

IAHR PERU Young Professionals Network

2021 Annual Report of Activities

1. Introduction

The IAHR Peru YPN was created as a network of young professionals and students in science and engineering who are motivated to conduct research and improve their skills in the areas of hydraulics, hydrology, water resources and their connection with other sciences such as climatology, ecology, geography, geology and related environmental sciences. The network has the support of the Peruvian Association of Hydraulic and Environmental Engineering (APIHA).

Our mission is to forge a group of highly committed professionals dedicated to promoting the involvement of young people in the integrated management of water resources in Peru and to proposing solutions to different issues where water both plays an essential role and is vulnerable. Our vision is to form a highly competent network capable of fostering future professionals who will contribute to different disciplines, policies, and decision-making in our country.

2. 2021 main goal and key objectives

- Promote activities for the construction of the social, cultural, scientific and technological development of the country.
- Collaborate and participate energetically in activities for the dissemination and knowledge of relevant issues in water resources.
- Generate research through theses and scientific articles on topics related to Water Resources.
- Collaborate and support projects proposed by various groups related to Water Resources in any part of the country.
- Disseminate knowledge and progress using all the means of communication that are at your disposal.

In summary, we have tried to meet the objectives mentioned in our statute despite the complications that have occurred during this year, so we have chosen to carry out multiple events online, which has allowed us to connect with researchers from other countries.



3. Composition

Officers

President

Rodrigo Alexander Chavarry Victoriano (rodrigo.chavarry@unmsm.edu.pe)



Vice President

Ivana Karina Escate Gastañaga (ing.escate05@gmail.com)



Advisor

Julio Montenegro Gambini (J.I.MontenegroGambini@tudelft.nl)



Secretary

Elizabeth Milagros Santiago Torres (emist2694@gmail.com)



Treasurer

Magaly Cusipuma Ayuque (ayuquemagaly@gmail.com)



Public Relations Coordinator

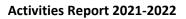
Carol Isabel Salazar Mamani (csalazar@unsa.edu.pe)



Academic Link Coordinator

Angel Martin Rincón Rodríguez (angel.rincon.r@uni.pe)







List of members

Name	Surname	Country	Membership category (student or professional affiliate)
Abner Divan	Cari Mamani	Peru	Student Affiliate
Alexandra Jakelyn	Zuloaga Panana	Peru	Young Professional Affiliate
Alexis Baldomero	Gutarra Rodriguez	Peru	Student Affiliate
Alfredo Enrique	Mory Loarte	Peru	Student Affiliate
Angel Martin	Rincón Rodríguez	Peru	Young Professional Affiliate
Angello Fabrizzio	Figueroa Figueroa	France	Young Professional Affiliate
Anthony Kevyn	Del Rosario Ruiz	Peru	Young Professional Affiliate
Axel Steven	Uribe Rodriguez	Peru	Young Professional Affiliate
Carlos Edwin	Obispo Padilla	Peru	Young Professional Affiliate
Carmen Guadalupe	Rosas Tomas	Peru	Young Professional Affiliate
Carol Isabel	Salazar Mamani	Peru	Young Professional Affiliate
Channel Yurico	Rodriguez Torres	Peru	Young Professional Affiliate
Claudia	Lloclla	Peru	Young Professional Affiliate
Darwin Dino	Palma Tafur	Peru	Young Professional Affiliate
Eduardo Fred	Melendres Perez	Peru	Young Professional Affiliate
Edvin Neil	Huamanguillas Paravecino	Peru	Young Professional Affiliate
Elizabeth Milagros	Santiago Torres	Peru	Young Professional Affiliate
Elmer Dante	Rojas Zuta	Peru	Young Professional Affiliate
Erick Gianfranco	Zavaleta Vereau	Peru	Young Professional Affiliate
Frank Charles	Ramírez Bogovich	Peru	Young Professional Affiliate
Ivana Karina	Escate Gastañaga	Peru	Young Professional Affiliate
Jackelinne Patricia	Tello Chavez	Peru	Young Professional Affiliate
Jean Carlos	Diestra Vidal	Peru	Student Affiliate
Jeefry Williams	Samaniego Huayanay	Peru	Young Professional Affiliate
Jheysson Rechter	Valdivia Chavez	Peru	Young Professional Affiliate
Jhudit Eva	Condori Mamani	Peru	Young Professional Affiliate
Jordan Joseph	Grados Panduro	Peru	Young Professional Affiliate
Joshua Er Addi	Iparraguirre Ayala	Peru	Young Professional Affiliate
Josue Arturo Neptali	Tanta Sandoval	Peru	Student Affiliate
Karen Adriana	Tunque Vilca	Peru	Young Professional Affiliate
Karen Fiorella	Aparco Carranza	Peru	Young Professional Affiliate
Karen Patricia	Garcia Angulo	Peru	Young Professional Affiliate
Lady Nathaly	Constancio Vilca	Peru	Young Professional Affiliate
Luiggi Anthony	Cardenas Acuña	Peru	Young Professional Affiliate
Magaly	Ayuque	Peru	Young Professional Affiliate
Malú Massiel	Galindo Sánchez	Peru	Student Affiliate
Michel Huber	Cueva Portal	Peru	Young Professional Affiliate



