

GET-TOGETHER



YOUNG WATER PROFESSIONALS

10 May 2023, 13:00 BST

Engagement of YWPs in IWA Specialist Groups



EVENT INFORMATION



- Post questions using the chat function and feel free to introduce yourselves briefly to one another!
- Mute / camera in the bottom left corner.
- No need to share screen as slides have been added to this presentation.
- This event will be recorded and made available "on-demand" on the IWA Connect Plus, with presentation slides, and other relevant information.



MODERATORS & RAPPORTEUR





Isabela Espindola IWA Membership Engagement Senior Officer



Claudia Prehn IWA YWP Steering Committee/IWA YWP Ecuador Chapter



Nam Ngo IWA YWP Steering Committee

PANELISTS





Rachna Sarkari IWA Membership Engagement Officer



Gary Wyeth IWA Water Loss Specialist Group



Ulf Jeppsson IWA Modelling and Integrated Assessment Specialist Group



Raziyeh Farmani IWA Intermittent Water Supply Specialist Group



Stuart Ramilton IWA Water Loss Specialist Group



Janelcy Alferes IWA Instrumentation, Control and Automation Specialist Group



Part 1 - Opening

13:00 – 13:05: Welcome, introduction and meeting objectives (Isabela Espindola)

Part 2 – Presentations

- 13:05 13:15: Opportunities for YWPs in IWA Specialist Groups (Rachna Sarkari)
- 13:15 13:25: Intermittent Water Supply SG (Raziyeh Farmani)
- 13:25 13:35: Modelling and Integrated Assessment (MIA) SG (Ulf Jeppsson)
- 13:35 13:45: Water Loss SG (Stuart Hamilton & Gary Wyeth)
- 13:45 13:55: Instrumentation, Control and Automation (ICA) SG (Janelcy Alferes)

Part 3 – Discussion and Conclusion

- 13:55 14:25: Q&A and discussion (all speakers Nam Ngo & Claudia Prehn)
- 14:25 14:30: Closing remarks (Claudia Prehn & Isabela Espindola)



IWA Specialist Groups: the engine of IWA

RACHNA SARKARI, IWA MEMBERSHIP ENGAGEMENT OFFICER - SG



inspiring change



Specialist groups (SGs) connect people from **across disciplines** and **across national boundaries** to **accelerate the science, innovation and practice** that can make a difference in addressing water challenges and pushes the sustainability agenda.

Spread across IWA's membership in more than 140 countries, SGs are an effective means of international networking, sharing information and skills, and making professional and business contacts.

SPECIALIST GROUPS: THE ENGINE OF IWA!





IWA SPECIALIST GROUPS: OPPORTUNITIES FOR SG MEMBERS



IWA members can join up to 51 Specialist Groups and contribute to the SGs by engaging in discussion with the other members, join the SG Management Committee, provide support during SG events etc.

HOW TO GET INVOLVED IN SG?





SGs are self-managed communities for IWA members, gathered under specialised topics

Here you can contribute to:

- Contact the Chair to express your active interest to be involved MC meetings/ in an event / editing the SGs newsletter etc.
- Review papers (if you do not have experience, express your interest to learn
- SG publications (submitting content to newsletters; reviewing conference papers, co-authoring book chapters)
- SG events (from webinars to regional workshops and international conferences)
- Leadership role to the management and organisation of group activities and specialised conferences
- Become an active contributor of knowledge on IWA Connect Plus & stay tuned on the latest news, resources and posts shared



Intermittent Water Supply Specialist Group

RAZIYEH FARMANI, CHAIR





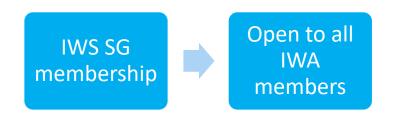
A piped Water Supply System which delivers water for less than 24 hours in a day or a few days a week.

- The objective of the Intermittent Water Supply Specialist Group is:
 - to research and advance knowledge in Intermittent Water Supply to water professionals and industry, utilities and employees, and community representatives at all levels of government, including national and international agencies.
 - To improve the operational conditions and management of water supply networks under intermittent supply with the ultimate goal of providing continuous supply to all consumers.

