# **IGD**A

**Cities and Water in a Time of Climate Change** 

February 14-18, 2022

Venice International University Isola di San Servolo, Venice



# VIU International PhD Academy

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## Scientific coordinators:

Maria Chiara Tosi Iuav University of Venice

Margherita Turvani Iuav University of Venice

This program is a VIU Global Challenges Initiative Our planet is suffering dramatic urgencies, exacerbated by climate change. As global temperature increases, an increasing risk of extreme weather events, including destructive storms, floods and droughts is

foreseen. Excess and lack of water largely impact urban life in our cities and territories. Floodings and droughts are among the main causes of social tension, migrations among continents, desertification and hydrogeological risks, loss in food production, inadequate waste treatment. With sea-level rise, urban areas along the coasts, particularly those in low-elevation coastal zones, will be threatened with inundation and flooding, saltwater intrusion affecting drinking water supplies, increased coastal erosion and reductions in livable land space. All of these effects, however, will be compounded by other climate impacts, including increase in the duration and intensity of storms such as hurricanes and cyclones, creating extreme hazards for both rich and poor populations occupying low-elevation coastal zones. Even in non-coastal areas, the convergence of rapid urbanization with climate change can be very dangerous. Poor people living on unstable hillsides could face continuous threats of being swept away or buried by rain-induced mud- and rock-slides. Uncontrolled growth of urban centers into natural forest or brush areas that will dry out with increases in temperatures and in the intensity and duration of droughts will see increases in the frequency of life and propertythreatening wildfires. Droughts in both coastal and non-coastal cities could disrupt urban water supplies and supplies of forest and agricultural products. These impacts will fall disproportionately upon the urban poor in developing as well as developed countries.

This set of issues affects and transforms cities and territories, but different global regions are expected to experience different changes as a result of global warming. For example, while Europe is expected to experience an increase in inland flash floods, Africa will see a rise in arid and semi-arid land. For this reason they are asking for new and site specific form of knowledge and management. But new projects and policies are asked also because the threats posed by the convergence of the effects of urbanization and climate change, however, is an equally compelling set of opportunities. Cities use too much water and too quickly for nature to keep up, and there is an urgent need to radically rethink the role of water in cities. Reducing consumption and better use of water is not enough under the pressure of climate change. Water is largely mismanaged: the preservation of aquifers and the extension of the lifecycle of water for entire cities is necessary.

There is also a need of overcoming the sectoral approach toward an interdisciplinary form of transformation understanding and of urban projects and policies.

These aspects are not totally new, and an historical perspective can help to better understand what is going on and to recognize continuity and discontinuity on the process of urban transformation.

This PhD Academy will be led by:

- luav University of Venice, Italy
- KU Leuven, Belgium
- Tsinghua University, China
- National Research Council of Italy (CNR)

### Faculty

Maria Chiara Tosi, Iuav University of Venice Margherita Turvani, Iuav University of Venice Francesco Musco, Iuav University of Venice Paola Viganò, Iuav University of Venice Jiane Zuo, Tsinghua University Bruno De Meulder, KU Leuven Kelly Shannon, KU Leuven Michele Vurro, National Research Council of Italy Andrea D'Alpaos, University of Padua, Italy Stephan Dudeck, EUSP Oleg Pachenkov, EUSP Patrizio Antici, Institut National de la Recherche Scientifique, Canada Uwe Lübken, Ludwig Maximilian University Renzo Rosso, Polytechnic University of Milan Mariam Traore Chazalnoel, IOM, New York Gideon Wolfaardt, Stellenbosch University Alessandra Fornetti, Venice International University Ilda Mannino, Venice International University

### Description

The one-week program is structured as a series of guest lecturers (from the universities partner and

others), poster presentations from the PhD student participants and transversal skill sessions, structured to guide the participants towards the development and presentation of group projects.

Four thematic modules and a site visit will compose the program's calendar:

- Settlements and water in a time of climate change
- Historical and geographical perspectives
- Climate migrants, water, food, urban daily life
- Urban projects-policies, water projects-policies
- Site visits to provide participants with practical examples of the issues at stake

A parallel program of training in a range of **Transversal Skills** for developing their academic careers and poster sessions for the participants to present their PhD research projects.

### Learning outcomes for participants

The program provides participants with advanced skills for successfully implementing PhD research projects on city and territories in relation with water issues through an international and multidisciplinary approach.

### Who can apply?

This PhD Academy is offered to PhD students, post-docs and young researchers in Urban Design, Urban Studies, Urban planning, Geography, Sociology, Economics, History of cities and water, Environmental Science and Engineering.

This PhD Academy is a postponed 2020 activity. Applications are currently closed, however, should any places become available, a new call for applications will be opened. <u>Updated information will be available on the</u> <u>dedicated webpage.</u>

### Fees & Grant Support

Students from the VIU member universities will pay <u>no</u> participation fees. Grant support is also available to support, partially or fully, the costs of international travel and accommodation. The participation fee for students of non-member universities is Euro 1.100,00 incl. VAT. The fee is inclusive of tuition, course materials, accommodation, lunches, social events and taxes. Students from non-member institutions are not eligible for VIU grant support. VIU Alumni are eligible for a reduced fee.

Selected participants will be asked to present a poster.

### **VIU International PhD Academies**

Venice International University is a consortium of 20 universities, representing 15 countries throughout the world.

The mission of VIU is to foster cooperation among VIU member institutions while facilitating the exchange of knowledge and ideas, by developing, promoting and organizing joint academic, research and training/capacity-building program. Students from non-member universities may participate in selected academic programs. The academic programs at VIU are distinguished by a markedly interdisciplinary approach to the topics, and by the international perspectives that the participants contribute to the discussions. The VIU campus is on the island of San Servolo in Venice, Italy.

Venice International University holds two International PhD Academies each year. They are intensive training opportunities open to PhD candidates from the member universities of VIU.

A PhD is the highest diploma awarded by universities in the world, and PhDs are naturally expected to take on major responsibilities in their professional life. Apart from the disciplinary scientific skills acquired during doctoral study and research, it is the ability to respond to the requirements of creativity, innovation and project management, that produce the significant added value of a doctoral degree.

Whether they will work within or outside academia, PhDs must be able to develop a forward-looking vision of the challenges they have to face. The interdisciplinary approach of all VIU activities is adopted also in the PhD Academy, where the participants have the opportunity to meet their peers from all over the world, and to tackle transversal topics.

www.univiu.org/study/phd-academy

As the COVID-19 pandemic is ongoing, VIU will continue to monitor the situation, and in the event that it is not possible to confirm the program on the VIU campus as scheduled, other practicable solutions will be evaluated. Applicants and confirmed participants will be informed of any changes.

### Location





Venice International University Isola di San Servolo 30133 Venice Italy T +39 041 2719511 F +39 041 2719510 E phdacademy@univiu.org www.univiu.org