

Organised by



同濟大學  
TONGJI UNIVERSITY

## Towards Healthy China 2035: Sustainable Urban (Sanitation) Infrasystems in the Yangtze River Delta

Workshop

**Dr Deljana Iossifova (University of Manchester)**

Overall PI and UK coordinator

**Prof Feng Luan (Tongji University)**

China coordinator

**Discipline:** Interdisciplinary

**Dates:** 20-23 October 2020

**Format:** We are currently anticipating three possible formats depending on the COVID-19 situation at the time: (a) The workshop will take place face-to-face at Tongji University, Shanghai (China); (b) the workshop will take place simultaneously at Tongji University, Shanghai, for China-based participants and at the University of Manchester for UK-based participants, and will have virtual meeting components; (c) the workshop will take place entirely virtually using a platform such as Zoom.

**The programme, Newton Fund Researcher Links, provides opportunities for early career researchers from the UK and internationally to interact, learn from each other and explore opportunities for building long-lasting research collaborations.**

**As part of this programme, we are now recruiting early career researchers to participate in the above workshop. Please see below for more details on the initiative and link to the online application form. The deadline for applications is 30 June 2020.**

### Summary

Infrastructural systems (infrasystems) are entangled with social, technical and ecological systems at smaller and larger scales. How they are planned, implemented, managed, maintained and used has impact on sustainability outcomes. The transformation of national infrastructures, although usually implemented with the aim to improve human well-being, may carry adverse implications for human health, social relations and environmental sustainability. Yet, there is a lack of systematic and integrated evidence on the sustainability outcomes of transitions in infrasystems.

This workshop will highlight the need for **sustainable infrasystems in dense urban environments** (SDG12, SDG10); support efforts to develop more inclusive, economically viable and less wasteful infrasystems (SDG6, SDG11); contribute to reducing inequalities (SDG10, SDG12); help improve the living standards for the poor (SDG11); and reduce common health risks associated with the lack of appropriate infrastructure, such as sanitation (SDG3).

Workshop streams will be concerned with (1) infrasystems as complex human ecosystems and (2) tools for evidence-based decision making at different levels of governance and in professional practice:

Supported by



Towards Healthy China 2035. Open Call.

Organised by



同濟大學  
TONGJI UNIVERSITY

1. Infrasystems will be discussed as
  - a. resource systems, including *ecosystem resources*, such as energy, water, nutrients; *cultural resources*, such as organisations, beliefs and myths; and *socio-economic resources*, such as information, labour and capital; and
  - b. human social systems, including *social institutions*, such as health, justice and governance; *social cycles* across different scales (physical, individual, organisational, etc.); and *systems of social order*, including identity (age, gender, class), norms (formal, informal) and hierarchies (wealth, power).
2. Complex network modelling and other techniques will be discussed for their potential to generate models and to support the development of technical applications (practical tools) for decision making in the future.

Transdisciplinary activities will involve non-academic stakeholders (including policy-makers, government and others within the public, private and third sectors). They will be designed to build an interdisciplinary foundation for the development of data based tools for decision making.

Workshop outcomes will have the potential to benefit research communities with interest in infrasystem transitions, rapidly urbanising China and cross-cutting themes across other transitioning countries. They will facilitate informed decision making in the near future and, in the long term, improve the lives of millions of people who rely on the provision of and access to sustainable urban infrasystems.

## Objectives

The overall aim of this workshop is to *enhance our understanding of complex human-environment interactions and their sustainability outcomes*. It will advance systems approaches for infrastructure (incl. sanitation, water, energy, transport) which situate basic human functions within wider human ecosystems of critical social, economic and environmental resources and social institutions, cycles and order.

Workshop contributions will be concerned with different infrasystems (e.g., service-networked; sewage-based sanitation), environments (urban, peri-urban, rural) and temporal scales (historical analysis, scenario modelling).

Workshop contributions and activities will have the following objectives:

- To understand the components of different types of infrasystems as well as how infrasystems interact with other social, technical and environmental systems
- To reveal the interactions between different infrasystems and the Sustainable Development Agenda
- To identify knowledge needs in collaboration with non-academic stakeholders and co-design an agenda for the co-development of infrasystems-related decision support tools
- To build transdisciplinary capacity in infrasystems research, design, planning, implementation, management and maintenance

Supported by



Towards Healthy China 2035. Open Call.

Organised by



同濟大學  
TONGJI UNIVERSITY

- To support the United Nations Sustainable Development Agenda and contribute to the achievement of Sustainable Development Goals, specifically: SDG3 (healthy lives and well-being for all); SDG6 (water and sanitation for all); SDG10 (reduce inequalities); and SDG11 (inclusive, safe, resilient and sustainable settlements)

The collaborative workshop will focus on the Yangtze River Delta (China) as a prime example of urban transformation across different stages of infrastructural development.

### What will you experience

The workshop will bring together researchers with diverse backgrounds, including (but not limited to) architecture, computing science, complex systems and mathematical biology. We will engage with relevant non-academic partners to ensure workshop insights are deployed in the most appropriate and practically useful manner.

Participants will benefit from the following:

- exposure to and involvement in the development of cutting-edge inter- and transdisciplinary methods for network analysis
- interaction with researchers from vastly different backgrounds to broaden and enhance their methodological repertoire
- active collaboration and knowledge exchange with key end-users
- networking sessions around in-person and virtual presentations to identify user needs and enable the co-creation of transdisciplinary research agendas
- development and improvement of integrative approaches to evidence-based decision making for policy makers and practitioners, with special focus on infrastructural challenges in urbanising China

### Tentative programme

Due to the uncertainties surrounding the COVID-19 pandemic, at this point we are planning for three alternative formats: (a) The workshop will take place face-to-face at Tongji University, Shanghai (China); (b) the workshop will take place simultaneously at Tongji University, Shanghai, for China-based participants and at the University of Manchester for UK-based participants, and will have virtual meeting components; (c) the workshop will take place entirely virtually using a platform such as zoom. The precise format will be communicated closer to the date, when we can anticipate possible restrictions. We will make use of the possibility to pre-record presentations and discuss contributions using an online platform at specific times of the day during the workshop.

