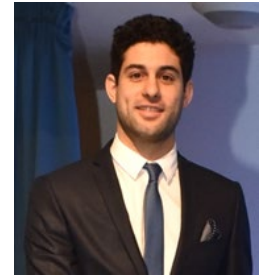




Simone Pagliara

Civil Engineer, MSc, BSc





Informations

 Höggerbergring 26, 8093, Zürich, CH


 simone.pagliara@outlook.com


 pagliara@vaw.baug.ethz.ch

 +41 44 632 41 31

 @SimonePagliara

 www.linkedin.com/in/simone-pagliara/

 57216167738

 orcid.org/0000-0002-9939-8930

Overview

Civil Engineer specialized in hydraulic engineering and hydrology. Currently a PhD Student at ETH Zürich – Laboratory of Hydraulics, Hydrology and Glaciology (VAW), with an experimental research project concerning the safe design of dams' bottom outlets for high-velocity air-water flows.

Employment

APRIL 2021 – CURRENTLY

PhD Candidate – ETH Zurich, Switzerland

Laboratory of Hydraulics, Hydrology and Glaciology (VAW)

Research Project: SAFAIR – Safe design of hydraulic structures for high energy air-water flows

Supervisors: Prof. Dr. Robert Boes; Dr. Benjamin Hohermuth

Founded by: Swiss National Science Foundation, Grant 197208 <https://data.snf.ch/grants/grant/197208>

Educational Background

SEPTEMBER 2019 – SEPTEMBER 2020

MSc. Civil Engineering - Hydrology & Water Resources Management – Imperial College London, United Kingdom

Grade: DISTINCTION (80%)

Research dissertation topic: “Rainfall modelling for a changing climate”

Supervisors: Dr. Christian Onof; Benjamin Guo

OCTOBER 2018 – SEPTEMBER 2019 & SEPTEMBER 2020 – DECEMBER 2020

MSc. Civil Engineering - Infrastructure Design in River Basins – Università di Bologna, Italy

Grade: 110/110 CUM LAUDE

Research dissertation topic: “Rainfall Data Generation for Climate Studies: Application of Stochastic Models to UK and Italy Single-Site Fine-Resolution Timeseries”

Supervisors: Prof. Elena Toth; Mattia Neri

OCTOBER 2015 – OCTOBER 2018

BSc. Ingegneria Civile, Ambientale, Edile – Università di Pisa, Italy

Grade: 110/110 CUM LAUDE

Research dissertation topic: “Pressure distribution in 3D scour holes due to plunging jets”

Supervisor: Prof. Michele Palermo

Internships & Working Experience

OCTOBER 2020 – FEBRUARY 2021

Internship – Prof. Ing. Stefano Pagliara, Pisa, Italy
HEC-RAS and HEC-HMS modelling.

FEBRUARY 2018 – JUNE 2018

Internship – CO.GE.MAR., Pisa, Italy

Internship of 300 hours at CO.GE.MAR. constructions and consulting company. The work consisted in topographic surveys, market analysis and civil engineering projects analysis.

Licences and Certificates

SEPTEMBER 2021

Esame di Stato per l'abilitazione alla Professione di Ingegnere – Università di Pisa
Superamento dell'Esame di Stato Sez. A (Settore Ingegneria Civile Ambientale) con **votazione 60/60**

MARCH 2019

IELTS (International English Language Testing System) – British Council

MARCH 2019

GRE (Graduate Record Examinations) – ETS

Honours

JANUARY 2023 – CURRENTLY

Vice-President of the IAHR Young Professional Network Italy –International Association for Hydro-Environment Engineering and Research (IAHR)
Vice-President of the Italian Young Professional Network (YPN).

JUNE 2022

JFK Student Paper Competition Finalist –International Association for Hydro-Environment Engineering and Research (IAHR)
One of the 12 finalists of the JFK student Paper Competition at the IAHR World Congress 2022, Granada.

