

IAHR UNI GEAHH Young Professionals Network

2023 Annual Report
of Activities



**Young
Professionals
Network**

Hosted by
Spain Water and IWHR, China


1. Our vision and mission

Grupo Estudiantil Aplicado a Hidráulica e Hidrología (GEAHH), we are a group of the Faculty of Civil Engineering dedicated to promoting and contributing knowledge and experiences concerning hydraulics and hydrology through various activities.

2. Main goals and key objectives in 2023

We aimed to increase our knowledge dissemination activities through various activities such as webinars, workshops, technical visits, and informative flyers, among others. In addition to unifying us as a group and strengthening the relationship between members and associated entities.

3. Activities in 2023

 <p>The flyer is for a webinar series titled "INTELIGENCIA ARTIFICIAL EN EL MANEJO DE LOS RECURSOS HÍDRICOS" by Dr. Ing. Gerald Corzo Perez. It features a circular portrait of the speaker and a background image of a river. The text includes his credentials: "Ingeniero Civil de la Escuela Colombiana de Ingeniería con especialización en teleinformática y doctorado en Inteligencia Artificial híbrida para el pronóstico de inundaciones." It also lists his roles as a professor and coordinator at the IHE Delft, his award-winning status from IAHR, and his work on remote sensing models. The event is scheduled for Thursday, March 23rd at 10:00 UTC-5. Transmission is via Zoom and Facebook Live. Logos for IAHR, YPN, and Universidad Nacional de Ingeniería-GEAHH are present.</p>	"WATER DAY" WEBINAR SERIES
	Date/s 23-24-25 February 2023
	Venue Online
	Objectives <i>In commemoration of the Water Day, we held a series of presentations by leading researchers.</i>
Description This event shares the knowledge and experience of leading researchers concerning water issues, their importance, and challenges to be taken into consideration in order to provide solutions.	

INFRAESTRUCTURA RESILIENTE AL CAMBIO CLIMÁTICO

Dra. Ing. Ada Arancibia Samaniego

- Ingeniera Civil de la Universidad Nacional de Ingeniería, con más de 25 años de experiencia en el campo profesional.
- Maestría en Ciencias en Gestión Ambiental de Recursos Hídricos del UNESCO – IHE Delft, Holanda.
- Doctorado en Gestión de Recursos Hídricos y Saneamiento Ambiental en la Universidad Federal de Rio Grande do Sul – Brasil.
- Catedrática en la Universidad Nacional de Ingeniería – Facultad de Ingeniería Civil en el Departamento Académico de Hidráulica e Hidrología.
- Calificada como Investigador CONCYTEC desde junio del 2022.
- Viene desarrollando proyectos de investigación relacionados con la gestión de los recursos hídricos y cambio climático, específicamente en medidas de adaptación al cambio climático.

VIERNES 24 MARZO 16:00 (UTC-5)

TRANSMISION:

IAHR YPN Universidad Nacional de Ingeniería-GEAHH Young Professionals Network

TORTUDATOS

Date/s

Any date in 2023

Venue

Online

Objectives

Disseminate knowledge of basic topics related to water resources.

Description

Informative and easy-to-learn flyer or video publications for all interested audiences.

TORTUDATOS

Hidráulica

Viscosidad de Newton

Establece que en movimientos laminares existe una relación lineal entre las tensiones tangenciales y los gradientes de velocidad.

La constante de proporcionalidad entre estas es la viscosidad dinámica siendo una propiedad físico del fluido.

Donde:

- τ : Esfuerzo cortante
- $\frac{\partial u}{\partial y}$: Razón de deformación angular del fluido
- μ : Viscosidad dinámica o absoluta
- F : Fuerza tangencial
- A : Área de la placa 2D

Los fluidos newtonianos cumplen con la relación lineal mientras que los no newtonianos no existe relación alguna

IAHR YPN Universidad Nacional de Ingeniería-GEAHH Young Professionals Network

GRUPO ESTUDIANTIL APLICADO A LA HIDRÁULICA E HIDROLOGÍA

¿QUÉ SE HABLA EN LOS RECURSOS HÍDRICOS?

- ESTADOS Y FUENTES DE LOS RECURSOS HÍDRICOS.
- USO PRODUCTIVO Y NO PRODUCTIVO DEL RECURSO.
- PREVIENE EVENTOS QUE AMENAZAN LA CALIDAD DE VIDA.