Michell Andree	Fernández Velarde	Peru	Young Professional Affiliate
Nataly Marisol	Chirinos Herrera	Peru	Young Professional Affiliate
Nelida Asbel	Ayta Humaní	Peru	Young Professional Affiliate
Pedro Alexis	Cahuana Coronacion	Peru	Young Professional Affiliate
Roberto Antonio	Muñoz Llanos	Peru	Young Professional Affiliate
Rodrigo Alexander	Chavarry Victoriano	Peru	Young Professional Affiliate
Sebastian	Manchego	Peru	Young Professional Affiliate
Thania Nathaly	Mostacero Ordaz	Peru	Student Affiliate
Vanessa Rosa	Hilario Coaguila	Peru	Young Professional Affiliate
Vanessa Victoria	Juárez Laura	Peru	Young Professional Affiliate
Victor	Gallo Ramos	Peru	Young Professional Affiliate
Victor Brian	Velasquez Huaman	Peru	Young Professional Affiliate
Waldir Anderson	Sulla Mendoza	Peru	Young Professional Affiliate
Wendy Rocio	Roque Quispe	Peru	Young Professional Affiliate
Yazid Pedro Nilton	Cordero Mescco	Peru	Young Professional Affiliate
Yudyt de Milagros	Palma Tafur	Peru	Young Professional Affiliate

4. Communications

Website and social networks

Website	https://www.iahr.org/index/committe/122
Facebook	https://www.facebook.com/iahrperu/
Twitter	https://twitter.com/ypnperu
Instagram	https://www.instagram.com/ypnperu/
Linkedin	https://www.linkedin.com/company/ypnperu
Youtube	https://www.youtube.com/channel/UCue8hVI I5dGSLJJI_oSEqog

Promotional and information materials

Newsletter/s	Informative e-mails by e-mail
Publication/s	Posts via social media
Other	





5. Activities

Activities organised in 2021:

Activity 1:



Name of the activity:

Programming in R and Python aplied to water resources - Intermediate level

Dates: start and duration

Wednesday February 03, 2021 (Duration of two months)

Objectives:

Provide tools and theoretical knowledge that allow students to improve their skills in programming in R and Python with applications related to water resources.

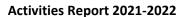
Description:

Event organized by the leadership team of our YPN, dictated by M. Sc. Julio Isaac Montenegro Gambini, with the support of the other members of the leadership team.

The course was mainly directed to our members, however, we also had participants from other YPNs, as well as students related to the country and Latin America.

Activity 2:

	Name of the activity: Informative Talk: Young Professionals Networks	
	Dates: 14 February 2021	
	Objectives: Publicize the proposal of our YPN and extend the invitation to be part of us.	







Description:

We released our second call (2021) for the public to be part of our YPN IAHR network.

The objective was to make known both the objectives of the IAHR and those that we as a group will have to the public in general.

Activity 3:



Name of the activity

Interview sessions with researchers and professionals dedicated to the Area of Water Resources and The Environment.

