



TECHNISCHE
UNIVERSITÄT
WIEN

#IMM2022 BRIEFING

THE WATER CHALLENGE

WWW.INDUSTRYMEETSMAKERS.COM/TUWIEN-WATER-CHALLENGE





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FÖRDERBERATUNG UND
WIRTSCHAFTSKOOPERATIONEN
FUNDING SUPPORT AND
INDUSTRY RELATIONS



R&T

Forschungs- und Transfersupport
Research and Transfer Support



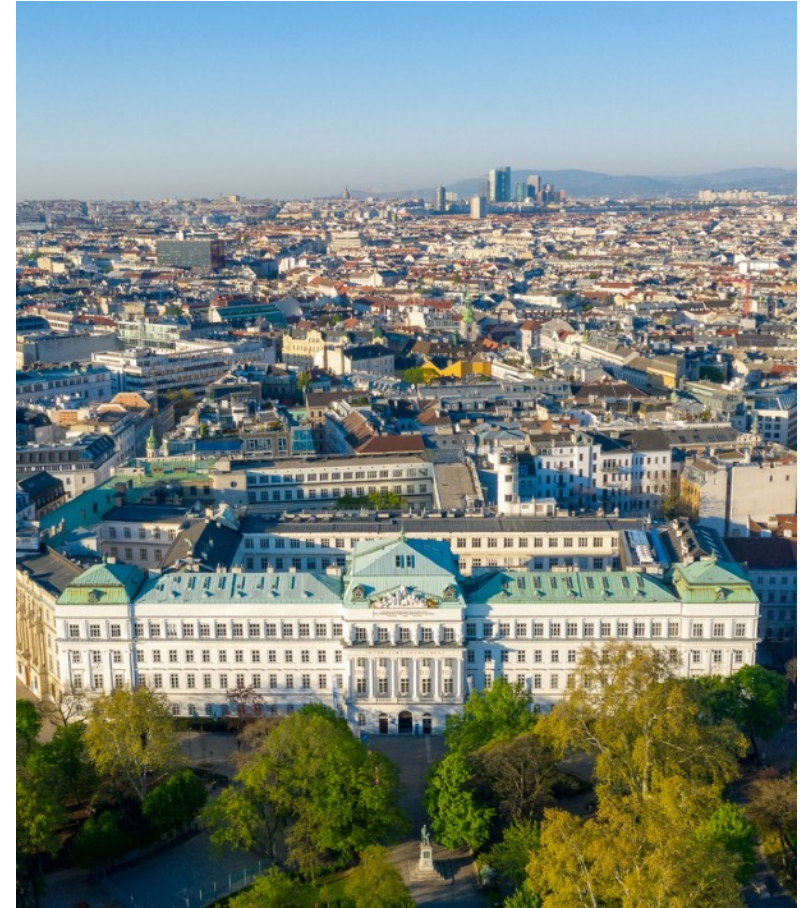
TU Wien – Industry meets Makers 2022

27.04.2022

TU Wien is Austria's largest research and educational institution in the field of technology and natural sciences.

- 4.000+ researchers
- 5 main research areas
- 8 faculties
- 27.000+ students
- 55 degree programmes

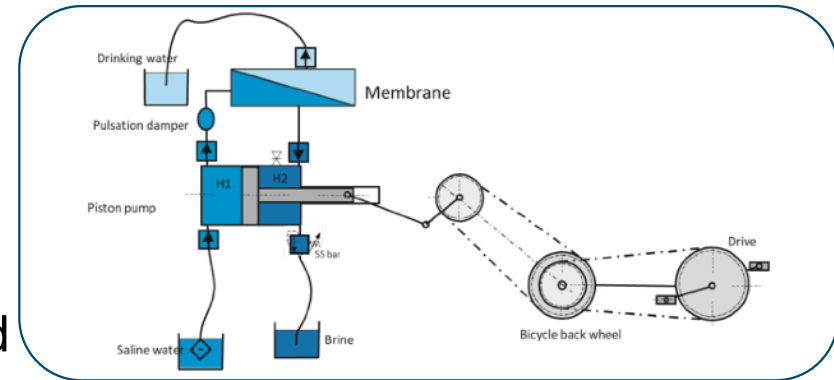
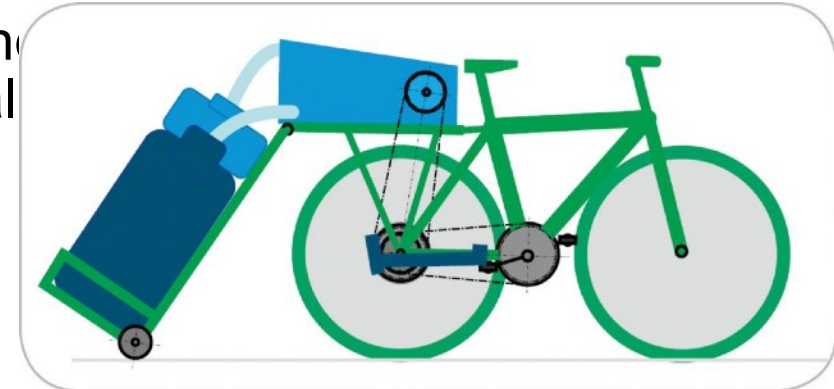
As a driver of innovation, TU Wien strengthens the business location, facilitates cooperation and contributes to the prosperity of society.



