



IAHR Spain Young Professional Network

2021 Annual Report of Activities

1. Introduction

The IAHR Spain Young Professional Network was founded in 2020 from the union of the three YPNs that existed in Spain (Southeast Spain, Madrid and Galicia) with the aim of creating a nationwide network. The Spain YPN is aimed at young researchers, and also at more technical profiles in companies and industry, in the field of water engineering in Spain, currently having more than 40 members and representation in 9 Spanish universities. The main objectives of the Spain YPN are to promote interaction and collaboration among the members of the YPN itself, as well as to cooperate with other national and international networks; to actively participate in the technical committees and working groups of the IAHR; and to foster divulgation activities and promote projects and research related to water engineering.

2. 2021 main goal and key objectives

The IAHR Spain Young Professional Network was set up in 2020, so the main goals for 2021 were related to the reinforcement of the created national network, organizing activities by YPN members from different institutions and involving non-active and potential members. The number of officers has been adapted to coordinate the activities though the increasing number of institutions. Promoting YPN activities, job opportunities and projects and works developed by YPN members was also a key objective set for this year, focusing the efforts through the YPN twitter account which has grown to more than 200 followers in just one year.

3. Composition

Officers

President

Juan Naves García-Rendueles	juan.naves@udc.es
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Vice President

Francisca Marco Cutillas	francisca.marco@upct.es
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Secretary

Araceli Martín Candilejo	araceli.martin@upm.es
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Public Relations officer

Manuel Regueiro Picallo	manuel.regueiro1@udc.es
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Activities Coordinator

Sarai Díaz García	Sarai.Diaz@uclm.es
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Academic Links

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Daniel Valero Huerta	d.valero@un-ihe.org

Advisor

José María Carrillo	jose.carrillo@upct.es
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List of members

Name	Affiliation
Dr. Ing. Fernando Salazar González	CIMNE - International Center for Numerical Methods in Engineering
Dr. Daniel Valero Huerta	IHE Delft Institute for Water Education
Mr. Ignacio Fraga Cadorniga	Universidade da Coruña
Beatriz Nácher Rodríguez	Universitat Politècnica De València
Dr. Maria Maza	IHCantabria, Universidad de Cantabria
Dr. Ing. Sarai Díaz García	E.T.S.I. Caminos, Canales y Puertos - University of Castilla-La Mancha
Dipl. Ing. Francisca Marco Cutillas	Universidad Politécnica De Cartagena
Mr. Jorge Molines Llodrá	Universitat Politecnica de Valencia
Mr. Juan Francisco Macián Pérez	Universitat Politècnica de València
Mr. Manuel Regueiro Picallo	Universidade da Coruña
Dr. Ing. Juan Naves García-Rendueles	Universidade da Coruña
Miguel Rico Cortés	JACOLBS
Dr. Iván Gabriel Martín	Universidad Politécnica de Madrid
Dr. Modesto Pérez Sánchez	Universitat Politècnica de València.
Dipl. Ing. Víctor Manuel Fernández Pacheco	University of Oviedo
Esteban Sañudo Costoya	Universidade da Coruña
Dipl. Ing. Amal Nnechachi Bounous	Universidade da Coruña
Ing. Ronnie Araneda Cabrera	Universidade da Coruña
Mr. AITOR FERNÁNDEZ JIMÉNEZ	University of Oviedo
Alicia Ros Bernal	Universidad Politécnica de Cartagena
Dipl. Ing. María Encarna Martínez Moreno	Universidad Politécnica de Cartagena
Leticia Ramos Cuevas	Universidad Politécnica de Cartagena
David Pereñíguez Fernández	Universidad Politécnica de Cartagena
Dipl. Ing. Bartolomé Morote Sánchez	Universidad Politécnica de Cartagena
José Antonio Martínez Enriquez	Universidad Politécnica de Cartagena
Ana Martínez Arredondo	Universidad Politécnica de Cartagena
Stephany Beltrán Martínez	Universidad Politécnica de Cartagena
María Trinidad García Hernández	Universidad Politécnica de Cartagena
María Inés Rojas Lombana	Universidad Politécnica de Cartagena
Marta Sánchez Burillo	Universidad Politécnica de Cartagena
Patricia Molina López	Universidad Politécnica de Cartagena
Dipl. Ing. Antonio Ortín León	Universitat Politècnica De València



José María	Universitat Politècnica De València
Dipl. Ing. Araceli Martín Candilejo	Polytechnical University of Madrid
Mr. Gonzalo García-Alén Lores	Universidade da Coruña
Juan Fernando Farfán Durán	Universidade da Coruña
Alejandro Lopez Núñez	Universidade da Coruña
Mr. Andrea Paindelli	AQUATEC SUEZ
Oscar Tomas Vegas Niño	Universitat Politècnica de València (UPV)
Maria Emilia Maza Fernández	Universidad de Cantabria
Modesto Pérez Sánchez	Universitat Politècnica de València
Lorena Lombana González	Facultad de Ciencias, Plaza La Merced S/N, Salamanca
Marcos Sanz Ramos	Instituto Flumen (UPC-CIMNE)
Jose Maria Carrillo Sánchez	Supervisor (UPCT)