We plan for keynotes to be delivered by coordinators and mentors in the mornings, followed by participant presentations and lunch. The afternoons will begin with skills sessions designed to inform on institutional and funding landscapes in the UK and China and build ECR capacity around proposal writing, research methods and publishing strategies. This will be followed by participant presentations sessions and stakeholder networking workshops designed to facilitate future transdisciplinary collaboration.

Supported by



Towards Healthy China 2035. Open Call.

Organised by



同濟大學  
TONGJI UNIVERSITY

### Publication

Participants will have the opportunity to produce working papers for dissemination following the workshop; they will be assigned to 8-10 teams of 2-3 people and mentors will be allocated to each. The most promising contributions will be invited to produce chapters for publication as part of a forthcoming edited volume on urban infrastructure transitions.

### Application and Deadline:

The full application below must be completed and submitted by **5 July 2020** to [susurbinfra@gmail.com](mailto:susurbinfra@gmail.com)

### Eligibility Criteria:

- Applications must be submitted using the Researcher Links application form (at the end of this document)
- Application must be submitted before the above deadline
- Participants must be Early Career Researchers: Early Career Researchers are defined as *holding a PhD (or having equivalent research experience) and having up to 10 years post-PhD research experience*. They are equivalent to the 'Recognised Researcher' and sometimes 'Experienced Researcher' categories in the EU framework for researchers' careers.
- Participants must have a research or academic position (a permanent post, research contract, or fellowship, etc.) at a recognised research institution either in the UK or in China.
- Please note that participants are expected to attend all sessions of the workshop.
- English is the language of the event and candidates must have appropriate comprehension of English.

### Quality Assessment

- Experience and the relevance of the applicant's research focus to the workshop
- Motivation and contribution to the aims of the workshop
- Description of the anticipated impact resulting from participation in the workshop
- Ability to disseminate workshop outcomes

### Selection Procedure:

- Eligibility check
- Quality assessment

### Notification of results:

Applicants will be notified by email by **15 July 2020**.

Supported by



Towards Healthy China 2035. Open Call.

Organised by



同濟大學  
TONGJI UNIVERSITY

## Funding

The workshop will cover the following expenses for selected UK participants, should a face-to-face meeting be possible:

- Travel expenses UK-China, up to £1,200 including visa fees, should workshop take place in Shanghai. Domestic travel in the UK, up to £300, should workshop take place in Manchester.
- Accommodation including breakfast and dinner
- Lunch and coffee breaks

## Equal Opportunities

Equal opportunities and diversity are at the heart of the British Council's cultural relations ambitions. While recognising that some research fields are dominated by one particular gender, Principal Applicants are encouraged to work towards an equal gender balance, promote diversity. They must not exclude applicants on the basis of ethnicity, gender, religious belief, sexual orientation, social status or disability. Participants' selection undertaken by workshop organisers must not contravene this policy. Extra support to enable participation of Early Career Researchers with special needs will be given (please indicate any such needs in the application form).

## About the Newton Fund

The Newton Fund builds research and innovation partnerships with 17 active partner countries to support their economic development and social welfare, and to develop their research and innovation capacity for long-term sustainable growth. It has a total UK Government investment of £735 million up until 2021, with matched resources from the partner countries. The Newton Fund is managed by the UK Department for Business, Energy and Industrial Strategy (BEIS), and delivered through seven UK delivery partners, which includes UK Research and Innovation (comprising the seven research councils and Innovate UK), the UK Academies, the British Council and the Met Office. For further information visit the Newton Fund website ([www.newtonfund.ac.uk](http://www.newtonfund.ac.uk)) and follow via Twitter: @NewtonFund.

## Acknowledgement

This work was supported by a Researcher Links grant, 2019-RLWK11-10594, under the UK-China partnership. The grant is funded by the UK Department for Business, Energy and National Science Foundation of China and delivered by the British Council. For further information, please visit [www.newtonfund.ac.uk](http://www.newtonfund.ac.uk).

## Contact us

Please send any queries to [susurbinfra@gmail.com](mailto:susurbinfra@gmail.com)

Supported by



Towards Healthy China 2035. Open Call.

Organised by



## Towards Healthy China 2035: Sustainable Urban (Sanitation) Infrasystems in the Yangtze River Delta

Workshop Application Form

1. Applicant	
Name and title	
Gender (for statistical purposes. This will not affect choice of participants)	
Position and institution	
Postal address	
Email	
Phone number	
Brief CV (academic career, publications, markers of esteem, and any other relevant information) – no more than ½ page of A4	

2. Abstract - Please give a summary of your area of research

3. Please describe your motivation for attending the workshop and how the workshop matches your professional development needs

4. Please describe the expected impact of your participation on your personal and professional development, including your ability to work internationally

5. Please indicate how you will disseminate the outcomes of the workshops and the new knowledge/skills you have acquired

6. Workshops will take place in English as standard. Please indicate your ability to work and communicate in English (Note, translators may be provided if necessary)		
Native speaker		Good
Excellent		Need support

Supported by



Towards Healthy China 2035. Open Call.

Organised by



同濟大學  
TONGJI UNIVERSITY

**7. Are you interested to contribute to the edited book that might come out of this workshop?**

--

**8. Please use this space to give any additional information that you feel is relevant for the application.**

--

Supported by



Towards Healthy China 2035. Open Call.