabtene** (2017). Emergency Flood Gate Control and Operation Using Fuzzy Logic Controller. International Symposium and Exhibition on Hydro-Environment Sensors and Software (HydroSenSoft 2017), 28 Feb - 3 Mar 2017, Madrid, Spain.
8. Mohamed Amireche, **Tarek Merabtene**, Abdelmalek Bermad and Djamel Boutoutaou (2017). Comparative assessment between GR model and tank model for rainfall-runoff analysis using Kalman filter- application to Algerian basins. Pro. of the Inter. Conf. on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17). MATEC Web of Conferences 120, 05006 (2017). DOI: <https://doi.org/10.1051/mateconf/201712005006>.
9. M. Amireche, **T. Merabtene**, A. Bermad, D. Boutoutaou. (2017). Modélisation de la Relation Pluie Débit par L'utilisation du Filtre de Kalman Applique aux Modelés a Réservoirs (Tank Models) : Application aux Données de Bassins Versants Algériens. Proc. of the Inter. Conf. on African Large Basins Hydrology. [http://armspark.msem.univ-montp2.fr/medfriend/Dakar2016/5-AMIRECHE\\_b.pdf](http://armspark.msem.univ-montp2.fr/medfriend/Dakar2016/5-AMIRECHE_b.pdf)
10. Radia Maachou, Abdelouahab Lefkir, **Tarek Merabtene**, Amel Hamriche and Abdelmalek Bermad (2017). Contribution to optimize decision parameters in activated-sludge process using hybrid ACP-ANFIS Model. The International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17) at the University of Sharjah, Sharjah, United Arab Emirates, April 18th – 20th, 2017.
11. Mohsin Siddique, **Tarek Merabtene**, Abdallah Shanableh and Rami Al-Ruzouq (2015). Numerical study on bottom shear stress under breaking waves. Fifth International Conference on Estuaries and Coasts (ICEC2015), November 2-4, 2015, Muscat, Oman.
12. Shanableh, A., Imteaz, M., Hamad, K., Omar, M., **Merabtene, T.** and Siddique, M., (2015). Potential Impact of Global Warming on Whiting in a Semi-Enclosed Gulf?. In Proceedings of the 2015 Global

- Conf. on Global warming (GCGW2015), (Paper No.: 295-145-2-RV), 24-27 May 2015, Athens, Greece,
13. Barakat, S., Altoubat, S., Maalej, M., **Merabtene, T.**, and Al-Ruzouq, R., (2015): Program Assessment -National Standards (NQF) Vs. International Standards (ABET) -The Master of Science (MSCE) Program at the University of Sharjah as Case Study. In: Proceedings of the Joint 7th IFEE and 3rd TSDIC, (Reference # 86), 17-19/ Mar. 2015, Sharjah University, Sharjah, UAE.
  14. 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, (Ref. # 97), 17-19/ Mar. 2015, Sharjah University, Sharjah, UAE.
  15. R. Al-Ruzouq, A. Shanableh, and **T. Merabtene**, (2015). Geomatics for Mapping of Groundwater Potential Zones in Northern Part of the United Arab Emirates - Sharjah City. *Int. Arch. Photogrammetry Remote Sensing Spatial Inf. Sci.*, XL-7/W3, 581-586, doi:10.5194/isprsarchives-XL-7-W3-581-2015, 11–15 May 2015, Berlin, Germany.
  16. M. Siddique, **T. Merabtene**, A. Shanableh and R. Al-Ruzouq, (2015) "Impact of Climate Change on Long Term Rainfall Trend in UAE and Future Challenges: A Case Study of Sharjah Airport Data". 3rd int. conf. on Global Warming: Food security, 5-7 May 2015, Ras El Khaima, UAE.
  17. W. Radeef, A. Shanableh and **T. Merabtene**, (2015). Biogas Production through Co-digestion of Date Palm Seed and Wastewater Treatment Sludge. In Proceedings of the 3rd International Conference on Water, Energy, and the Environment, (Ref # 54), American University of Sharjah, 24-26 March, 2015, Sharjah, UAE.
  18. **Merabtene T.**, Shanableh A., Mahdi T., (2012). Decision Support System for the Optimal Management of Water Systems under Drought Scenarios. Accepted as Key Note Speaker, *The First International Conference on Water Resources of Al Jabal Al Akhdar: Reality & Prospective*, Al Badya, Libya, June 2012.
  19. Shanableh A., Imteaz M., **Merabtene T.**, and Ahsan A., (2012). A Framework for Reducing Water Demand in Multi-Story 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.
  20. **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>
  21. **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>.
  22. **Merabtene T.**, Yoshitani, J. and Shanableh A., (2009). Risk indicators to Assess Policy Effectiveness in Flood Risk Management. *3rd WFEO-JFES-JSCE Joint International Symposium on Disaster Risk Management*, pp. 32-36, 3rd September 2009, Fukuoka, Japan.
  23. Shanablal A., **Merabtene T.**, Omer M., (2009). Impact of Surface Ocean Acidification on the CO<sub>2</sub> Absorption rate. *Global Conference on Global Warming 2009*, Istanbul, Turkey.
  24. **Merabtene T.**, (2007). WWP Japan Case Studies and Capacity Building. Invited paper, *Proceeding of the 3rd Southeast Asia Water Forum*, 22nd - 24th October 2007, Kala Lumpur, Malaysia.
  25. Junichi Y. and **Merabtene T.**, (2006). Toward Sustainable Integrated Flood Management. *Proceeding of the 4<sup>th</sup> Mekong Annual Flood Forum*, May 2006, Cambodia.



