



Vol 50 Anniversary Issue, List of all articles and “Article I recommend”

Preface:

In publishing the special issue commemorating the 50th Newsletter

Keiko Yamamoto,
WaQuAC-Net Representative

Regarding the publication of the newsletter, many WaQuAC-Net members have collaborated to write the articles, and the secretariat, Yariuchi and Yamamoto have edited them. Thanks to all members and friends, we could publish this 50th Newsletter. We are deeply moved by the fact that it continued well.

Therefore, in order to look back the footsteps of WaQuAC-Net as a special commemorative issue, we decided to publish the contents of newsletter vol.1 to vol.49 (and special issue) in vol.50.

The first issue was in December 2008, the same as the establishment of WaQuAC-Net. Since then, it has been published almost once every three months until the 50th issue in September 2021. The WaQuAC-Net newsletters mainly consists of activity reports, member introductions, questions and answer (Q&A) which is the main activity. Q&A consists question concerned water supply issues from members and practical answers to questioners by experienced members or experts. If you look at this newsletter vol.50, you can see all the activities of WaQuAC-Net for almost 13 years.

Since 2020, our activities have been restricted

by COVID-19. However, we have realized that online seminar and meeting have the advantage of being able to be attended wherever we live. Today, the situation surrounding water in the world is becoming more severe due to global warming and political instability that spreads throughout the world.

WaQuAC-Net is not a big activity, but we want to continue to be a place where we can learn water issues from each other, aiming that all people living in Asia and Africa will be able to use safe water.

Article I recommend

Mr. Hiroshi Sasayama

[“Special Issue - protection of water supply from a disaster”](#)

(Vol.14, May 2012)

#BigEarthquake,
#FoodInThailand, #WaterSupply,
#Reconstruction



This issue is the record of activities on disaster and reconstruction after the big earthquake in Japan and the big flood in Thailand 2011. WaQuAC-Net invited its 2 members from MWA, Thailand and requested them to report their experience against the flood. They visited Tokyo and Sendai to share their issues and efforts and got information on the big earthquake in Japan. I had been in Vietnam as a JICA expert since 2010 and could get information on the earthquake by only internet. At the occasion of the activity, I was luckily in Japan as taking the regular leaves for one month. Then I joined this activity. It was the first time to see damages by the big earthquake by my eyes directly. The scenery was terrible and

I felt gloomy. But I found reconstructions were begun in many places and its fact gave me hopes. So, this issue impressed me much.

Article I recommend

Dr Yasuko Kamegai

[“Special Q&A: Leakage detection under high ground water level”](#)



(Vol.40, March 2019)

[#SpecialQ&A](#), [#LeakageDetection](#),
[#AppropriateAnswerFromExperts](#)

One of the important activities of WaQuAC-Net can be seen in the article of Q&A on the newsletter. Experts answer the technical question of members and provide the appropriate advice. Such practices have been accumulated and helped a lot for the improvement of water supply.

Especially, Q&A of Vol.40 which featured the topic of leakage survey showed the high capacity of WaQuAC-Net since many experts explained in detail from their experience and knowledge.

I hope the WaQuAC-Net continuously be the place to get the answers for any questions from the world.

Article I recommend

Mr. Noboru Ozaki

[“Mr. Sasayama, Return to the place of the JICA project in the Central Vietnam”](#)



(Vol.42, September 2019)

[#ReturnToThePlace](#), [#HueWACO](#)
[#VietnameseCoffee](#)

“Egg coffee” is my memory of this article. I like Vietnamese coffee, but I did not know “Egg coffee”. After I read this article, I found “Egg coffee” and I jumped into the shop. It was very tasty. The writer visited former project site and met with former counterparts. I am attracted by such a trip.

Article I recommend

Dr. Mari Asami



[“Special Interview: H. E. Ek Sonn Chan, Cambodia”](#)

(Vol.42, September 2019)

I really admire your daily efforts in accumulating such knowledge!

In particular, I would like to express my gratitude to Ms. Yariuchi for her interview with H. E. Ek Sonn Chan in issue 42. The importance and wonderfulness of WaQuAC-Net realized in human connections.

Article I recommend

Ms. Keiko Yamamoto



[“Discussion: Proper operation and power consumption reduction of the pump”](#)

(Vol.23, December 2014)

[#PreventiveMaintenance](#)
[#DevelopmentOfIntensiveInstallation](#)
[OfMeters](#) [#StrategicMonitoring](#)

This discussion meeting was modest, but focused on key points from the cases presented by the Asian countries participated the 3rd Executive Forum for Enhancing Sustainability of Urban Water Service in Asian Region. The following discussion meeting entitled, “Procurement and Maintenance” was same purpose. (Vol.25). I think These activities are suitable as WaQuAC-Net activities

[“Special meeting on “Damage of Water Supply Facilities by the Great Earthquake and Support for the Stricken Areas””](#)

(Vol.10, May 2011)

[#TeamDispatchWithExperiencedPeople](#)
[#MissionAsWaterSupplyMember](#)
[#LuckOfEngineersInLocalCities](#)
[#VulnerablePeopleInDisaster](#)

A discussion meeting was held on April 14, just one month after the Great East Japan Earthquake struck on March 11, 2011, invited the staff of several waterworks bureaus as guests.