IWS SG MANAGEMENT COMMITTEE MEMBERS



Raziyeh Farmani	Chair	UK	
Joe Dalton	Secretary	Ireland	
Bambos Charalambous		Cyprus	
Hassan Aboelnga	nga YWP Egypt		
Assia Mokssit	YWP	France	
David Meyer		Canada	
Emily Kumpel		USA	
Pradip Kalbar		India	
Alessandro Bettin		Italy	
Yukun Hou		China	
Yang Villa	YWP	Philippines	
El Hassane Ben Ahmed		Morocco	
Anand Kumar Jalakam		India	





IWS SG MANAGEMENT COMMITTEE MEMBERS

- Prepare newsletters of Group activities and developments
- Convene conferences and workshops
- Initiate research papers and investigations
- Coordinate publication of articles, guides and manuals on related topics
- Facilitate communication and interaction between members with IWA Connect
- Encourage the promotion of science, technology and practice development of the IWS field through the Source magazine, blogs, short articles, etc.

WATER						
NEWSLETTER	the international water association SUPPLY					
April 2023	FOREWORD					
Contents:						
Foreword	Dear members of the IWS SG,					
Aqua Journal Special Edition on IWS	In this Newsletter we report on the imminent publication of a Special Edition on Intermittent Water Supply of the <u>Aqua: Water</u> Infrastructure. Ecosystems and Society Journal, published by IWA					
IWS and Water Quality	Publishing.					
IWS Webinar Series	We have restarted our IWS webinar series. Our first webinar in 2023 was on the drain of intermittency with a call for change. Our					
News, Projects, Activities & Issues	next webinar is on the impact of IWS on water quality. An interview with the presenter is featured in this Newsletter. All of the webinars are available to view on our YouTube page					
News of Forthcoming Events	Any readers interested in delivering a webinar on IWS should contact any member of the IWS SG Communications Committee. We would be very happy to receive any webinar suggestions. We report from recent events including the 2022 IWA Water Loss Conference and the 2023 Indian Water Works Association Convention.					
News from IWA HQ						
News from IWA Publishing						
IWA Learn						
Write to Us	Convention.					
Become a Member of the IWS SG						
	Happy reading,					
Editor:	Joe Dalton, IWS SG secretary					
Joe Dalton joe.e.dalton@gmail.com	*					
Communications Committee:						
Raziyeh Farmani (IWS SG Chair)						
Assia Mokssit Hassan Aboelnga						
Contributions from anyone are welcome!						
are welcome!						

IWA INTERMITTENT WATER SUPPLY

SPECIALIST GROUP

ater associatio

TERMITTEN

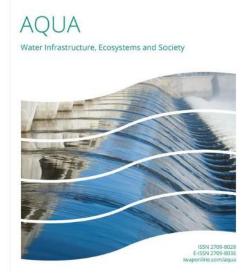
SG ON THE NEWS

- IWA Source Magazine
 - Challenges and opportunities around IWS under COVID-19, 2021
 - Intelligent Driven Supply performance, 31 January 2023
 - Global Intermittent Water Supply (to be published soon)

IWA Journals

- Intermittent Water Supply and their resilience to COVID-19: IWA IWS SG survey
- Special Issue Intermittent Water Supply: Challenges, Opportunities and Solutions (to be published soon) in Aqua: Water Infrastructure, Ecosystems, and Society





/ol 72 | Issue 4 | April 2023

I WWA



Last Wednesday of each month at 1pm (UK time)

- Intermittent Water Supply Specialist Group Youtube
 - <u>https://www.youtube.com/channel/UC6Fbg0umPsP7rnhO78Z5qKA?app=desktop</u>
- If anyone would like to present an IWS webinar, please contact:
 - Raziyeh Farmani, <u>r.farmani@exeter.ac.uk</u> (IWS SG Chair)
 - Joe Dalton, joe.dalton@gmail.com (IWS SG Secretary)



IWA Modelling and Integrated Assessment Specialist Group

ULF JEPPSSON, CHAIR



ABOUT SG ON MODELLING AND INTEGRATED ASSESSMENT (MIA)



"This SG targets people from research, consulting companies, institutions and operators to think along the use of models and computing tools to support the understanding, management and optimization of water systems."