26. Junichi Yoshitani, Tadahiko NaKao, and **Tarek Merabtene**. (2004). A New Mechanism for Sound and Sustainable Integrated Flood Management. *Proceeding of the 4th Annual Mekong Flood Forum*, Siem Reap, Cambodia, 18-19 May 2006, pp. 164-167.
27. **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.
28. 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.
29. **Merabtene T.**, Junichi Y., Kuribayashi D., (2004). Managing Flood and Water-related Risks: A Challenge for the Future. *Proceeding of the 2<sup>nd</sup> Conference of Asia Pacific Association of Hydrology and Water Resources*, Vol. 2, pp.756-787.
30. **Merabtene T.**, Junichi Y., and Kuribayashi D., (2004). Flood Risk Index: A Global Indicator for the Assessment of Flood Mitigation Measures. *2<sup>nd</sup> United Nation Expert Group Workshop on Risk Management*, February 26-29, WMO, Geneva, Switzerland.
31. **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, *2<sup>nd</sup> Conference of the Asia Pacific Association on Hydrology and Water Resources Conference*, Suntec City, Singapore.
32. 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.
33. 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.
34. **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.
35. **Merabtene T.**, Jinno K., and Kawamura A., (1998). Development of a risk assessment decision support system for optimal control of water supply systems. *Proceeding of Award-Winning Papers of Int. Water Supply Symposium in Tokyo '98*, **3rd Prize winning Paper**, pp. 105-112.
36. **Merabtene T.**, Jinno K., and Kawamura A., (1998). Integrated decision support system for drought management of water supply systems. *Proceeding of the 11<sup>th</sup> Congress of the Asia and Pacific Division of the Int. Association for Hydraulic Research (IAHR-APD)*, Jack-Jakarta, Indonesia, pp. 109-118.
37. **Merabtene T.**, Jinno K., and Kawamura A., (1997). Decision support system for the water resources management. *Proceeding of the 5<sup>th</sup> Japan Symposium on Water Resources*, Tokyo, Japan, pp. 461-466.

#### **Invited Talks and Participation to Experts Groups Seminars and Workshops:**

1. Feb.2011	Invited expert, WANA Forum Consultation meeting on the Challenges of Water Scarcity in WANA Region, Aman, Jordan, 22 to 24 Feb. 2011.
2. Feb.2008	Invited expert, 2nd Kickoff meeting of the World Water Forum, Istanbul, Turkey.
3. Jul.2007	2nd Governing Council Meeting of the Asia Pacific Water Forum, National Water Agency, Singapore.

4. Jul.2007	Second Expert Group Meeting for Disaster Management Theme of the Asia Pacific Water Forum, Asian Development Bank, Manila, The Philippines.
5. Mar.2007	Invited expert, 1st Kickoff meeting of the, 18 to 20 March, 2007, Istanbul, Turkey.
6. Mar.2007	Chairperson, "Session 5 River Basin Flood Management", The International Congress on River Basin Management, 22 to 24 March, 2007, Antalya, Turkey. .
7. Feb.2007	First Meeting of the Governing Council of the Asia Pacific Water Forum (APWF), PUB National Water Agency, Feb.21-22, Singapore.
8. Feb.2007	First Expert Group Meeting for Disaster Management Theme of the Asia Pacific Water Forum, Asian Development Bank, Manila, The Philippines.
9. Feb. 2007	Invited speaker "Hydrology delivering Earth System Science to Society", HESSS Conference, Feb.28-Mar.2, Tsukuba, Japan.
10.Nov. 2006	First Coordination Meeting for Theme B: Disaster Management of the Asia Pacific Water Forum, Asian Development Bank, Manila, The Philippines.
11.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.
12.Mar.2006	Delegate of the UNESCO_ICHARM, 4th World Water Forum, Mexico.
13.Oct. 2007	Session, the 3rd Southeast Asia Water Forum, Kala Lumpur, Malaysia.
14.Sep. 2006	Launching Ceremony of the Asia Pacific Water Forum (APWF), and expert group meeting of the APWF Disaster Management Theme, Manila, Philippines.
15.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.
16.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.
17.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.
18.Nov.2005	Managing Risk Expert Group Meeting, World Meteorological Organization, Geneva, Switzerland.
19.Jan.2005	Managing Risk Expert Group Meeting, UN International Strategy on Disaster Reduction, Germany.
20.Apr.2005	UN Water Expert Groups Meeting on Indicators for WWDR 2. United Nations, Switzerland.
21.Nov.2004	International Seminar on Water Resources Environmental Impact Assessment, Tokyo, Japan.
22.Nov.2004	World Water Assessment Programme Synthesis Workshop and Expert Group Meeting for Chapters and Indicators Development, Nov. 8-9, UNESCO Paris.
23.Sep.2004	Preparatory meeting for the creation of US-Japan Water-Panel under the UNJR intergovernmental Scientific Programme, US Embassy, Japan.