Some of them went to the site for helping emergent water supply for the victims and repairing the broken pipes temporarily. Others worked at their office to back up as the supporting team. Participants listened to and discussed with the guests for three hours. It was an article that conveyed unity and mobility of water persons.

Article I recommend

Mr. Yoshinobu Ono

[“Event: 150th anniversary of opening Yokohama port”](#)

(Vol 4, December 2009)

#SafeWaterForWorld

#WaterSafetyDeclaration

#TransferringSeniors'Spirit&EnthusiasmToTheNextGeneration



I found an article in newsletter 4th issue, posted by my seniors, Mr. Mitake and Mr. Ide. I worked together with them at Yokohama Waterworks Bureau and Yokohama Water Co., Ltd. They have led the international activity of Yokohama with strong ambitions and passion for many years. Unfortunately, they have both passed away and I am no longer able to receive their advice, but I engraved it in my heart that we should take over their aspirations and enthusiasm for international activity.

Article I recommend

Ms. Mina Yariuchi

[“Special Report: Study Tour in Myanmar”](#)

(Vol 44, April 2020)

#Experts

#ExchangesAtSite



This is a report on WaQuAC-NET's first overseas study tour. The members came to Myanmar, where I was assigned at the time. It was very meaningful for me to meet with all of you, who usually communicate with each other mainly by e-mail, and exchange opinions on the situation of facilities and waterworks projects based on our respective specialties and experiences.

[“The water source survey and workshop on the problem of the algae in MWA”](#)

(Vol.18, August 2013)

#TimelyDispatchment

#IdentificationOfAlgae&Seminar

We had been exchanging with the Metropolitan Waterworks Authority (MWA) of Thailand, mainly in the field of water quality, even before the MOU was signed in 2012. For the algae survey in 2013, with the cooperation of the Yokohama City Waterworks Bureau, we sent experts to the site at the timing of an algae bloom, which had been a major issue at MWA, to jointly survey the water source and identify the algae in a workshop with MWA's water quality staff.

List of all articles: Vol.1 – 49

Issues	List of articles
Vol.1, Jan 2009	Let's join in the WaQuAC-Network
	Member introduction: Phnom Penh, Cambodia
	Opinions from experts: Ms. Kamegai, Japan
Vol.2, Apr 2009	Technical Q&A; Nematoda from tap water !?
	Technical Q&A: Arsenic pollution of groundwater
	Launch of Network Activity
	Dispatch of an Expert to Laos; Ishikawa

	Tomoichi, JPN
	Member introduction: Laos (Kawashima Yasuhiro (Saitama CityWWB))
	Activity Reports: from Laos by UKAI Tomohiro: JICA Volunteer
	Activity Reports: Experience as a JICA Volunteer by Ms. OKOSHI Hiromi
Vol.3, June 2009	Technical Q&A: Advantages to change the coagulant from aluminum sulfate to PACI?
	Essay: A Big Step by Small Private Participation (Mr. Nakashima)
	Participation report: The 5th World Water Forum (Mr. Mitake)
	Member introduction: Hue, Vietnam (Mr.