PRIORITIES

- Interact with other IWA SGs and other professional organizations
- Organize specialized conferences, sessions, workshops, webinars
- Engage and activate YWPs in the domain

CURRENTLY 2200 MEMBERS



GENERAL ACTIVITIES BY MIA SG



- Spread information of the Group's activities and developments
- Convene conferences and arrange workshops/webinars
- Initiate research and case studies, produce special papers
- Stimulate initiation and host Task Groups and Working Groups
- Interact and streamline activities with other IWA SGs, as well as with other academic and professional organisations
- Start SG-internal committees on specific emerging topics of interest
- Work for the benefit of our members, assist IWA HQ on issues

ACTIVITIES

- Benchmarking of Control Strategies (BSM) AND Good Modelling Practice (GMP) AND **Design and Operations** Uncertainty (DOUT) AND Use of Modelling for Minimizing GHG Emissions (GHG) AND **Generalised Physicochemical** Modelling (PCM) (all five finished)
- Membrane Bioreactor Modelling and Control (MBR)
- Good Modelling Practice in Water Resource Recovery Systems (GMP2)

working		Groups (WGS)			Events	
	Systems	ational Fluid		WRRWate	Rmod ermatex	
	 Good Me (GMP) 	odelling Practice				
ng as block by the a Suidelines for Jsing Activated Sludge Models Ma bai for an Good Madding Patiente Ma bai for an Good Madding Patiente		Benchmarking of Control Strategies for Wastewater Treatment Plants	Design	inty in ater Treatment and Operation <i>Current Practices</i>	Quantificatio Modelling of Greenhouse & Emissions fro Water System	

Working Groups (WGs)

Conferences /



INSPIRING CHANGE



UPCOMING EVENTS BY MIA SG



11th Symposium on Modelling and Integrated Assessment (<u>Watermatex2023</u>)

- Location: Québec City, Canada, 23-27 Sept. 2023
- Chair/vice-chair: Prof. Peter Vanrolleghem (Univ. Laval)/Dr. Elena Torfs (Univ. Ghent)

9th Water Resource Recovery Modelling seminar (WRRmod2024)

- Location: Notre Dame, Indiana, USA, 6-10 April 2024
- Organisers: Adrienne Menniti, Leon Downing, Tom Johnson, Rob Nerenberg
- CALL FOR WRRmod2026 soon to appear





UPCOMING EVENTS BY MIA SG





MIA webinar no. 16 Register here!

FIND MIA SG ON SOCIAL MEDIA





Newsletters, push messages, MIA YouTube channel, digital archive

ORGANISING THE WORK WITHIN MIA



- Monthly electronic MC meetings (1 hour)
- Tri-monthly focused YWP meetings + mentoring
- Open MIA SG meeting at major conferences (1/yr)
- Closed MIA MC meeting at major conferences (1/yr)
- Short newsletter (generated from IWA_ConnectPlus)
- Posting news on IWA_ConnectPlus
- Manage <u>open</u> MIA website for non-IWA members
- Produce MIA part of the IWA Global Trend Report series
- Close collaboration with IWA HQ, IWA SC2SG and IWA Learn

- Strong focus on TGs and WGs
- Organise conferences and workshops (IWA/MIA events)
- Organise workshops or sessions at non-IWA/MIA conferences (SETAC, IFAC)
- Organise webinars
- Create MIA visibility on social medias (LinkedIn, Twitter, YouTube)
- Create friendships
- Remember face-to-face social activities



- "Time is the enemy" ALL SG WORK is VOLUNTARY!
- Dedicated MC members essential
- MC: 14 senior members (+ outgoing chair) & 14 associated YWPs working in teams
 - MC more ACTIVE and DYNAMIC
 - Higher work CAPACITY
 - Create **OPPORTUNITIES** for YWPs

Across 11 Countries 19 Institutions



HOW ARE YWPs INVOLVED IN MIA SG (MC FOCUS)?