4. Communications

[Website and social networks]


Website	https://www.iahr.org/index/committe/121
Facebook	-
Twitter	https://twitter.com/spainypn
Instagram	-
Linkedin	Soon
Mail	SpainYPN@upct.es
Youtube	https://www.youtube.com/playlist?list=PLSI_AoS8gdfvplh4VIBVIXHM0sZbelp-O5

[Promotional and information materials]

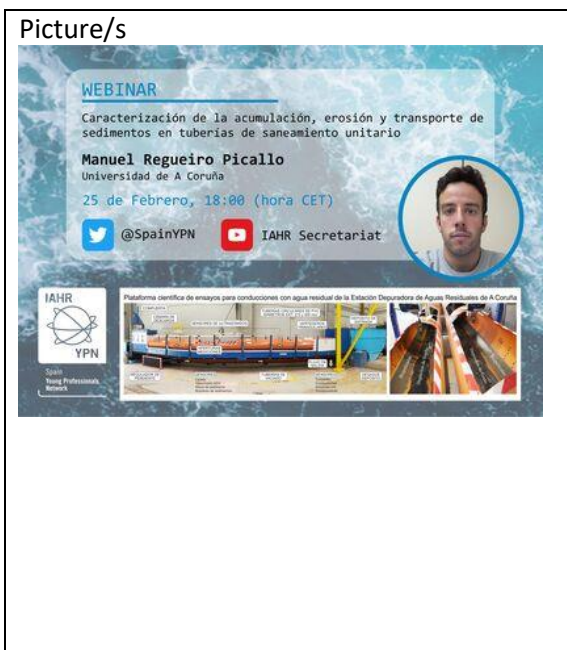
Promotion video	https://www.youtube.com/watch?v=R2YX4g_fyXY
Publication/s	Twitter: 91 YouTube: 8 (6 webinars + 2 promotion video)
Other	Twitter analytics (2021): <ul style="list-style-type: none">• Total tweet impressions = 70k• Profile visits = 7,3k• Total followers = 216

5. Activities

Activity 1

<p>Picture/s</p> 	<p>Name of the activity Methodology for the study of ancient hydraulic systems. Application to the water supply of Cartagena in the 19th century.</p> <p>Dates 28 January 2021</p> <p>Objectives: <i>Promotion Spain YPN and Spain YPN members, motivating membership. Delivering opportunities for professional development. Increase presentation and moderation skills.</i></p> <p>Description IAHR Spain YPN III Webinar: Methodology for the study of ancient hydraulic systems. Application to the water supply to Cartagena in the 19th century. On this occasion, we will have Prof. Francisco Javier Pérez de la Cruz (Polytechnic University of Cartagena) who will talk about the methodology for the study of ancient hydraulic systems and its application to the water supply to Cartagena during the 19th century. Attending and participating is free, don't miss it!</p>
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Activity 2

<p>Picture/s</p> 	<p>Name of the activity Characterization of sediment accumulation, erosion and transport in combined sewers</p> <p>Dates 25 February 2021</p> <p>Objectives <i>Promotion Spain YPN and Spain YPN members, motivating membership. Delivering opportunities for professional development. Increase presentation and moderation skills.</i></p> <p>Description IAHR Spain YPN IV Webinar: Characterization of sediment accumulation, erosion and transport in unitary sanitation pipes. On this occasion, Manuel Regueiro Picallo, PhD in civil engineering from the Universidade da</p>
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	<p>Coruña, will talk about the characterization of sediment accumulation, erosion and transport in unitary sanitation pipes. We invite you to participate and join our community.</p>
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Activity 3

<p>Picture/s</p> 	<p>Name of the activity Study of the hydraulic jump and its application in stilling basins through physical and numerical modelling</p> <p>Dates 25 March 2021</p> <p>Objectives <i>Promotion Spain YPN and Spain YPN members, motivating membership. Delivering opportunities for professional development. Increase presentation and moderation skills.</i></p> <p>Description Study of the hydraulic jump and its application in stilling basins through physical and numerical modeling. On this occasion, Juan Francisco Macián Pérez, Civil Engineer by the Universitat Politècnica de València (UPV), Master in Environmental Water Management by Cranfield University (UK) and PhD by the PhD program in Water and Environmental Engineering of the UPV; will talk about the study of the hydraulic headroom and its application in stilling basins through physical and numerical modeling. Can there be a better plan for Thursday afternoon? We are waiting for you!</p>
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Activity 4