	Sasayama)			
Vol.4, Nov 2009	Technical Q&A: Influence of Algae to water treatment process	2011	system of electrolysis method.	
	Participation report: 150th anniversary of opening Yokohama port		Mini-talk 4: "Leakage control and safe water supp	
	Member introduction: Thai Metropolitan Waterworks Authority (MWA)		Thesis by member; "suspended particles and their chemical composition in water distribution system" (Mr. Ma Noravin)	
Vol.5, Feb 2010	Technical Q&A: applicability of chlorine dioxide for disinfection?		Welcome! Three women from MWA, Thailand	
	Mini-talk 1; How is Arsenic Problemgoing on?		Report of Activities; Visiting PPWSA, MWA, PWA (Mr. Sasaki)	
	Info: Set up of Kyushu Branch		Member introduction: Ms. Tith Linda (Cambodia)	
Vol.6, Jun 2010	Technical Q&A: Can lime removed by Bio-filtration method?		Vol.10, May 2011	Technical Q&A: Pipe materials (Polyethylene, poly vinyl chloride, ductile iron, steel) and their damages by the earthquake
	Mini-talk 2; Advantage of Grass-roots Activities			Field report: Damage of Water Supply Facilities by the Great Earthquake and Support for the Stricken Areas
	Essay: Tama-Mina-Ke's Table Talk on NGO			Field report: Water Supply of Sendai City - From suffering to rehabilitation (Mr. Watanabe)
	Participation report: Executive Forum for Urban Water Service in Asia			Field report: Recent Situation of Damaged Areas, Kitakami city, Iwate Pref. (Mr. Odajima)
	Member introduction: Mr. MORI Hajime			Vol.11, July 2011
	Project report: Farewell Party for Mr.Sasayama, Mr. Wada and Ms. Yariuchi	Mini-talk 5: "Water supply & radioactive contamination"		
	Essay: Water business abroad by small companies syndicate (Mr. Akaishi)	Project report: Water supply situation in Bhutan (Mr. Kitahara)		
	Info: Congratulations on the Stockholm Industry Water Award 2010	Project report: Entering the 2nd year of the project (Mr. Sasayama)		
	Vol.7, Sep 2010	Technical Q&A: 1. Control of weed in raw water channel. 2. Chemical use for removing of Duck lettuce (Ottelia alismoides)		
Project Report; Project on Human Resources Development for Water Supply in Sudan (Mr. Uemura)		Member introduction: Mr. Daisuke SAKAMOTO		
Participation report: WaterLinks Forum - Manila-		Vol.12, Dec 2011	Technical Q&A: How to remove calcium carbonate and/or magnesium carbonate at home?	
Member introduction: Mr. OSAKI Kazuo			Field visit: Situation of affected area by the Great East Japan Earthquake (Mr. Arimura)	
Welcome! Party for Ms. Tam from Vietnam			7 months later, to the stricken areas	
Member introduction: interview with Ms. Mimi from Laos			Participation Report: JICA Second Executive Forum for Enhancing Urban Water Service in Asian Region	
Essay: My First Trip to Developing Country -Travel report to Siem Reap, Cambodia - (Mr. Kakegawa)		Project Report: Project on Capacity Development for Urban Water Supply Utilities in the Central Region, Vietnam	1) Trainees from Laos, new and old ~Cooperation with Saitama City Waterworks Bureau and the Vientiane Capital City Waterworks (Mr. Shimomura)	
Vol.8, Jan 2011		Technical Q&A: Comparison between Chlorine gas and sodium hypochlorite (NaClO)	2) Cooperation with Yokohama City and Vietnam (Mr. Wada)	
		Mini-talk 3; Cryptosporidium in Southeast Asia	3) The party night in Memories Ally by the Ashigaru	
	Information Sharing Seminar for "Water" SMEs for Expanding into Southeast Asia	Project report: from Vietnam Project; Training Course has started		
	Member introduction: Ms. Toki Ayaka	Member Interview; Former Expert in Myanmar: Mr. Daiji NAGASHIO		
	Project Report; Present condition of regional water supply in Vietnam	Info: WaQuAC Net Business Card		
	Project report: Water Supply in Bolivia (Mr. Makino)	Member Introduction; interview with		
Vol.9, Feb.	Technical Q&A: Comparison between commercial NaClO and house generation			