Active program to fully engage, mentor and involve YWPs

- Every "full" MC member (14) teamed up with an associated YWP
- Teams made up from <u>different research groups</u>
- Senior MC members take on mentoring role
 - Train YWPs in leadership
 - Actively involve YWPs in MC activities
 - Add YWPs to international networks
- Associated YWPs can grow into full members if/when position opens up
- YWPs make up 40-50% in Scientific committees for MIA conferences
- Reviewing in teams (senior/YWP)
- MIA MC currently looking for some new YWPs

INITIATIVES OF ASSOCIATED YWPs



- TG/WG liaisons: YWPs form direct link between MC and TG/WGs
- Tri-monthly separate YWP meeting discussing ongoing activities and new initiatives + mentoring
- (Co-)organization of workshops
 - Integrated modelling workshop at YWP conference Toronto
 - YWP workshop at Watermatex 2019, Watermatex 2023
 - YWP workshop at WRRmod2021, WRRmod2022+, WRRmod2024





INITIATIVES OF ASSOCIATED YWPs



MIA INTERNAL YWP SEMINARS

 To present their background, current research and seek an opportunity for potential collaboration

MIA SG NEWSLETTER

- Newsletter for MIA members once in 3 months through IWA-ConnectPlus
- SUPPORTING LOCAL YWP CHAPTERS





NETWORKING EVENTS WITH IWA SPECIALIST GROUPS YWPs

Digital twin for sustaina and resource efficient

operation of wastewate treatment plants Christoffer Wärff, RISE

- In planning phase



En Shi

YWP SEMINARS OPEN TO ALL YWPs

Seminars are being planned in the field of MIA and networking event



Water Loss Specialist Group

GARY WYETH, SECRETARY STUART HAMILTON, CHAIR



inspiring change

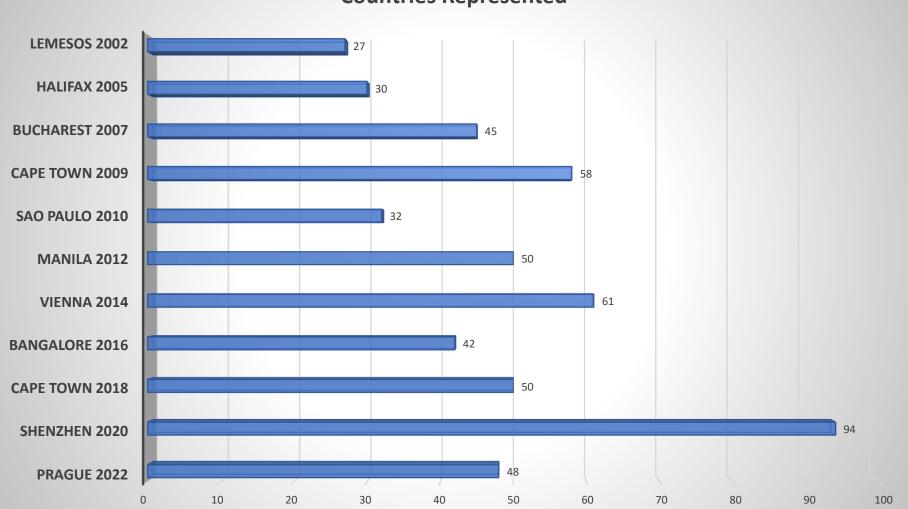
THE TEAM



- Chair: Stuart Hamilton UK
- Secretary: Gary Wyeth Thailand
- Management Committee 20 members 17 countries
- Country Representatives 15 (continuously increasing)
- Over 1500 IWA Connect WLSG members
- Over 4000 active members promoting Water Loss
- Represented in over 60 countries

PREVIOUS CONFERENCES





Countries Represented



"to provide leadership in the development of effective and sustainable international best practice in water loss management"