DRA. ADA ARANCIBIA SAMANIEGO
DOCENTE DEL DAHH

IAHR YPN Universidad Nacional de Ingeniería-GEAHH Young Professionals Network

"Estudiantes hoy Hidráulicos e hidrólogos siempre"

INTEGRATION TOUR

Date/s

26 March 2023

Venue



Ricardo Palma" Country Club

Objectives

Improve the relationship between members through group dynamics, sports, and lunch.

Description

Recreational activities and sports among members at the country club, in addition to a group lunch.

EXPANSIÓN ALIANZA INTER UNIVERSITARIA DE RECURSOS HÍDRICOS
¡CONÓCENOS!

GEMRA
Somos una asociación estudiantil interdisciplinaria de la PUCP enfocada en la difusión de conocimiento, investigación y concientización en lo concerniente al cuidado del medio ambiente y los recursos hídricos a través de la realización de talleres, congresos, difusión en redes, investigaciones académicas y realización de proyectos orientados a la solución de problemáticas reales.

GEAAH
Grupo Estudiantil Aplicado a la Hidráulica e Hidrología de la Facultad de Ingeniería Civil de la UNI, está compuesto por estudiantes y egresados de la carrera de Ingeniería Civil y otras a fines, motivados con el aprendizaje, investigación y fomento del tema de Hidráulica, Hidrología y recursos hídricos mediante eventos, cursos y proyectos orientados a nuestros objetivos.

Grupo de Investigación en Hidráulica, Hidrología, Recursos Hídricos, Medio Ambiente y Energías no convencionales de la UNMSM. Las líneas de investigación comprenden hidráulica de tuberías y canales, Hidráulica fluvial, Hidráulica marítima, Hidrología, Medio ambiente (Oceanografía Física, Meteorología y dinámica de Fluidos geofísicos), Recursos Hídricos, modelación numérica en hidráulica e hidrología y Dinámica de Fluidos Computacional, Energías no convencionales. Se gestionan eventos como ponencias, cursos talleres y difusión de la carrera de Ingeniería Mecánica de Fluidos principalmente en las ramas mencionadas.

EXPANSION OF THE UNIVERSITY WATER RESOURCES ALLIANCE

Date/s

29 March 2023

Venue

Online and presential

Objectives

Expand partnerships and promote the Water Resources branch through events and collaborations throughout the year.

Description

We made an alliance between student groups from other universities such as GESIH (USIL), IDI (UPC), WER (UTEC), GEMRA (PUCP), CIDRHI (UNALM), and GIHREHMA (UNMSM) all with the same objective of expanding knowledge in water resources.



CONVOCATORIA GEAHH 2023-1

Date/s

23 April 2023

Venue

Online

Objectives

Know the occasions when knowledge of hydraulics and hydrology, the mission, vision, and objectives of our student group is very important.

Description

Dynamics, activities, and a raffle of semi-scholarships offered by Gesconval to the participants were developed, where they will be able to take advantage and further develop their knowledge in engineering



VIRTUAL

CURSO - TALLER BÁSICO:
GOLDSIM - MODELAMIENTO Y
BALANCE DE AGUAS

Ing. Lorena Dueñas
Ingeniera Civil de la
Universidad Nacional
Hermilio Valdizán, Huánuco.

Ing. Jean Huaraca
Ingeniero Civil de la
Universidad Nacional de
Ingeniería, CIP.

DIRIGIDO A:
Estudiantes, egresados y profesionales
interesados en recursos hídricos y minería.

CRONOGRAMA: VÍA ZOOM
19:00 - 22:00 (UTC-5)

SESIÓN 1 ➤ LUNES 12 DE JUNIO
SESIÓN 2 ➤ JUEVES 15 DE JUNIO
SESIÓN 3 ➤ VIERNES 16 DE JUNIO

INFORMES Y BROCHURE:

- Consultas a través del correo
e-mail: geahh@uni.edu.pe
- Brochure mediante el enlace
o a través del código QR:

AUSPICIA: EDSGROUP

IAHR UNI - GEAAH
Young Professionals Network

"Estudiantes hoy
Hidráulicos e hidrólogos siempre"

¡ATENCIÓN!