	Ms.Nirmala Hailinawati (Indonesia)		Member introduction: Mr. Long Naro, Phnom Penh Water Supply Authority, Cambodia
	Welcome!: Three Bolivians in Water project visited		
Vol.13, Mar 2012	Technical Q&A: How to analyze quality of solid PAC?	Vol.17, May 2013	Technical Q&A: Strange noise from pump
	Flood Crisis 2011, Bangkhen Water Treatment Plant, Water Quality Management (Ms. Nisapas Wongpat, Mr. Somsak Passananon)		Interview: Two years pass from East Japan Great Earthquake Disaster (Mr. Ozaki)
	Flood Crisis 2011, Field report of Japan Disaster Relief - Power of MWA and friendship -		Info: Activity of Let's Talk Algae (LETA) group
	Project Report: Report from Bhutan no.2 (Mr. Yasuyuki KITAHARA)		Participation Report: "the study and lecture tour of 'consideration of safety net for water supply'" (Ms. Kamegai)
	Member introduction: Mr. Mon Tito (PPWSA, Cambodia)		Event report: Training on Biological Problems for Young Staff of MWA in Yokohama (Mr. Sasaki)
	Welcome!: The Party of Ashigaru		Welcome! Party for the MWA scientists
Vol.14, June 2012	Event reports: Protection of water supply from a disaster		Participation Report: JICA Seminar for Urban Water Service Management and Human Resource Development in Asian Region
	1) Participating in WaQuAC-NET activity from Thailand (Ms. Nisapas Wongpat, Ms. Sivilai Kitpitak from MWA, Thailand)		Member introduction: Dr. Chea Visoth, PPWSA, Cambodia
	2) Technical Exchange and Observation at Sendai City WWB (Mr. Hiroshi Sasayama)		Study Meeting: Report of Osaka meeting 2013
	Welcome!: Ms Nispas and Ms Sivilai to JWWA (Mr. Yoji Matsui)		Member introduction: Mr. GOTO Shinya
	3) To Ishinomaki, the disaster area (Mr. Sasaki)	Vol.18, Aug 2013	Technical Q&A: the influences and measures of eutrophication
	4) Mini-talk 6: (cancelled)		Mini-talk 7; The water source survey and workshop on the problem of the algae in MWA
	Member introduction: Mr. Yoshinobu Ono		Field visit: Local activities specializing in human resource development, the Water Supply Council of Iwateshiwa-area - (Mr. Arimura)
Vol.15, Sep 2012	Technical Q&A: Small black particles came out from tap in some supplied areas. Why did quality of tap water change?		Field visit: NSF International Visiting (Mr. Sugino)
	Project report: Mr. Shimomura started for Laos as a Project Leader		Welcome! Party for MWA staff
	Essay: Creating system to involve people; Wisdom and Power of Singapore (Mr. Arimura)	Vol.19, Nov 2013	Technical Q&A: Jar-test (necessity, examination process and suggestion)
	MWA and WaQuAC-NET Signing in MOU		Project report: Termination of Technical Cooperation Project in Vietnam (Ms. Yariuchi)
	Project report: Safe water supply in rural area of Northern region in Ghana, and study of possibility of introduction of slow sand filter. (Mr. Sakamoto)		Field report: Special Training: Pressure Control (Mr. Kenji Nakanosono)
			Project report: Technical assistance for emergency water supply in Laos (Mr. Toshiki HORIE)
Vol.16, Jan 2013	Technical Q&A: Case of SOPs on the countermeasures against algae obstacles	Vol.20, Feb 2014	Technical Q&A: "Is EM (Effective Microorganisms) effective in order to reduce the water pollution of the river?"
	Participation report: IWA World Water Congress & Exhibition in Busan (Ms. Kawamura)		Field visit: East Japan Great Earthquake- Three years will have passed on March 11, 2014 (Yamamoto)
	Participation report: Member's Outstanding Performance at the symposium		2) Dispatch to Ishinomaki District Water Supply Authority (Mr. Tate)
	Condolences (Mr. Takenaka)		4) My Sentiment on Ishinomaki (Mr. Watanabe)
	Welcome! MWA mission for technical cooperation came to Japan		5) Visiting Ishinomaki & Onagawa – Seeing is believing (Ms. Kawamura)
	Thesis by member; Measuring Efficiency Performance of Water Utilities in Indonesia (Ms. Nirmala Hailinawati)		6) Ishinomaki, Okawa elementary school (Mr. Sasaki)
	Welcome! Ms. Soursdey from PPWSA, Cambodia to Master Course of Hiroshima University		7) First visit to the damaged areas (Ms.