OCTOBER 2020

Atleta Eccellente Eccellente Studente – CONI, Italia

Winner of the prize “Atleta Eccellente Eccellente Studente” for obtaining the MSc degree at University of Bologna with honours while being part of the Field Hockey Italian National Team.

OCTOBER 2018

Atleta Eccellente Eccellente Studente – CONI, Italia

Winner of the prize “Atleta Eccellente Eccellente Studente” for obtaining the BSc degree at University of Pisa with honours while being part of the Field Hockey Italian National Team.

Language and Software Skills

Language Skills

Italian

English

German

French

Software Skills

- **Operative Systems:** Windows, OSX, Linux
- **Coding:** MATLAB, R, Python
- **GIS & CAD:** QGIS, AutoCAD
- **Hydraulic Simulations:** HEC-RAS, HEC-HMS, EPANET, SWMM, ICM InfoWorks

Publications

Orcid & Scopus ID

Orcid ID: <https://orcid.org/0000-0002-9939-8930>

Scopus ID: 57218665622



Journal Papers

- Palermo, M., & Pagliara, S. (2020). Teaching Hydraulics and Hydraulic Structure Design with Leonardo da Vinci. *Journal of Hydraulic Engineering*, 146(5), 04020035.
[DOI: 10.1061/\(ASCE\)HY.1943-7900.0001744](https://doi.org/10.1061/(ASCE)HY.1943-7900.0001744)
- Pagliara, S., & Palermo, M. (2020). Effect of Pressure Fluctuations and Flow Confinement on Shear Stress in Jet-Driven Scour Processes. *Water*, 12(3), 718.
[DOI: 10.3390/w12030718](https://doi.org/10.3390/w12030718)
- Palermo, M., Roy, D., Pagliara, S. (2021). Morphological characteristics of eco-friendly protected basins downstream of block ramps in river bends. *Geomorphology*, 377, 107587.
[DOI: 10.1016/j.geomorph.2020.107587](https://doi.org/10.1016/j.geomorph.2020.107587)
- Roy, D., Pagliara, S., & Palermo, M. (2021). Experimental analysis of structures for trapping sars-cov-2-related floating waste in rivers. *Water*, 13(6), 771.
[DOI: 10.3390/w13060771](https://doi.org/10.3390/w13060771)
- Roy, D., Pagliara, S., & Palermo, M. (2021). Experimental analysis of scour features at chevrons in straight channel. *Water*, 13(7), 971.
[DOI: 10.3390/w13070971](https://doi.org/10.3390/w13070971)
- Pagliara, S., Roy, D., & Palermo, M. (2021). Scour features at wood bundles. *Water*, 13(15), 2118.
[DOI: 10.3390/w13152118](https://doi.org/10.3390/w13152118)
- Roy, D., & Pagliara, S. (2022). Equilibrium morphology and scour evolution at blunt nosed chevrons. *River Research and Applications*.
[DOI: 10.1002/rra.3911](https://doi.org/10.1002/rra.3911)
- Pagliara, S., Hohermuth, B., & Boes, R. M. (2023). Air–Water Flow Patterns and Shockwave Formation in Low-Level Outlets. *Journal of Hydraulic Engineering*, 149(6), 06023002.
<https://doi.org/10.1061/JHEND8.HYENG-13357>
- Kurdistani, S. M., Pagliara, S., & Palermo, M. (2023). Analysis of fish migration in correspondence with wood and rock-made instream structures. *Geomorphology*, 108836.
<https://doi.org/10.1016/j.geomorph.2023.108836>
- Pagliara, S., Felder, S., Boes R. M., & Hohermuth, B. (2023). Intrusive effects of dual-tip conductivity probes on bubble measurements in a wide velocity range. *International Journal of Multiphase Flow* (under review).
- Roy, D., & Palermo, M., Pagliara, S. (2023). Control of surface plastic transport in natural streams. *Journal of Hydraulic Engineering* (under review).