Dates:

Friday February 19, 2021 - 07:00 mm - 08:00 pm (GMT-05:00).

Objectives:

In this interview María Cárdenas talked about her experiences as a researcher abroad, in addition to orienting future researchers and professionals in the field of water resources and the environment.

Description:

On February 19, 2021, Dr. María Cárdenas Gaudry was interviewed about her experiences as a researcher in the area of Environment and Water Resources in Germany, Austria and Peru.





Activity 4:



Name of the activity:

The Project: The Water Journal Club

Dates:

Thursday February 25,2021.

Objectives:

Organize activities involving open discussion of scientific articles related to Water Resources, in the following lines of research:

- Hydraulics and Computational Hydrology.
- Ecohydrology and Environmental Flows
- Integrated Management of Water Resources
- Fluvial Hydraulics
- Coastal Hydraulics
- Design and Management of Hydraulic Systems
- Climate Change and Water Resources
- Hydrology and Climatology
- Glaciers and Mountain Basins.

Promote activities for the construction of the social, cultural, scientific and technological development of the country through the free horizontal debate of scientific articles.

Description

Was founded on February 25, 2021 as a network for the exchange of knowledge and discussion of scientific articles in a group manner, in which debate and criticism strengthen scientific development and its dissemination.





Activity 5:



Name of the activity:

Interview sessions with researchers and professionals dedicated to the Area of Water Resources and The Environment.

Date:

Friday February 26, 2021 - 6:00 pm (GMT - 05:00)

Objectives:

In this interview, Mitchel Jara shared with the network and the public audience his professional experiences in projects related to surface and subsurface water resources were discussed, in addition to orienting future researchers and professionals in the area of water resources.

Description:

On February 26, 2021, an interview was conducted with M. Sc. Mitchel Jara García, general manager of MJ & Asociados Water Resources Consulting, where he commented on his experiences as a consultant for projects related to surface and groundwater resources.

Activity 6:

Name of the activity:

Interview sessions with researchers and professionals dedicated to the Area of Water Resources and The Environment.





Dates:

Friday March 05, 2021 - 5:00 pm (GMT - 05:00)

Objectives:

In this interview, professional experiences in Water Quality research projects were talked about, in addition to orienting future researchers and professionals in the area of water resources.

Description:

Albert Johan Mamani Larico, Environmental and Water Resources specialist, was interviewed on March 5th, 2021, where he told us about his experiences in Water Quality research projects.

Activity 7:



Name of the activity:

Interview sessions with researchers and professionals dedicated to the Area of Water Resources and The Environment.

Dates:

Friday March 19, 2021 - 6:00 pm (GMT - 05:00)

Objectives:

In this interview we talked about experiences in research about projects related to environmental themes with Yuri Tito.

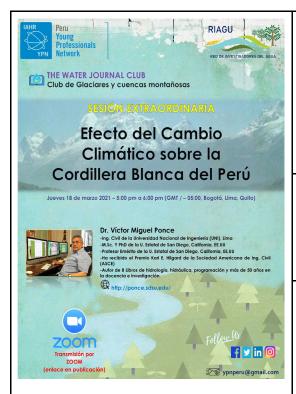
Description:

On 19 March 2021, an interview was held with the Agronomist Yuri Tito Quispe, consultant in



Water Resources, where he told us about his experiences in research projects and environmental themes.

Activity 8:



Name of the activity:

First extraordinary session of the Glaciers and Mountain Basins Club

Theme: "Effect of Climate Change on the Cordillera Blanca of Peru".

Dates:

Thursday March 18, 2021 - 5 pm- 6:00 pm (GMT - 05:00)

Objectives:

Regional global warming is causing an increasing retreat of glaciers in the Cordillera Blanca, Peru. The melting of these glaciers causes, among other consequences, the formation of new glacial lakes and an increase in the volume of pre-existing glacial lakes; both phenomena increase the possibility of glacial disasters. It is therefore important to provide guidance on these issues to students, researchers and professionals.