	Yariuchi) Project Report: Activity in the World: Water Supply in Fiji/ JICA SV (Mr. Hiroto ODA)		Member introduction: Ms. Ngoc, HueWACO, Vietnam
Vol.21, June 2014	Technical Q&A: Is Block Distribution System effective for leakage reduction?	Vol.26, Oct 2015	Technical Q&A: Reduction of NRW; NRW ratio is 50% around in our water supply. I want to know a method of NRW reduction
	Field Report; Water Supply Situation in East Timor		Project Report: My Activities & Current Water Supply System in Yangon, Myanmar (Mr. Matsuoka)
	Essay: Thoughts of Human Resources Development		Member introduction: Interview with Dr. Chea Visoth from Cambodia
	Essay: Flank chat-2 Red Card to Japanese succession of technology		Member introduction: Mr. Shinichi Sekimoto
	Welcome! Party for HE. Ek Sonn Chan, Cambodia		
	Essay: Flank chat-2 Red Card to Japanese succession of technology		
	Technical Q&A: What kind of condition reduces the effectiveness of PAC?		Vol.27, Jan 2016
Event report: Survey of Japanese WaQuAC-NET Members		Study Meeting: 2nd Osaka Meeting - International Cooperation of Water Utilities	
Participation report: The 5th International Slow Sand & Alternative Biological Filtration Conference		Mini-Talk "water supply in Africa and Asia"	
Participation report: The 3rd Executive Forum for Enhancing Sustainability of Urban Water Service		Participation Report: JWVA Conference - Ms. Sivilai gave a presentation	
Welcome! Support to the International Student from Cambodia		Member's Opinion: Result of Questionnaire from Cambodian members	
Project Report: Dr. Sugawara was assigned as JICA expert in Indonesia		Welcome! Ms. Siti Zainab Lubis 6 months training at Yokohama	
Vol.23, Jan 2015	Technical Q&A: How should we understand value of water quality standard?		Welcome! Party with Dr. Sugawara and his counterparts from Indonesia
	Event Report: Workshop on "Arsenic Contamination and Removal from Groundwater"	Vol.28, Apr 2016	Welcome! Mr. Long Naro was invited to INCHEM TOKYO 2015 as a lecturer
	Event Report: Cooperation to Biological Survey in Thailand		Technical Q&A: Odor test of raw water, its procedures
	Mini-talk: "Proper operation and power consumption reduction of the pump"		Project Report: Mr. SAIKI from Matsuyama City Dispatch to Laos as JICA expert
	Member Introduction: Tirtanadi Waterworks Company, Indonesia		Project Report: Interim Report on the Field Experiment of High-turbidity Water Purification Process by Small-Scale Plant (Mr.Takebe)
	Participation report: "General Assembly and Conference 2014 (JWWA)"		Member Introduction: Siem Reap Water Supply Authority, Cambodia (Mr.Kut Nimol)
Vol.24, March 2015	Technical Q&A: Advantage and disadvantage of liquid PAC		Field visit report: AQUATECH 2015 and water supply in the Netherlands (Mr. Arimura)
	Project Report: Lao-Japan Waterworks Seminar" and "Project MAWASU International Seminar"		Essay: Let's get exposed to water culture & technologies in foreign countries! (Mr. Umeyama)
	Member introduction: Ms.Patcharaporn Itthirotjanakul (MWA, Thailand)		Welcome! Farewell parties and communication meeting
Vol.25, June 2015	Mini-Talk: technical discussion: "Procurement & Maintenance for Materials and Equipment"	Vol.29, July 2016	Essay: Two Earthquakes in Kathmandu, Nepal and Otsuchi, Japan (Mr. Ozaki)
	Participation Report: Exhibition "Viet-Water" in Ho Chi Min City (Mr. Arimura)		Member Introduction: Japanese Letter from Ms. Zainab
	Participation Report: UN World Conference on Disaster Risk Reduction (Ms. Kawamura)		Activity Report: Looking back on my JICA's days (Mr. Nakayama)
	Event Report: Courtesy call to the governor of MWA and Biological survey in Thailand		Participation report: Symposium "Urban Water Management in Asia"
			Event Report: Dispatching an expert to PPWSA, Cambodia and MWA, Thailand
			Project Report: Farewell party for Ms. Yariuch, to Myanmar as JICA long-term Expert
			Welcome! Party for Cambodian Friends

Vol.30, Oct 2016	Technical Q&A: Countermeasures against illegal connections		Welcome! SDDC & Mr. Varich
	Event Report: Study Meeting "Water in Africa "- Experience of Mr. Uemura	Vol.35, Jan 2018	Technical Q&A: Causes of water contaminations in distribution pipes and the countermeasures
	Field report: Kumamoto earthquake Report (Mr. Arimura)		Welcome! Three MWA staffs participate in JWWA Conference
	Field visit: Kumamoto Earthquake Information Memo		Outline of presentation "Development of Water Safety Plans -Ensuring Safe Water to People living in Metropolitan Area of Thailand-"
	Project Report: JICA Project in Yangon, Myanmar		Member introduction: Mr. Fauzil Husni, Medan, Indonesia
	Member introduction: Ms. Nguyen Trang (Vietnam)		Member introduction: Mr. Shinohara, To achieve SDG, work closely
Vol.31, Jan 2017	Welcome! Cooperation with MWA: Ms. Chaweeapan gave a presentation in Kyoto		Welcome! Mr. Shimomura
	Study meeting: Measures against Algae Bloom in Bangkhen WTP - Optimum Chemical Dosing Rate for Aulacoseira Removal-		Training report: Lecture on distribution pipe cleaning method
	Study Meeting: The3rd Osaka Meeting "International Cooperation of Water Utilities" (Mr. Sugino)		Welcome! WaQuAC-Net exchanges in Takamatsu
	Project Report: Information of Africa: The first impression of Sudan (Mr. Kagata)	Vol.36, Apr 2018	Technical Q&A: How do people drink more tap water?
	Project Report: Activity of Myanmar Project :From Yangon to MWA for training! (Ms.Yariuchi)		Project Report: Support for water supply in Rwanda (Mr. Momozono Tokiya)
			Event Report: Visiting Thailand & Cambodia for technical exchange of WaQuAC-NET members
Vol.32, Apr 2017	Technical Q&A: How to remove blue-green algae from raw water		Greeting to return to homeland, Mr. Varich
	Field visit: Visiting Yangon again (Mr. Nagashio)		Essay: Heading to the countryside of Myanmar
	Partnership between MWA (Bangkok) and OWSA (Osaka) (Mr. Hayashi)		Field report: Visiting JHA Office (Ms. Sakamoto)
	Essay: Frank Chat "Incredible India!"		
Vol.33, July 2017	Technical Q&A: In Japan, is there water quality standard of raw water (surface water) used for water supply?	Vol.37, July 2018	Technical Q&A: Can I use the "ultrasonic sound technology" for controlling the algae?
	Member introduction: Mr. Pheng Ty, Cambodia		Member introduction: Ms. Ei Khaing Mon in Myanmar
	Project report: Activity in Narok Water Supply in Kenya (Mr. Jin Igarashi)		Participation report: Special Lecture "One day with Dr. TAMBO" by Mr. Sugino
	Project report: International cooperation to East Timor by Chiba Prefectural Waterworks Bureau, (Mr. Kobayashi)		Member Introduction; Mr. Kiji, wastewater treatment method: SSCM
	Project report: Professor Ishibashi, assigned to Khon Kaen Univ. Thailand		Special Article; Trip to Thailand and Cambodia for deepening membership
	Welcome! Sudanese executives visit to a water treatment plant in Japan		1-Seminar in MWA
	Welcome! Mr. Kunnarith from PPWSA arrived at Narita		2-Seminar in PWA
	Essay: What should I inform for the foreign C/P? (Mr. Ono)		3-Visit to Khon Kaen RTC2
	Mini-talk 10; "Finance and Accounting of Japanese Waterworks Utility for Engineers"		4-Lecture in Khon Kaen University
			5-Visit to Mr. Umeyama office
			6-Meeting and algae training in PPWSA
		7-Welcome party for Thai members	
		8-Follow up cooperation in PPWSA, Cambodia	
		Member introduction: Ms. Wasana, Thailand	
Vol.34, Oct 2017	Project Report: Return from Laos MaWaSU Project (Mr. Shimomura)	Vol.38, Oct 2018	Project Report: Project in Cambodia (Mr. Hirowatari)
	4 th Study Meeting in Osaka		Member introduction: interview with Mr. Mon Tito
	Info: WaQuAC-NET won the 19th Japan Water Award!!		Member introduction: Mr. Job (Kenya)
	Participation report: The 4th Executive Forum		Mini Talk 11; "Basic finance for engineers"
		Vol.39,	Technical Q&A: What are the points to