"to develop best practices in water loss management"



- Introduce new and young talent to the WLSG
- Encourage and promote gender balance across all activities delivered by the WLSG
- Create relationships and sharing of knowledge with water Associations around the world
- Build relationships with funding institusions, such as World Bank, to assist them in promoting and investing in best practices to reduce water loss



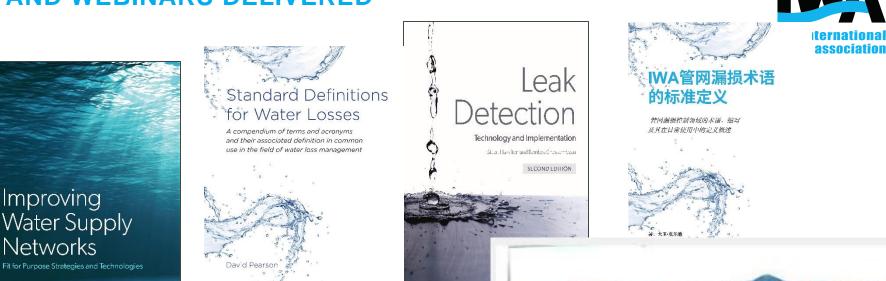
- Investigate new best practices in water loss management
- Update all existing documents & processes and distribute
- Seek to promote new technologies from around the world
- Promote regional conferences and awareness programs

DELIVERABLES



- Distribute all knowledge gained by means of electronic communications
- Promote all findings through conferences
- Encourage free sharing of data
- Share software and spreadsheets to allow everyone to benefit

BOOKS PUBLISHED, SPREADSHEETS DEVELOPED AND WEBINARS DELIVERED





The free water balance software Version 6.15 (24 July 2021)



avid Poarso

Networks

Stuart Hamilton, Bambos Charalambous and Gary Wyeth

Definiciones Estándar de Pérdidas de Agua

Compendio de términos y acrónimos y su definición asociada de uso común en el campo de la gestión de

las pérdidas de aqua

Water System Improvement Calculator

Based on the Water System Improvement Matrix Methodology

TAKE HOME MESSAGE



- Its not about being the best but being better than yesterday
- Albert Einstein is credited for saying "The definition of Insanity is doing the same thing over and over again and expect a different result" – make that change that matters
- Be as wild as you like looking for innovation just be disciplined during the implementation
- The WLSG is there to help and we are one big family – don't be afraid to ask



Thank you!

Stuart Hamilton: Gary Wyeth:

stuart.hamilton@miya-water.com garywyeth@me.com



Instrumentation, Control and Automation Specialist Group

JANELCY ALFERES, CHAIR



OBJECTIVES

International discussion forum to collect, exchange methodologies & experience in all aspects of ICA for water systems

- Collect, summarize and publish practical experience to support and promote the use if ICA in practice
- Highlight socio-economic and sustainability aspects of ICA. e.g. management problems, operator aspects or incentive systems









Knowledge

ORGANIZATION



- Open to all IWA members
- Management Committee (MC) is composed of the chair, the vice-chair and up to 10 IWA members, each fulfilling a role
- Monthly web meetings
- Dedicated working/brainstorming sessions when needed

ORGANIZATION



Management structure

		*				
Janelcy Alferes	Yanchen Liu	Ángel Robles	Oscar Samuelsson	Ramesh Saagi	Luz Alejo	Niels Nicolai
Chair	Vice-chair/secretary	Liaison IWA clusters, SG, WG, TG & event coordinator	Content manager for Newsletter, website, Liaison officer Industry & Utilities	Newsletter editor and public relations coordinator	Smart water and wastewater systems	YWP Relations officer & IWA connect and website manager
Liu Ye	Nataliia Siv	chenko Pau Ju	ian Alexand	Iria Gagnon	Tri Le	Yu Jie
ICA conference, w	vebinars Affiliated	YWP Affiliated	I YWP Affilia	ated YWP	Affiliated YWP	Affiliated YWP

- Updating IWA Connect & social media with relevant information
- Group newsletters (which can be found on the SG's IWA Connect page)
- Organising and supporting conferences & workshops
- Supporting Task Groups, Working Groups & Clusters
- Organising webinars
- Encouraging publications of ICA related papers at conferences and in scientific journals.
- Leveraging partnerships and relationships with industry organization with overlapping missions, such as the Smart Water Network Forum.