<p>Picture/s</p> 	<p>Name of the activity Numerical modelling of mud and debris flows and their importance in risk assessment.</p> <p>Dates 29 April 2021</p> <p>Objectives <i>Promotion Spain YPN and Spain YPN members, motivating membership. Delivering opportunities for professional development. Increase presentation and moderation skills.</i></p> <p>Description On this occasion, Juan Francisco Macián Pérez, Civil Engineer M.Sc., researcher of the project Guías de Espeleología y Montaña - Universidad Politécnica de Madrid (UPM). General Manager of the consulting company Wasser World Latin America Ltd., with experience in the management and development of projects with numerical modeling of surface flows, floods, rapid mass movements and design of structural mitigation measures; he will talk about the numerical modeling of mud and debris flows and its importance in risk assessment. On this occasion, Julio Montenegro Gambini, Civil Engineer M.Sc., researcher of the project Guías de Espeleología y Montaña - Universidad Complutense de Madrid (UCM). General Manager of the consulting company Wasser World Latin America Ltd., with experience in the management and development of projects with numerical modeling of surface flows, floods, rapid mass movements and design of structural mitigation measures, will talk about the numerical modeling of mud and debris flows and their importance in risk assessment. You can not miss it, register now!</p>
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Activity 5

<p>Picture/s</p>  <p>The poster features the IAHR YPN logo, a circular portrait of Ruben Gebdang Biangbalbe, and several charts and graphs related to climate and anthropogenic activities in a semi-arid region of North China.</p>	<p>Name of the activity A comprehensive assessment framework for quantifying climatic and anthropogenic activities: a case study of a semi-arid region, North China basin</p> <p>Dates 27 May 2021</p> <p>Objectives <i>Promotion Spain YPN and Spain YPN members, motivating membership. Delivering opportunities for professional development. Increase presentation and moderation skills.</i></p> <p>Description In this 7th IAHR Spain Young Professionals Network webinar, Ruben Gebdang Biangbalbe (University of Dschang) will give us, in English, an international lecture accompanied by a real case study in China.</p>
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Activity 6

<p>Picture/s</p>  <p>The poster includes the IAHR YPN logo, a circular portrait of Marcos Sanz Ramos, a map of the Aznalcóllar disaster site, and a graph showing hydraulic data.</p>	<p>Name of the activity Some hydraulics on the Aznalcóllar disaster</p> <p>Dates 30 September 2021</p> <p>Objectives <i>Promotion Spain YPN and Spain YPN members, motivating membership. Delivering opportunities for professional development. Increase presentation and moderation skills.</i></p> <p>Description In this eighth webinar conducted by IAHR Spain YPN, Marcos Sanz Ramos, Civil Engineer by the Polytechnic University of Catalonia with experience in the fields of hydrology, hydraulics and GIS. He currently develops his activity as a research support technician at the Flumen Institute, he is a developer of the Iber program and, since October 2018, he is doing his PhD studies in numerical modeling of non-Newtonian fluids; he will talk about the disaster.</p>
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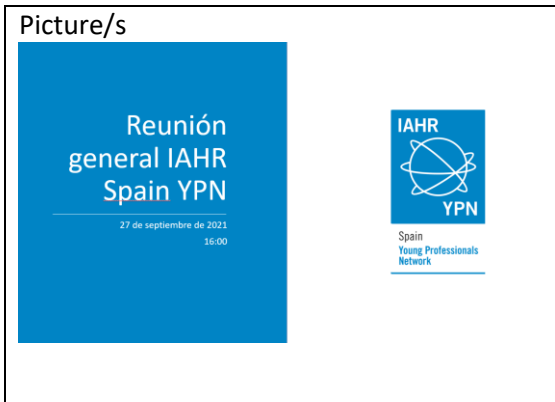
Activity 7

<p>Picture/s</p> 	<p>Name of the activity Nature-based solutions for coastal protection: numerical and experimental analysis</p> <p>Dates 28 October 2021</p> <p>Objectives <i>Promotion Spain YPN and Spain YPN members, motivating membership. Delivering opportunities for professional development. Increase presentation and moderation skills.</i></p> <p>Description On this occasion, María Maza, Assistant Professor at the University of Cantabria (UC) and researcher at the Institute of Environmental Hydraulics of Cantabria (IHCantabria) will talk about Nature-based solutions for coastal protection: numerical and experimental analysis.</p>
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Activity 8