Jan 2019	pay attention to when operating the water treatment system of rapid sand filtration method	Apr 2020	brine/seawater		
	Project Report: Challenge of Mr. KAWASHIMA as Senior Adviser in NPNL, Laos		Special Report: Study tour in Myanmar		
	Project Report: Dr. Sugawara, returning back from Indonesia		Project report: Investigation on improvement of community water supply, Thailand (Prof. Ishibashi)		
	Study Meeting: 5th Osaka meeting-Case of Disaster Impact in MWA		Member introduction: Interview with Mr. Innocent (Rwanda)		
	Participation Report: Symposium on "Future Leaders Training Program"		Member introduction: Mr. Kimura		
	Participation Report: JICA President Award Commemorative Lecture by H.E. Ek Sonn Chan		Special Issue, May 2020	Result of Questionnaire Survey about Impact of COVID-19	
	Welcome! Friendship party at IWA World Water Conference			Part 1 Impact of COVID-19 pandemic	
	Welcome! Party for H.E. Ek Sonn Chan		Part 2 Comment and recommendations for WaQuAC-Net Activities	Vol.45, July 2020	Special issue: COVID-19 in Africa, Measures/Cooperation
	Vol.40, Apr 2019		Special Technical Q&A: Leakage detection under high ground water level		Interview: UNICEF's response to COVID-19 in Ethiopia (Mr. Takahashi)
Field Report: from Nepal (Mr. Saiki)		Report: Smile Toilet Project in Kenya by JHA (Mr. Shinohara)			
Field visit: Revisit to Nepal (Mr. Ozaki)		Report: Long Distance of my family (Mr. Hirowatari)			
Field Visit: Tohoku Meeting		Report: COVID-19 impact of my life (Mr. Chenda Pharith, PPWSA, Cambodia)			
Vol.41, July 2019	Project Report: Member's news: Prof. Ishibashi from Thailand	Report: My Experience of Kanagawa Overseas Technical Training (Ms. Weesuda Chaloeythit, MWA)			
	Vol.41, July 2019	Technical Q&A: We have a problem of Zebra Mussel	Vol.46, Oct 2020	Event Report: Online panel discussion "COVID-19 countermeasures of waterworks in Japan" (Webinar 1)	
		Member introduction: Ms. Kounthy, Cambodia		Info: Congratulations! MWA, Thailand! "Chlorine Next" wins 1st prize	
		Essay: Want to follow the reconstruction of Ishinomaki water supply (Mr. Yuki Tate)		Technical Q&A: Tell me about PFOS and PFOA (organic fluorine compounds)	
		Field visit: Return to Vietnam (Ms. Mina Yariuchi)	Vol.47, Jan 2021	Technical Q&A: I want to know the pump design considerations and parameters	
		Mini-talk 12 "GIS and Water Supply"		Member introduction: Mr. Rabindra Pokhrel, Nepal	
Participation Report: Symposium for World Water Day 2019		Webinar 2: "Collaborative research on community water supply improvement in Khon Kaen, Thailand"			
Vol.42, Oct 2019	Vol.42, Oct 2019	Special Interview with H. E. Ek Sonn Chan (Cambodia)	Webinar 3: "A cheap and easy way to utilize GIS for effective management using Vector Tiles"		
		Field visit report: Tohoku disaster area	Study meeting: 7th Osaka Meeting, "International cooperation by remote access"		
		Member introduction: Interview with scholarship student, Ms. Khaing (Myanmar)	Vol.48, Apr 2021	Participation report: Final report session of scholarship graduate students of Univ. of Tokyo	
		Field visit report: MWA Bangkhen WTP		Technical Q&A: Utilization of rainwater as water resource, experiences in Japan	
		Thesis by member: Ms. Ohno		Webinar 4 "Chlorine Next" The innovation project of MWA, Thailand	
		Vol.43, Jan 2020	Vol.43, Jan 2020	Field visit: Return back to Vietnam (Mr. Sasayama)	Webinar 5 "International Cooperation by Remote Access"
Study meeting: 6th Osaka meeting: Lecture by Dr. Terashima: CD & HRD	Info: H.E. Ek Sonn Chan, awarded by Japanese Government				
Member introduction: Interview with Ms. Kai (Laos)	Special message: What can we do for our friends in Myanmar?				
Event report: Discussion with MWA(Thailand), Big donation from MWA	Vol.49, July			Member introduction: Interview with Ms. Nan from Khon Kaen, Thailand	
Participation report: JWVA Conference in Hakodate					
Vol.44,	Vol.44,	Mini talk 13: "Cambodia& Sudan"			
		Member introduction: Ms. Weesuda Chaloeythit (MWA, Thailand)			
		Member introduction: Mr. CHENDA Pharith (PPWSA)			
		Member introduction: Ms. Kuniyasu			
Vol.44,	Technical Q&A: How to treat				