IWA Connect Plus

Search ICA under "Search" to go to the ICA group page

Click "Join group"

Any questions or issues about joining in ICA group on IWA connect, please contact *Dr.* Niels Nicolai <u>Niels.Nicolai@gci.ulaval.ca</u>

Community | IWA communities and their work are at the heart of the Association, reflecting the breadth and depth of the water sector globally.

As an IWA member you gain direct access to a diverse, global network of professionals working across a range of specialised topic areas; through networking, collaboration and exchange of knowledge you will obtain the key support and tools to become an active agent of change towards a world of sustainable water management.

Groups Events People Corporate / University Members



Specialist Group Cluster Gr	roup Task Group Governing	g Member Programs Group	Working Group Misc You	ng Water Professional	
			Q þearch	X Parch By Tags	All Groups 🗸
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SG Leaders Forum	Advanced Oxidation Processes	Anaerobic Digestion	Assessment and Control of Hazardous Substances in Water	Benchmarking and Performance Assessment	Biofilms
View Group	View Group	View Group	(View Group	© View Group	View Group
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Chemical Industries	Design Operation and	Design Operation and	Diffuse Pollution and	Disinfection	Efficient Urban Water

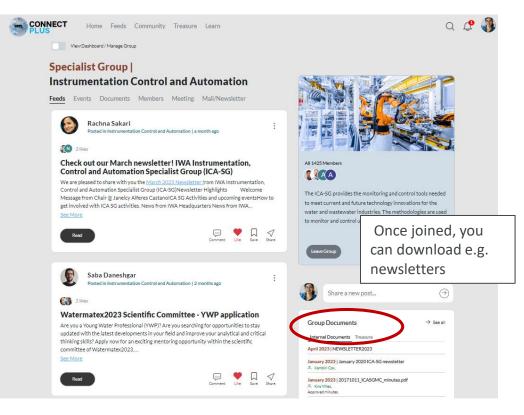


IWA Connect Plus

Search ICA under "Search" to go to the ICA group page

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Any questions or issues about joining in ICA group on IWA connect, please contact *Dr.* Niels Nicolai <u>Niels.Nicolai@gci.ulaval.ca</u>



Social media

Different of social media platforms

<u>LinkedIn</u>

in 9 Search

INSTRUMENTATION
CONTROL AND
Froup on Instrumentation, Control and Automation
nging the best practices and state-of-the-art in ICA to all stakeholders in the
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connection work here

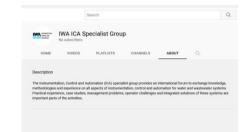
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<u>Youtube</u>





Newsletter

Message from chair Welcome to the ICA SG **Activities** How to get involved in WG, TG Get involved in webinars, clusters New projects, activities and issues Upcoming events PhD thesis News from IWA Publishing

Content

Newsletter editor Ramesh Saagi

ramesh.saagi@iea.lth.se

IWA SPECIALIST GROUP NEWSLETTER

March 2023

Content Velcome to the ICA SG News, projects, activities & issues Ph.D. Theses News from IWA Headquarters

News from IWA Publishing Write to Us!

WRITE TO US!



Thanks for your support and your active enrolment within the ICA related activities!

Janelcy Alferes

R&D Project Leader - Monitoring technology & Digital water WaterKlimaatHub - VITO



Dear ICA-SG members,

Welcome to the March 2023 Newsletter of the IWA Instrumentation, Control and Automation Specialist Group (ICA-SG). We present you this updated version in view of providing you at a glance, relevant and interesting information for the ICA community.

We share with you the latest ICA-SG activities, like the participation in the ICA2022 conference in its first digital format. We provide you as well an update on news, projects, event, webinars, publications and upcoming events. Thanks to all contributors!