Description

On Thursday, March 18, 2021, the first extraordinary session of the Glaciers and Mountain Basins Club was realized, thus addressing a very important topic regarding



the phenomena that increase the possibility
of glacial catastrophes.

Activity 9:



Name of the activity:

Webinars: Value of Water, Situation and Challenges of Water in Peru.

Dates:

Monday March 22, 2021 - 07:40 pm - 09:00 pm (GMT - 05:00)

Objectives:

Webinar focused on the situation and challenges of water in Peru according to the experience of the invited specialists.

Description

On Monday 22 March 2021, the webinar was presented focusing on the situation and challenges of water in Peru, in the context of the water day.

Activity 10:

Name of the activity:
First extraordinary session of the Hydrology and Climatology Club





Theme: "Disparity of Hydroclimatic Change in the Peruvian Pacific Slope Basins"

Dates:

Friday March 26, 2021 - 7:00 pm - 8:00 pm (GMT - 05:00)

Objectives:

The importance of this session is centred on hydrological and climatic themes, where a detailed analysis of the hydro-climatological variability in the basins of northern Peru is presented.

Description

The first extraordinary session of the Hydrology and Climatology Club was realized on Friday 26th March 2021, with the aim of orienting students, researchers and professionals interested in the area of Hydrology and Climatology.

Activity 11:

Name of the activity:

First extraordinary session of the Hydraulic Systems Design and Management Club

Theme: "Evaluation of the alternatives for the recovery of the storage capacity of the Poechos reservoir"





Dates:

Friday April 02, 2021 - 6:00 pm - 7:00 pm(GMT - 05:00)

Objectives:

The importance of this session is centred on the themes of design and management of hydraulic systems, where the thematic was mainly based on an article about the largest dam in Peru, Poechos.

Description:

On Friday 02 April 2021, the first extraordinary session of the Hydraulic Systems Design and Management Club was realised, with the objective of orienting students, researchers and professionals interested in the area of hydraulic systems design and management.

Activity 12:

Name of the activity: Webinar: "Transboundary Water Resources Management: Peru-Ecuador Case" Dates: Friday April 16, 2021 - 06:00 pm - 7:00 pm (GMT /- 05:00)







Objectives:

The importance of this seminar is centred on the themes of transboundary water resource management between Peru and Ecuador.

Description:

On Friday, April 16, 2021, the webinar "Transboundary Water Resources Management: Peru - Ecuador Case" was realized with the intention of orienting students, researchers and professionals interested in the area of Water Resources.

Activity 13:



Name of the activity:

Cycle of conferences: Advances in the study of hyperconcentrated flows, slurry and debris flows.

Dates:

Friday May 21, 2021 - 05:00 pm - 6:00 pm (GMT /- 05:00

Objectives:

The importance of this cycle of conferences is centered on themes related to the area of torrential hydraulics, challenges in research with rheologies other than water and the importance of sediments in its dynamics, as well as tools and approaches for its modeling; which is useful for disaster risk management, caused by natural phenomena, and the design of attenuation and retention structures.



Description

On Friday 21 May 2021, we realised the cycle of conferences related to the themes of hyperconcentrated flows, slurry and debris flows, with the objective of orienting students, researchers and professionals interested in the area of prevention of Disaster Risk Management and Water Resources.

Activity 14:



Name of the activity:

Webinar: "Best practices with Qgis applied to Water Resources"

Dates:

Sunday June 13, 2021 - 06:00 pm - 7:00 pm (GMT /- 05:00)

Objectives:

The importance of this webinar is centred on the theme "Best practices with Qgis applied to Water Resources".

Description:

On Sunday 13 June 2021, the webinar "Best practices with Qgis applied to water resources" was realised with the intention of orienting students, researchers and professionals interested in the area of Water Resources.

Activity 15:





Name of the activity:

Webinar: Using OPENFOAM for Hydraulic works design

Dates:

Sunday, November 14, 2021 - 06:00 pm to 07:00 pm (GMT - 05:00).

Objectives:

The importance of this webinar is centred on the theme of "Using OPENFOAM for the design of hydraulic works".