FECHA DE INICIO: 19 DE JUNIO

CURSO - TALLER BÁSICO:
GOLDSIM - MODELAMIENTO Y
BALANCE DE AGUAS

IAHR UNI - GEAAH
Young Professionals Network

"Estudiantes hoy
Hidráulicos e hidrólogos siempre"

Basic Course-Workshop "GoldSim - Water Modeling and Balance"

Date/s

12-16 June 2023

Venue

Online

Objectives

Provide training to students, graduates, and professionals related to the hydraulic design of riparian protections

Description

In 3 sessions, an introduction to the GoldSim environment, hierarchical models, and basic examples of GoldSim models will be given, to finally perform probabilistic simulations in various scenarios



Participation in the FIC Student Group Fair

Date/s

8 September 2023

Venue

Courtyard of the Faculty of Civil Engineering - UNI

Objectives

Showcase and promote the knowledge and activities provided by GEAHH to UNI Civil Engineering students.

Description

All the groups of the Faculty of Civil Engineering of UNI were present to show their activities, being GEAHH a participating group in the fair attracting students interested in the branch of hydraulics and hydrology.

2° ENCUENTRO ESTUDIANTIL DE RECURSOS HÍDRICOS

21 AL 23 DE SEPTIEMBRE

2° ENCUENTRO ESTUDIANTIL DE RECURSOS HÍDRICOS

EVALUACIÓN DEL USO DE DISTANCIAS NO EUCLIDIANAS PARA LA INTERPOLACIÓN ESPACIAL DE PRECIPITACIÓN EN REGIONES MONTAÑOSAS DEL PERÚ

JUEVES
21 SEPTIEMBRE
19:00 PM

Ing. Erick Kevin Ciaros Chagua

Ingeniero Civil de la Universidad Nacional de Ingeniería. Actualmente viene cursando la maestría en Ingeniería Civil y Ambiental en la University of Illinois at Urbana-Champaign. Realizó su tesis de pregrado con el financiamiento del Instituto de Investigación de la Facultad de Ingeniería Civil de la UNI por medio del concurso "Mejor Tesis de Investigación". Se desempeñó como asistente de investigación en el Laboratorio Nacional de Hidráulica, como especialista en Hidrología para SINC Lavalin, como consultor en el Área de Hidrología de Ampghos 21 y como proyectista en el Área de Manejo de Aguas de la Unidad Minera Quellaveco. Experiencia en el desarrollo de proyectos de hidrología y de cambio climático.

2ND STUDENT MEETING ON WATER RESOURCES

Date/s

21-22-23 September 2023

Venue


Online/ UPC and UNMSM Campus Auditorium

Objectives

In commemoration of our alliance, we held this event intending to get to know the water world of civil engineering and related branches.

Description

This event consisted of a series of presentations by guest researchers from the 7 student groups, integration dynamics, and more benefits to our members.

 <p>The poster for 'Convocatoria GEAHH 2023-2' features a blue shark wearing a white hard hat with the GEAHH logo. The shark is holding a yellow megaphone. The background shows a dam and a river. Text on the poster includes: 'CONVOCATORIA GEAHH 2023-2', 'ÚNETE Y APRENDE MÁS SOBRE LOS TEMAS DE LA HIDRÁULICA, HIDROLOGÍA Y OTRAS A FINES', '17 DE SEPTIEMBRE 7PM (HORA PERÚ)', 'VIA ZOOM', and 'IAHR UNI - GEAHH Young Professionals Network' with social media icons for Facebook, Instagram, and LinkedIn.</p>	<p>CONVOCATORIA GEAHH 2023-2</p>
	<p>Date/s</p> <p>17 September 2023</p>
	<p>Venue</p> <p>Online</p>
	<p>Objectives</p> <p><i>Know the occasions when knowledge of hydraulics and hydrology, the mission, vision, and objectives of our student group is very important.</i></p>
	<p>Description</p> <p>Dynamics, activities, and a raffle of semi-scholarships offered by Gesconvia to the participants were developed, which they will be able to take advantage of and further develop their knowledge in engineering.</p>

GEAHH
GRUPO ESTUDIANTIL AFILIADO
A LA HIDRÁULICA E HIDRÓLOGIA

ABR
CONSULTORIA E INGENIERÍA S.A.C.

**CURSO - TALLER:
DISEÑO HIDRÁULICO
DE PROTECCIONES
RIBEREÑAS**

DIRIGIDO A:
Estudiantes, egresados y profesionales
de Ingeniería Civil y carreras a fines.

CRONOGRAMA: VIRTUAL
8:00 - 22:00 (UTC-5)

SESIÓN 1 > VIERNES 13 DE OCTUBRE
SESIÓN 2 > SÁBADO 14 DE OCTUBRE
SESIÓN 3 > DOMINGO 15 DE OCTUBRE

INFORMES Y BROCHURE:

- Consultas a través del correo e-mail: geahh@uni.edu.pe
- Brochure mediante el enlace de la descripción.