Conference Papers

- Palermo, M., Fabian, B., & Simone, P. (2019). Suspended Cohesionless Material in a 2D Scour Pothole due to Plunging Jets. *38th IAHR World Congress* (pp. 2556-2563). IAHR.
<https://static.iahr.org/34/296.pdf>

- Pagliara, S., & Palermo, M. (2020, May). Effects of Bridge Pier Location and Debris Accumulation on Equilibrium Morphology. In *World Environmental and Water Resources Congress 2020: Hydraulics, Waterways, and Water Distribution Systems Analysis* (pp. 76-83). Reston, VA: ASCE.
DOI: [10.1061/9780784482971.008](https://doi.org/10.1061/9780784482971.008)
- Pagliara, S., & Roy, D. (2021). Comparison of Pressure Distribution in 2D and 3D Jet-Driven Scour Processes. *8th International Junior Researcher and Engineer Workshop on Hydraulic Structures* (IJREWHS 2021).
<https://digitalcommons.usu.edu/ewhs/2021/Session1/8/>
- Roy, D., & Pagliara, S. (2021). Scour Downstream of Log-Frame Structures in the Presence of Rigid Vegetation. *8th International Junior Researcher and Engineer Workshop on Hydraulic Structures* (IJREWHS 2021).
<https://digitalcommons.usu.edu/ewhs/2021/Session1/9/>
- Pagliara, S., Hohermuth, B., & Boes, R. M. (2022). Validation of a dual-tip conductivity probe by a high-speed stereo-camera setup for air-water flow properties estimation. In *Proceedings of the 39th IAHR World Congress* (Vol. 19, p. 24). International Association for Hydro-Environment Engineering and Research.
- Rawat V.S., Roshni, T., Palermo, M., Pagliara, S., and Roy, D. (2022). Investigation of Energy Attenuation, Flow Resistance and Impending Motion of Downstream Bed Material in Rock Ramps. In *Proceedings of the 9th IAHR International Symposium on Hydraulic Structures – 9th ISHS*, 24-27 October 2022, IIT Roorkee, Roorkee, India.
DOI: [10.26077/8b70-3ba4](https://doi.org/10.26077/8b70-3ba4).
- Deep, R., & Pagliara, S. (2022). Preliminary Analysis of the Effect of Worked Wood Piles in Straight Channels. In *Proceedings of the 9th IAHR International Symposium on Hydraulic Structures – 9th ISHS*, 24-27 October 2022, IIT Roorkee, Roorkee, India.
<https://digitalcommons.usu.edu/ishs/2022/all2022/43>
- Das R., Das, S., Palermo, M., Roy, D., and Pagliara, S. (2022). Scour Geometry and Dune Formation Characteristics around Customized Structure in Channels. In *Proceedings of the 9th IAHR International Symposium on Hydraulic Structures – 9th ISHS*, 24-27 October 2022, IIT Roorkee, Roorkee, India.
DOI: [10.26077/54c1-fd55](https://doi.org/10.26077/54c1-fd55).
- Pagliara, S., Hohermuth, B., Felder, S., & Boes, R. M. (2023). Effects of Wall Roughness on Air-water Flow Properties of Low-level Outlets. IAHR 2023
- Pagliara, S., Hohermuth, B., Felder, S., & Boes, R. M. (2023). Effects of wall roughness on low-level outlet performance. ICOLD 2023
- Pagliara, S., Roy, D., Palermo, M. (2023). Kinematic characteristics of blunt nosed chevrons in movable bed channels. ISRS 2023.
- Roy, D., Pagliara, S., Palermo, M. (2023). Temporal scour evolution at wood bundles under clear water condition. ISRS 2023.

Reviewer

Peer reviewer for the following journals:

- ASCE Journal of Hydraulic Engineering
- MDPI Water
- Springer Acta Geophysica
- Environmental Engineering and Management Journal