<p>Picture/s</p> 	<p>Name of the activity Pumps operating as turbines (PATs) in pressurized networks, an answer to sustainable energy efficiency: methodology, optimization and case study application.</p> <p>Dates 26 November 2021</p> <p>Objectives <i>Promotion Spain YPN and Spain YPN members, motivating membership. Delivering opportunities for professional development. Increase presentation and moderation skills.</i></p> <p>Description In this tenth Webinar, Carlos Andrés Macías Ávila, Department of Hydraulic Engineering and Environment, Universitat Politècnica de València will talk about Pumps operating as turbines (PATs) in pressurized networks, an answer to sustainable energy efficiency: methodology, optimization and application to case study.</p>
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Activity 9

<p>Picture/s</p> 	<p>Name of the activity</p> <p>IAHR Spain YPN general meeting</p>
	<p>Dates</p> <p>27 September 2021</p>
	<p>Objectives</p> <p><i>Coordinating and planning of YPN activities.</i></p>
	<p>Description</p> <p>General meeting of the IAHR Spain YPN (Online) to coordinate YPN activities and plan future strategy. Open to all YPN members</p>


Activity 10

<p>Picture/s</p> 	<p>Name of the activity</p> <p>IAHR Spain YPN coordination meeting</p>
	<p>Dates</p> <p>15 December 2021</p>
	<p>Objectives</p> <p><i>Coordinating YPN activities.</i></p>
	<p>Description</p> <p>Meeting of the IAHR Spain YPN (Online) to coordinate current YPN activities. Open to all YPN members</p>


Activity 11

<p>Picture/s</p> 	<p>Name of the activity</p> <p>IAHR Spain YPN introduction video</p>
	<p>Dates</p> <p>21 October 2021</p>
	<p>Objectives</p> <p><i>Promote membership.</i></p>
	<p>Description</p> <p>New video and collage introducing IAHR Spain YPN made with the collaboration and materials of the YPN members.</p>

Activity 12

<p>Picture/s</p> 	<p>Name of the activity</p> <p>Eawag PhD seminar: Networking</p>
	<p>Dates</p> <p>4 November 2021</p>
	<p>Objectives</p> <p>Create partnerships and promote the creation of new IAHR YPN.</p>
	<p>Description</p> <p>Presentation of the SpainYPN activities within the IAHR framework at the Swiss Aquatic Institute: Eawag.</p>

Activity 13

<p>Picture/s</p> 	<p>Name of the activity</p> <p>Collaboration in school visits to the hydraulics laboratory of CITEEC (A Coruña)</p>
	<p>Dates</p> <p>January-December 2021</p>
	<p>Objectives</p> <p>Scientific dissemination</p>
	<p>Description</p> <p>YPN members often collaborate in the visits of schools to the CITEEC laboratory at the University of A Coruña.</p>

Have you organised any activities to promote membership? If yes, please include them
Activities from 1 to 8 and 11.

6. Partnerships and collaborations

Partner organisations and/or interaction with related national organisations

Organisation	Description of partnership
GEAMA (UDC)	- Sharing a PhD student job offer (26/10/2021) - Promotion of Co-UDlabs project (www.co-udlabs.eu)
Departamento ingeniería civil UDC	- Promotion of event "A IMPLICACIÓN CIDADÁ NA RESTAURACIÓN DE RÍOS URBANOS 25 Oct 2021. Online." between Spain YPN members
Spain YWP	Sharing job offer for LEQUIA group (Universidad de Girona)

Collaboration with other YPNs

YPN name	Description of collaboration
Revista Hidrolatinoamericana YPN	Collaboration as associate editors and reviewers
Latin-American YPNs	WhatsApp group to disseminate activities
Scandinavian YPN	Informal meeting before the constitution of the YPN to provide some advice on how to initiate a YPN
Scandinavian YPN	Promotion of event "Career Flow: stories and perspectives for water young professionals 26 May 2021. Online." between Spain YPN members
IAHR YPN CHILE	Promotion of event "Charlas técnicas" 9 November 2021. Online." between Spain YPN members

7. Contributing to the IAHR 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>)

The activities already organized by the IAHR Spain YPN, specifically the Spain YPN webinars, are closely related with the four pillars stated at the IAHR Strategic Plan by consolidating a young professional network at national level, providing a useful communication with other international YPN towards future collaborations between IAHR young members. In addition, big efforts are being made into dissemination of the projects and works developed by Spain YPN members, amplifying the collective knowledge of the global Hydro-Environment community.

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

The objectives of Spain YPN contribute to the IAHR YPN high-level aims. A sense of network is established, and the participation and collaboration of the members is encouraged by sharing experiences within webinars that are being organizing. In addition, collaboration with other YPNs is encouraged by participating in their initiatives with working groups. In addition, we actively participate in and promote through our social media events organized by the IAHR such as seminars, symposiums, workshops and congress (most recently the 2st Young Professionals Congress, the 'Revista Hidrolatinoamericana de Jóvenes Investigadores y Profesionales', and the next world congress that will be organized in Granada, Spain)