

SWIC Sjöstadsverket Water Innovation Centre:

How researchers at KTH can make use of it?

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- KTH-IVL Cooperation Agreement about SWIC
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Sjöstadsverket Water Innovation Centre SWIC

Platform for Development, Testing, Scaling Up and/or Demonstration

- Water Technologies
- Energy Technologies
- Material Technologies
- System analyses



Facilities at SWIC

- Access to different qualities of wastewaters
- Different aerobic and anaerobic treatment lines
- Membrane Technologies
- Relevant pilot scale for realistic results at affordable costs
- Mobile secondary and tertiary treatment modules
- Sludge handling and biogas production
- System integration

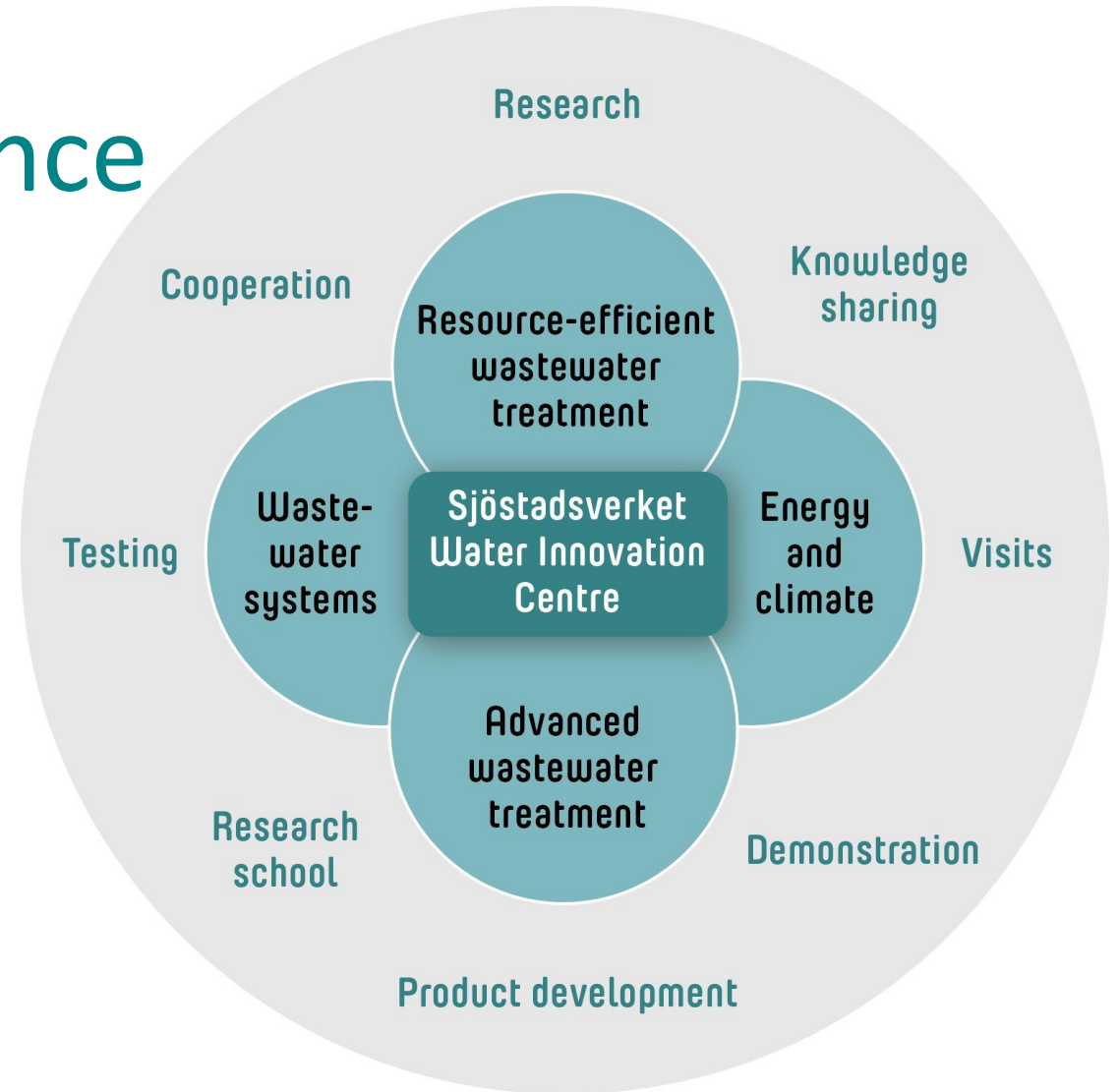
A platform for wastewater intelligence

Innovation

- Research
- Partnerships
- Product development

Education and training

- Site visits
- Internship
- Master thesis projects
- Lab course with real examples
- Workshop for awareness raising