Description

On Sunday 13 June 2021, the webinar "Using OPENFOAM for the Design of Hydraulic Works" was realised with the intention of orienting students, researchers and professionals interested in the area of Hydraulic Engineering using new trends in computational fluid dynamics.

Activity 16:

Name of the activity:

Webinar: "How to read and analyse a scientific article"

Dates:

Saturday November 20, 2021 - 6:00 pm - 7:00 pm (GMT /- 05:00 Bogotá, Lima, Quito).







Objectives:

The importance of this webinar is centred on the theme "How to read and analyse a scientific article"

Description:

On Saturday 20 November 2021, the webinar "How to read and analyse a scientific article" was realised with the intention of orienting students, researchers and professionals in the discussion and analysis of scientific articles.

6. Partnerships and collaborations

Partner organisations and/or interaction with related national organisations

Organisation	Description of partnership
Peruvian Association of Hydraulic and Environmental Engineering (APIHA)	Different meetings to seek for collaboration between professionals and scheduling events with presentations for the IAHR PERU Young Professionals Network

Collaboration with other YPNs

YPN name	Description of collaboration
IAHR Universidad Peruana de Ciencias Aplicadas (UPC) - CEDIRHMA Young Professionals Network. (President: Mayra Vega)	A coordination meeting was held with them to coordinate future events for the 2022-2023 period, such as a virtual information fair for scholarships for graduate studies in water resources.
IAHR UTEC Water and Environmental Research Young Professionals Network	It was developed together with them, the Webinar: Using OPENFOAM for Hydraulic works design (November 14th, 2021).





7. Contributing to the strategic plan

7.1. Please describe how your activities in 2021 have contributed to and advocated for IAHR's vision and strategic plan (https://www.iahr.org/index/detail/101)

During 2021 we have had different objectives that have been achieved with the collaboration of different members, especially in the training of different young people at undergraduate and postgraduate level with courses in computer programming, reading and discussion of scientific articles. These events have been very well received in Peru and internationally, proof of them are the successful numbers that we got through our social networks, this reception was achieved due to the high academic quality of the guests that we had, with which we are quite grateful for their time.

We have received, as we did in 2020, many messages from young professionals in the interior of Peru who are looking forward to joining our network. At the beginning of 2022 we have had elections and it will be the new leadership team who will make a new call so that we can welcome a new number of young people enthusiastic to learn and share experiences in water science and engineering.

This year we have achieved the participation of network members with their papers at the second world congress of the YPNs, where there was also an active participation of members with their consultations. We are very proud to have been one of the Latin American networks that has given an important stature to the event. As in this event, our group will always be interested in produce and disseminating research on environmental issues and those involving water, so we feel that we are on track and related to the vision and institutional strategic plan of the IAHR and we will continue to do so in the future.

7.2. Please describe how your YPN contributes to the IAHR YPN high-level aims

Our approach has always been to publicize the contributions in our fields of study made by multiple students, young professionals and researchers in our country, especially those from the interior of Peru who do not have the media to support them.

One of the main objectives of our group is to give a voice to researchers from universities that do not have an YPN or that do not have access to a broadcast channel with a greater number of possible recipients such as our social networks or IAHR's pages. In this period, we started to conduct interviews on Instagram, in order to know the academic and professional experiences, involved in the area of water resources.

Likewise, we have held online events in which we have had the participation of people involved in the IAHR from other countries such as Mexico and Spain, with which we are quite grateful, the topics that have been dictated through our events have had a great level in the academic aspect, proof of the quality of the presentations is the great reception that our events have had by the public from other Latin American countries such as Chile, Paraguay, Ecuador, Brazil, Argentina, among others.



We were able to meet since our creation with the different YPNs that are located in different universities in Peru such as Pontificia Catholic University of Peru, National Engineering University, La Molina National Agrarian University, Peruvian University of Applied Sciences and University of Engineering and Technology; in order to meet and find activities with a mutual interest. We were also able to coordinate with international YPNs such as Panama and Venezuela.

Our group aims to continue holding events that facilitate cooperation with other groups involved in water resources and the environment, either with other YPN networks or with associations related to the issue at the national and international level, all without neglecting the growth of our own members.