2021	Webinar 6 "AnSaT" developed by MWA
	Participation report: H.E. Ek Sonn Chan's Special Lecture at the Kumamoto

	Prefecture University
	Webinar 7 "Rural small water supply in 3 countries"

List of Q&As

1. Water Quality Issues

1.1 Water Sources Contamination・Water Quality Contamination in Pipe・Water Quality Standard

Question (Click to open the link)	Keywords	News-letter
Are there any arsenic pollution in the water supply using surface water?	Raw water quality, water quality standard, coagulation and sedimentation	Vol.2
Small black particles flew out from tap in some supplied areas. Why did quality of tap water change?	Flow out, iron & manganese, water pollution in pipe	Vol.15
Concentration of arsenic in new well water was 0.013mg/L. While, water quality standard value is 0.01mg/L. By rounding figures, concentration value become 0.01mg/L. Then can I say this water meet the standard?	Arsenic, influence to human health, water quality standard	Vol.23
In Japan, is there water quality standard of raw water (surface water) used for water supply?	Raw water quality, environmental quality standard	Vol.33
What's kind of water contaminations inside distribution pipes and the countermeasures are there in Japan?	Seal coat, corrosion of pipe, manganese oxide, washing out from hydrant, pipe replacement, customer service, accountability	Vol.35
We have a problem of Zebra Mussel growing in the water intake pipe. It will make the pipe diameter smaller and generate odor. We want to share your experience for our measures.	Zebra mussel, golden mussel, adhering inside pipe, drying, dosing chlorine	Vol.41
Recently, water level of the river has dropped, because of no rain, and seawater has risen up the river. Consumers complain that the tap water is salty. What measures has been taken in Japan	Tap water is salty, temporary soil dike, seawater rise up, desalination, electro dialysis	Vol.44
Recently, I heard discussions about PFOS and PFOA; organic fluorine compounds. Please tell me PFOS and PFOA.	Complementary items of water quality standard, organic fluorine compounds, activated carbon treatment	Vol.46

1.2 Measures of Biological Issues

Question (Click to open the link)	Keywords	News-letter
Nematoda from tap water !?	Flow out, water quality standards for drinking water, residual chlorine	Vol.1
Could you tell me how algae influence to water treatment process?	Algae, water treatment, water quality, odor	Vol.4
1.Control of weed in raw water channel, 2. Chemical use for removing of Duck lettuce (<i>Ottelia alismoides</i>)	Raw water, waterweed	Vol.7
I would like to make standard operating procedure (SOP) of countermeasure against algae obstacles. Would you introduce case example?	Algae, water treatment, SOP (Standard Operating Procedure)	Vol.16
I want to know about the eutrophication, the influences and measures.	Eutrophication, water sources control, advanced water treatment	Vol.18
Recently, we have algae problems in our raw water. We consider starting odor test. Please explain its procedures.	Algae, odor, qualitative descriptions, Quantitative measurements	Vol.28
Please tell me how to remove algae from water sources and treatment method in WTP	Algae, coagulation inhibition, eutrophication, circulation-aeration, water treatment	Vol.32