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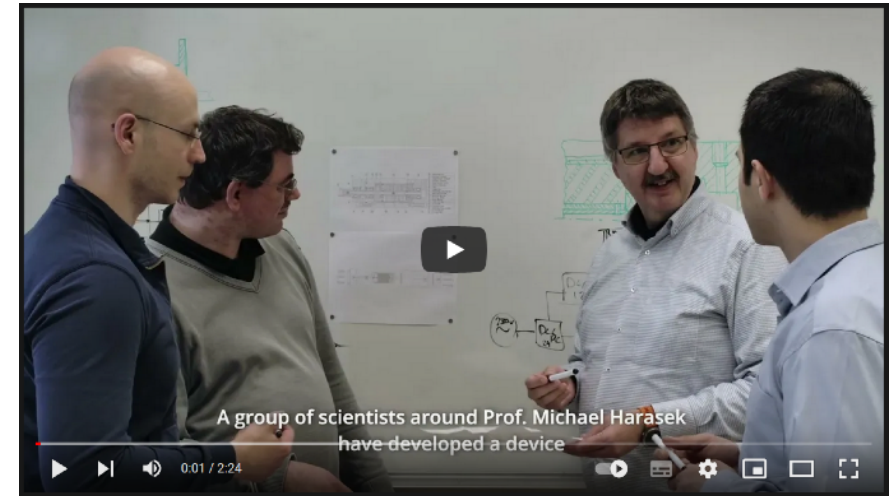
Challenge 1: Desalination Bike (TRL: 6-7)

- **Technology:** This mobile unit desalinates sea water and brackish water with the same process used in industrial desalination plants, but driven by muscle power.
- **Tasks:**
 - Non-commercial community challenge
 - Field tests with several prototypes (10 to 30)
- **Perspectives:**
 - Cooperative projects based on a functioning prototype
 - On demand advice on funding for joint research projects
 - Team of experts in the fields of membrane technology and thermal process engineering



Challenge 2: Liquid-liquid Extractor (TRL: 7-8)

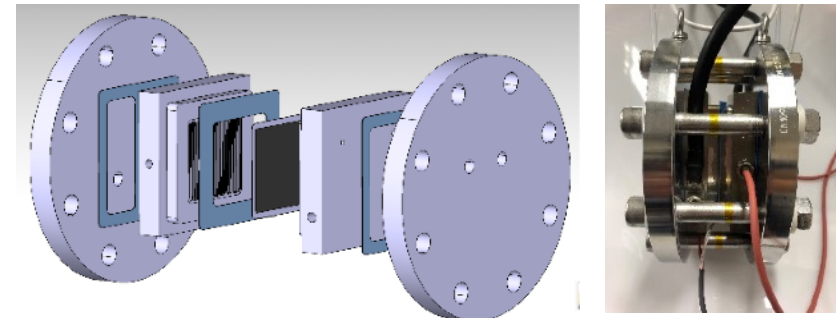
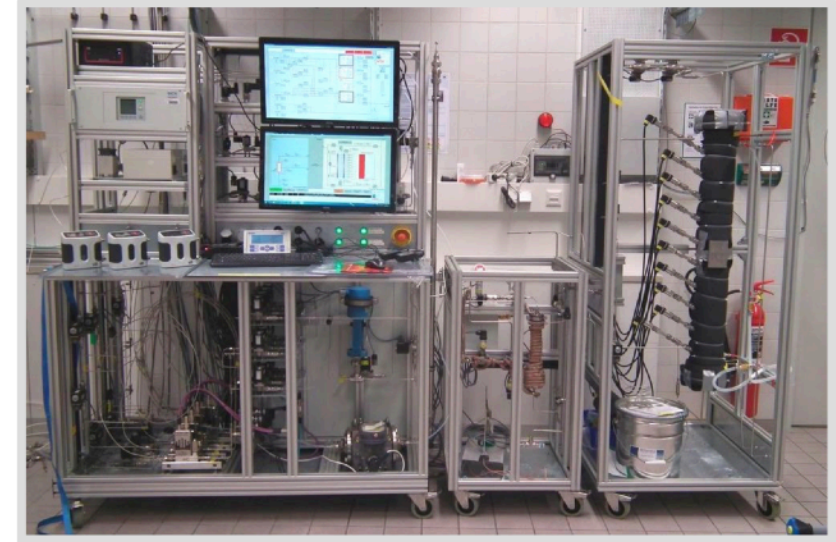
- **Technology:** TU Wien's novel design allows for more efficient extraction by combining mixing and separation in extraction processes in a two-in-one micro device.
- **Tasks:**
 - Ideas for new use cases and business models
 - Engineering partners for further development
- **Perspectives:**
 - Evaluation and feedback on ideas
 - Customisation projects, practical tests, proof-of-concepts



<https://www.youtube.com/watch?v=qxavne20q6c>

Challenge 3: Hydrogen Compressor (TRL: 4-5)

- **Technology:** This technology enables the clean recovery of pure hydrogen from gas mixtures in fuel cell quality (99.9%) as well as compression, while at the same time methane can be fed back into the gas grid.
- **Tasks:**
 - Industrial partners for proof-of-concept or deployment
- **Perspectives:**
 - Cooperative projects with an highly experienced team
 - Economic exploitation of TUW technology
 - On demand support and advice on funding for joint projects





Looking forward to your ideas and meeting you!

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TU Wien Water Challenge
[https://www.industry-meets-makers.com/
tuwien-water-challenge](https://www.industry-meets-makers.com/tuwien-water-challenge)





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