It is a fact that the traditional ICA is changing, as well as the challenges that the water industry needs to face. In parallel to a required integrated approach, the fast technology evolution and advances on AI are offering more possibilities to monitor and control our water systems for efficient management of the available resources and decision making.

From ICA-SG we want to contribute to this evolution. offering a platform for exchanging knowledge and setup good practices. As an active community, we look forward to hear from you in this regard, feel free to contact us to share any news or interests you want to move forward.





INSTRUMENTATION CONTROL AND AUTOMATION

Reports and white papers

IWA Global trends report

Three main themes

- Ι. Innovative Technologies
- Water and Health П.
- **Resource Recovery and** Ш. **Circular Economy**

Introduction to instrumentation, control and automation (ICA)

Trends in instrumentation, control and

Authors: Juan Antonio Baeza, Linda Åmand, Joaquim Comas, Oliver Grievson, Pau Juan-Garcia, Yanchen Liu, Angel Robles, Ken Thompson, Kris Villez and Liu Ye on behalf of the ICA Specialist Group

automation for the water industry

The ICA Specialist Group is an international forum to exchange knowledge, methodologies and experience on all aspects of ICA for water and wastewater systems. ICA aims to provide the monitoring, communication, data analytics, and control tools needed to cope with current and future technological innovations for the water and wastewater industries.

Existing knowledge on ICA

1.2

ICA is currently applied throughout the urban and rural water systems at source water intakes, drinking water treatment plants (DWTPs), water distribution networks, sewer networks and water resource recovery facilities (WRRFs).

What do we understand by ICA? Instrumentation ranges from simple monitoring sensors to complex online analysers. Control means either to bring a process from one status to another or maintain it at its set point. It can be achieved through single-loop controllers for the control of individual unit processes, or more advanced control systems based upon a combination of different control loops or by multi-variable

sewer overflows (CSOs) discharged into the environment. Water quality sensors are used in conjunction with sewer models and data analytics to provide insight into pollutants discharged into the collection system that can be harmful to downstream treatment facilities. This information is being used to identify the illegal discharger, and also to divert flows nrior to treatment

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https://iwa-network.org/publications/global-trends-andchallenges-in-water-science-research-and-management/

Webinars & workshops

Organizing several webinars & workshops per year

YWP workshop @ICA2022 Conference: Are you game? Serious games to support future proof water systems





- Collaboration with companies and organizations interested in the common topics to ICA in the water sector
 - Water Industry Process Automation & Control Group

WIPAC https://www.wipac.org.uk/

Smart water network forum

SWAN https://swan-forum.com/



CLOSING REMARKS

- Working on:
 - Stimulate bridging the gap between needs and applied solutions
 - Strengthen synergies with other SGs and IWA initiatives
 - Extend and activate communication activities through different channels
 - Preparation of webinars and workshops for 2023

What about YWP?

- Support all activities of the Management Committee (MC): Website, social media, newsletter, events/webinars coordination, all dissemination activities
- Specific tasks in liaison with the YWP Relations officer
- Active participation in the MC monthly meeting













Final remarks

CLAUDIA PREHN AND ISABELA ESPINDOLA



UPCOMING IWA EVENTS





UPCOMING IWA EVENTS





MEMBERSHIP FEE

- IWA uses a high / low-income country classification for its membership fees. The HIC/LIC classification is based on your country of residence and not on your country of origin.
- For more information on the membership benefits please view the <u>IWA</u> <u>Membership Benefits table</u>.

INDIVIDUALS	HIC	LIC
Individual 1 yr	£103	£52
Individual 2 yr	£185	£93
Student/Retired 1 yr	£52	£38
Student/Retired 2 yr	£91	£67



JOIN OUR NETWORK OF WATER PROFESSIONALS!



IWA brings professionals from many disciplines together to accelerate the science, innovation and practice that can make a difference in addressing water challenges.

Use code IWAYWP23

for a 20% discount off

new membership.

Join before 31 December 2023 at: <u>www.iwa-connect.org</u>