Can I utilize the "ultrasonic sound technology" for controlling the algae?	Algae control, ultrasound device, shallow reservoir, Aoko	Vol.37
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2. Water Treatment Process Technology

2.1 Chemicals

Question (Click to open the link)	Keywords	News -letter
When we change the coagulant from aluminum sulfate to PAC, what kind of advantage can we have?	PAC, coagulant, aluminum sulfate	Vol.3
I would like to know checking method of quality of PAC.	PAC, quality check	Vol.13
What kind of condition reduces the effectiveness of PAC in the coagulation process?	PAC, rapid mixing, Jar-test	Vol.22
I want to know the specification, life time, storage and advantage and disadvantage of liquid PAC.	PAC, coagulation effect, cost, advantage	Vol.24
Could you advise me on applicability of chlorine dioxide for disinfection?	Disinfectant, chlorine dioxide, safety of work	Vol.5
Comparison between Cl ₂ gas and NaClO (characteristic, easiness of O&M, cost)	Disinfection, Cl ₂ gas, NaClO, cost, safety, liquid	Vol.8
Please compare the commercial NaClO with produced one by the house generation system of electrolysis method.	Disinfection, cost, safety, electrolysis, salt	Vol.9

2.2 Water Treatment Technology

Question (Click to open the link)	Keywords	News -letter
Raw Water contains high concentration lime. Can lime be removed by the bio-filtration method?	Slow sand filter, softening, bio-filtration method	Vol.6
Please tell me about a small scale water treatment method which can remove lime in raw water.	Lime, hard water, softener, ion exchange method	Vol.12
I want to know the necessity of Jar-test, how to use it, and your suggestion	Jar-test, coagulant, pH control agent, coagulation aid agent	Vol.19
Is EM (Effective Microorganisms) effective in reducing water pollutants of the river?	Water quality of water source, EM (Effective Microorganisms)	Vol.20
What are the issues to be considered when we select filter media and maintain it.	Filter clogging, filter media, filter washing, flowing out of media	Vol.27
What are the points to pay attention to when operating the water treatment system of rapid sand filtration method ?	Backwash effluent, sieve, adjusting of backwash flow rate, sand layer thickness	Vol.39

3. Maintenance for Distribution Pipe, Pump

3.1 Distribution Network · Service Pipe

Question (Click to open the link)	Keywords	News -letter
Is the freezing construction method with liquid nitrogen effective to keep construction site clean?	Pipe freezing method, safety of water, construction site	-
How did the pipes of different materials perform during the most recent earthquake/tsunami?	PE Pipe, earthquake resistance, elasticity, Hanshin-Awaji Great Earthquake	Vol.10
I want to know "Air scouring method" for cleaning the old distribution main and household pipe.	Service pipe, compressed air	Vol.11
I would like to know the block distribution system for measures of leakage reduction and water pressure control.	Measures of leakage reduction, distribution system, pressure control, stable water supply, DMA, NRW, minimum night flow	Vol.21
NRW ratio is 50% around in our water supply. I want to know a method of NRW reduction.	Non-revenue water (NRW), water balance analysis, DMA (Districted Metered Area), water meter, illegal connection,	Vol.26
We face difficulties to reduce thief of water (illegal connection). Please tell us effective countermeasures.	Raising service pressure, proper equipment, water meter, educating personnel, monitoring of night flow, strong	Vol.30

	penalty	
How should I do a leakage investigation at the location where pipe is below the groundwater level?	Acoustic survey method, correlation method, tracer gas method, water flow measurement method, pool, borehole vibration measurement method	Vol.40

3.2 Pump Maintenance

Question (Click to open the link)	Keywords	News -letter
Recently a pump has strange noise. Tell me what possibly cause the sound and how we can deal with them.	Maintenance, Cavitation	<u>Vol.17</u>
I want to know the pump design considerations and parameters?	Pump specification, Transmission pump, Pump selection by purpose and application	<u>Vol.47</u>

4. Water Supply Management

4.1 Extension of Water Service

Question (Click to open the link)	Keywords	News -letter
How do people drink more tap water?	Safe water, health, continuous water quality control, hygienic circumstance, awareness, confidence	<u>Vol.36</u>

5. Water Resources Development and Management

5.1 Use of Rainwater

Question (Click to open the link)	Keywords	News -letter
I live in a city of India. I am thinking of using rain water because the water supply is insufficient. Please let me know a good example of using rainwater.	Rainwater storage tank in house, reclaimed wastewater, non-potable water, use for disasters	<u>Vol.48</u>

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Next Activity

Nov. 15 Newsletter Vol. 51 in English

Dec. Year end party