24.Jul.2004	1st Preparatory Meeting for the establishment of the International Flood Initiative/Programme, PWRI, Tsukuba, Japan.
25.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.
26.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.
27.Oct.2003	International Hydrological Programme, 11th IHP Regional Steering Committee, meeting for Southeast Asia and Pacific, October 2003, Fiji.
28.Aug. 2003	1st General Assembly of IFNet, Water Week in Stockholm, Sweden.
29.Mar.2003	3rd World Water Forum (WWF.3), Japan, Senior Officer for WWF 3 Secretariat
30.Mar.2003	WWF 3 Ministerial Conference, WWF 3 Secretariat Officer
31.Dec. 2002	The 2nd Preparatory Meeting on IFNet, Kyoto, Japan
32.Dec. 2001	UAE Water and Environment Research Strategic Plan Meeting, Abu Dhabi

### **Research Grants:**

<b>Period</b>	<b>Research Title and Institute</b>	<b>Grant</b>
2018/2021	Development of Conceptual and Physically based Rainfall-Runoff Models for selected arid ungagged basins of United Arab Emirates (UAE).	UoS Research Grant: AED 80,000
2016-2017	Development of Intensity Duration Frequency curve of the Emirates of Sharjah	UOS Research Grant: AED 20,000
2016-2019	<ol style="list-style-type: none"> <li>1: Assessment of water consumption patterns for various purposes and methods and techniques of rationalization of consumption</li> <li>2: Assessment of Groundwater in Sharjah using GIS and Remote Sensing</li> <li>3: Grey-water Reuse Policies and Practice in the City of Sharjah, United Arab Emirates</li> <li>4: Inspection of water systems and certification of their performance</li> <li>5: Development of Sustainable University Campus</li> </ol>	SEWA – UOS Collaborative Water Project: AED 2,000,000. Tasks: <ul style="list-style-type: none"> <li>• General Coordinator of the SEWA-UOS water project</li> <li>• PI of Project</li> <li>• Co-PI in other Projects</li> </ul>
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 Epidemiology of Disasters, 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 Mar.2009	PI: World Water Assessment Programme, UNESCO-ICHARM, Japan.	Ministry of Land, Transport, and Infrastructure (MLIT), Japan.
Apr. 2005 to Mar.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: <a href="http://www.apwf2.org/weblog/disaster/archives/200702/000059.php#more">http://www.apwf2.org/weblog/disaster/archives/200702/000059.php#more</a> .	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 <a href="http://www.apwf2.org/weblog/disaster/category/concept_paper.php">http://www.apwf2.org/weblog/disaster/category/concept_paper.php</a>	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-Tawiyaen & Ham Dams using numerical models. UAE University, UAE.	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

## **6. Other Scientific Activities**

### **Membership of Professional Organizations**

2008 to date	World Federation of Engineering Organization (WFEO), Committee Engineering and the Environment (WFEO-CEE), Task Group on Disaster Risk Management (DRM/WFEO-CEE).
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2008-2010	Sharjah Environmental Awareness Committee, Delegate of Sharjah University.
1996-to date	Japan Society of Civil Engineers, JSCE member since 1996.
2004-2010	International Association of Hydraulic Engineering and Research (IAHR),
2004-2009	International Association of Hydrological Sciences (IAHS/AISH), member 2004.
2004 - 2014	UN-Expert Group on Risk Management
2001 - 2003	WWF3- Officer and Water Voice Messenger, Messenger Certificate: 00111
2008-2010	Sharjah Environmental Awareness Committee, Delegate of Sharjah University
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 success of my work was reported by Nishi Nihon (East Japan) Newspaper, July 1997, page 25.

## 7. General Skills

<b>Computer Skills:</b>	<ul style="list-style-type: none"> <li>. Software development: Visual Basic and C++</li> <li>. Programming language: Matlab, Fortran, Visual Basic, and C.</li> <li>. Spreadsheet and Word-processing: Microsoft office packages.</li> <li>. E-learning: Blackboard, Computer assisted teaching techniques.</li> <li>. WaterGems: Professional Consulting expertise</li> <li>. StormGems: Professional Consulting expertise</li> <li>. Culvert Master: Professional Consulting expertise</li> <li>. TUFLOW: Professional Consulting expertise</li> </ul>
<b>Languages:</b>	<p><b>Arabic:</b> Mother Tongue. Writing, Reading and Speaking Professional level</p> <p><b>French:</b> Education language. Writing, Reading and Speaking Professional level</p> <p><b>English:</b> Professional language. Writing, Reading and Speaking Professional level, and</p> <p><b>Japanese:</b> Professional language. Speaking: Fluency; Reading &amp; Writing: Very good.</p>

### 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.



Dr. Tarek Merabtene,  
 University of Sharjah, UAE.  
 September 2022