MOST IMPORTANT:
Combining and
integrating systems
with a holistic
perspective
of different tech
and approach

Available techniques and methods

- **Resources efficient treatment technologies**

Soft sensors | Anaerobic treatment | Anammox | Side stream treatment | Advanced membrane technologies | Process control and modelling | ...

- **Technologies for recovery and reuse**

Nutrient recovery from ashes | Nutrients in sludge/sorbent | Water reuse/ Irrigation (nutrient rich effluent) | Industrial water | Potable water | Augmentation of potable water | Removal of pharmaceuticals, pathogens, viruses etc. | Online water quality monitoring | ...

- **Energy production and carbon neutral processes**

Flow separation | Increased sludge production | Enhanced sludge digestion (also co-digestion) | Sewage digestion | Gasification/burning | Microbiological fuel cell | Algae treatment | ...

KTH-IVL Collaboration Agreement Regarding SWIC

KTH Right of Use of SWIC

- KTH has the right to use SWIC to conduct water technology research as follows:
 - a) use of bench space at SWIC, included in the base fee to the extent specified in section 2.2,
 - b) conducting educational activities at SWIC, including having thesis students at SWIC (with primary supervision of thesis students by KTH), included in the base fee to the extent specified in section 2.2.
 - c) study visits at SWIC, included in the base fee to the extent specified in section 2.2,
 - d) use of IVL's pilot facilities at SWIC, under terms (regarding timing, scope, placement, etc.) and fees agreed separately between the Parties, and in accordance with IVL's price list as set out in section 2.3, second paragraph,
 - e) installation of KTH's own pilot facilities at SWIC, under terms (regarding timing, scope, placement, etc.) agreed separately between the Parties.

KTH Pilots at SWIC

- IVL has the right to use KTH's pilot facilities at SWIC, if such have been installed in accordance with point e) above, under terms and fees agreed separately between the Parties and in accordance with KTH's price list as set out in section 2.3, second paragraph.

Access Granted in the Base Fees

- For KTH's actual use under a)–c) below, the base fee includes access to electricity, water (including waste, waste streams, and sewage sludge), nitrogen gas and air supply, as well as office workspace during the period of each respective use:
 - a) bench space of a maximum of 30 m² per use occasion
 - b) conducting educational activities comprising a maximum of 10 sessions of 40 minutes each, and 20 thesis students
 - c) KTH study visits, up to a maximum of 10

Use of IVL Pilots at SWIC by KTH Researchers

- When KTH uses IVL's pilot facilities at SWIC, fees for the agreed and actual usage shall be charged in accordance with IVL's price list in force at the relevant time. Correspondingly, the same shall apply in accordance with KTH's price list in force at the relevant time when IVL uses any KTH pilot facilities that the Parties have agreed to install at SWIC.
- The Parties shall notify each other when their respective price lists are changed and ensure that the other Party receives a copy.

KTH-IVL Reference Group

KTH-IVL Reference Group

A group for consultation, planning, and follow-up,

- Ensure that KTH's needs and opportunities in relation to SWIC are taken into account.
- Monitor KTH's use of SWIC: an annual overview of activities and use of done by KTH researchers use at SWIC
- Highlighting the opportunities offered by SWIC to researchers who may need the environment
 - Showcasing researchers who already use SWIC
 - Identifying areas where the interests of KTH and SWIC align



Reference Group Members

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Discussion

- Who are the researchers that need/plan to use SWIC?
- What facilities do you need at SWIC?
- Work group of Researchers at KTH?
- How could the reference group/contact persons help you to use SWIC?



Thanks for listening

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