Ing. Aquiles Berrocal Rodríguez
Bach. Leonardo Peña Vilca
Bach. Jean Verde Castro

IAHR UNI - GEAHH
Young Professionals Network

"Estudiantes hoy
Hidráulicos e hidrólogos siempre"

Course-Workshop "Hydraulic Design of Riparian Protections"

Date/s

13-15 October 2023

Venue

Online

Objectives

Provide training to students, graduates, and professionals related to the hydraulic design of riparian protections

Description

In 3 sessions, the topics of Types of protections, Hydraulic design criteria and HEC-RAS 2D hydraulic modeling will be discussed.



Participation in the VI National Water Congress

Date/s

6-10 November 2023

Venue

College of Engineers of Peru - San Borja - Lima

Objectives

Collaborate in events related to water resources to promote and learn more about the subject.

Description

Participated as a volunteer team in the organisation of the event and as part of the staff.



Participation in the Open Day Student Group Fair

Date/s

15 November 2023

Venue

Courtyard of the Faculty of Civil Engineering - UNI

Objectives

Promote and raise awareness of hydraulics and hydrology among high school students.

Description

GEAHH participated in an event held for high school students to learn more about engineering, we presented activities such as a fair and a visit to the National Hydraulics Laboratory.





Congress of Engineering in Water Resources and Environment

Date/s

27 November 2023 – 01 December 2023

Venue

Online/ National Hydraulics Laboratory Auditorium

Objectives

In commemoration of our anniversary, GEAHH is pleased to present the launch of "CIRHA: Congreso de Ingeniería en Recursos Hídricos y Ambiente".

Description

This great event will offer national and international presentations by great professionals and researchers in engineering related to water resources, as well as workshops presented by training companies. The thematic axes that will be addressed are Hydraulics, Hydrology, Water Resources Management, Climate Change, Sanitation, Research, and others related to the subject.





Special Meeting "XII Anniversary GEAHH"

Date/s

16 December 2023

Venue

Hall of the Faculty of Civil Engineering
- UNI

Objectives

Bringing together members and ex-members to celebrate the 12th anniversary of our group.

Description

A series of activities and a presentation of the 12 years of our student group were prepared, in addition to finally celebrating its anniversary.



	<p>Solidarity Activity “Construyendo Navidades”</p>
	<p>Date/s 12-16 December 2023</p>
	<p>Venue Albergue Sinchi Roca – Casa de los Pitufos</p>
	<p>Objectives <i>Do a social activity during the Christmas season. Integrate members under a social purpose</i></p>
	<p>Description We joined forces to bring a Special Social Work to Casas Albergues, to make beautiful chocolate and provide the children of the Casa de los Smurfos with fruits and items for their hygiene.</p>

4. Partnerships and collaborations

4.1. Partnerships

National Hydraulics Laboratory (LNH): Water resources research center belonging to the National University of Engineering. Provides activities related to water resources such as laboratory and physical modeling.

Academic Department of Hydraulics and Hydrology (DAHH): This department was formed by professors of the Faculty of Civil Engineering (UNI) who teach hydraulics and hydrology to university students. There is a collaborative student-teacher relationship.

Gesconval: Academic company dedicated to providing specialized courses, including topics related to water resources. This year we entered a collaborative alliance with this company.

Enjofra Training Center: Academic company dedicated to providing specialized courses, including topics related to water resources. This year we entered a collaborative alliance with this company.

Hydraulisk Group: Training center dedicated to water resources issues, promoting computational tools applied to the planning and management of water resources. This year we entered a collaborative alliance with this company.

GeoMine Academy: Academic company dedicated to providing specialized courses, including topics related to water resources. This year we entered a collaborative alliance with this company.

4.2. Collaboration with other YPNs

CIDRHI (UNALM): Organisation formed by students and graduates of Agricultural Engineering of the Universidad Nacional Agraria La Molina (UNALM).

WER (UTEC): Student organisation of the University of Engineering and Technology (UTEC) that seeks to channel hydro-environmental issues.

5. Communication channels

Facebook: IAHR UNI – GEAAH – Young Professionals Network
(<https://www.facebook.com/geaah.uni>)

Instagram: geaah_uni_Peru
(https://www.instagram.com/geaah_uni_peru/)

Linkedin: IAHR UNI – GEAAH – Young Professionals Network
(<https://www.linkedin.com/company/geaah/mycompany/>)