



# Next Generation Water Action Winners 2021















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# Overview Young Entrepreneurs Award Winners

#### **IWA WORLD WATER CONGRESS SCHOLARSHIPS**

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4Life Solutions from Denmark (page 13)

#### **TOP 5 Startups**

4Life Solutions from Denmark

Agromorph Solutions from India

Waterkiosk from Kenya

Bluesparks Technologies from Ghana

Digital Ecoinnovision from India















# IWA World Water Congress 2022 Scholarships

### **About the award:**

The main awards of the initiative are fully funded IWA WWC 2022 scholarships for both tracks, Young Academics and Young Entrepreneurs track. The award goes to the Top 3 teams of each track - to the top 2 international teams and the best Danish team!

The scholarship encompasses for 2-3 team members (3 from Young Academics winners, 2 from Young Entrepreneurs winners) to travel to Copenhagen, visit DTU Skylab and most importantly, attend the IWA World Water Congress in 2022!

Jointly sponsored by IWA Denmark and Next Generation Water Action!











**Winner:** 

Team Kenya (2.KE)

# Team Name / Solution Title:

Chromium Recovery from Tannery Wastewater

#### **Team Members:**

Robert Kipng'eno Too Farida Gitonga Chrispin Ouko Zamzu Angel Nyokabi Loise Muthoni Mahugu Yannick Kyungu

# Link to Description & Pitch video:

https://nextgenerationwateraction.com/grundfos-team-2-ke/

#### **Short Description:**

Protecting the environment and humanity from the toxicity of hexavalent chromium (Cr+6) in wastewater while recovering these non-renewable resources for reuse in the industry: a move towards circular economy.

# IWA WWC 2022 Scholarship

- Young Academics





Picture from left to right: Robert Kipng'eno Too, Prof. Dr. -Ing. John Mwangi Gathenya (supervisor), Angel Nyokabi, Loise Muthoni Mahugu, Chrispin Ouko Zamzu, Yannick Kyungu and Carol Olale (local partner, Trade Council of Denmark in Sub-Saharan Africa)

Winner:

Team India (4.IN)

**Team Name / Solution Title:**Ekatyam

#### **Team Members:**

Rishabh Ravichandran Mihir Palav Piyush Bhandarkar

# Link to Description & Pitch video:

https://nextgenerationwateraction.com/ramboll-team-4-in/

#### **Short Description:**

Our solution MIDAS (Model of Interactive Decision Assistance Simulator) is a multi-stakeholder water management platform that ensures participatory and sustainable water management. Our uniqueness lies in our approach to support various water management initiatives started by government, NGOs or CSRs through the technology enabled end-to-end service. It is a sustainable water management solution created with the community and for the community.

# IWA WWC 2022 Scholarship

- Young Academics





Picture from left to right: Piyush Bhandarkar, Mihir Palav, Rishabh Ravichandran

**Winner:** 

Team Denmark (5.DK)

**Team Name / Solution Title:**Peater

#### **Team Members:**

Martin Anders Tjellesen Magnus Falkenberg Magdalena Golofit Maja Ørslund Jakob Vestergaard Offersen

# Link to Description & Pitch video:

https://nextgenerationwateraction.com/niti-aayog-team-5-dk/

#### **Short Description:**

At Peater, we develop an autonomous, self-sustaining IoT monitoring system specifically designed for peatlands. Our sensor network continuously monitors the health of peatlands on several attributes and transmits the data back to the farmer. Thus, the farmer can get a real-time insight of the wellbeing of their peatlands, and be notified when risk of wildfire or drought is detected. Peater saves nature's most vital CO2 capture tool before it's too Late!

## IWA WWC 2022 Scholarship

- Young Academics





Picture from left to right: Jakob Vestergaard Offersen and Magnus Falkenberg

Winner: 4Life Solutions

#### **Team Members:**

Julia Hammann Roskva Richardt

**Link to Description & Pitch video** (soon to be uploaded):

https://nextgenerationwatera ction.com/youngentrepreneurs-1/#4life

#### **Short Description:**

4Life Solutions is a Danish based impact-company aiming to deliver clean, sustainable water to everyone who needs it by developing and implementing the affordable household water purification device, the SolarSack. SaWa 4life is an affordable and straightforward water purification device that can clean 4 litres of water in 4 hours using only sunlight. Solarsack's purification technology is based on Solar Water Disinfection (SODIS), a process that has been endorsed by WHO. The process works by harnessing UV-rays and heat from the sun to reduce bacteria and virus by 99,99%

## IWA WWC 2022 Scholarship





On the picture: Julia Hammann

Winner:

**Agromorph Solutions** 

#### **Team Members:**

Akanksha Agarwal Abhilesh Agarwal

**Link to Description & Pitch video** (soon to be uploaded):

https://nextgenerationwate raction.com/youngentrepreneurs-1/#agro

#### **Short Description:**

We are an algal water technology company that offers "Re-invented Fresh Water®" from municipal liquid wastewater (MLW). In the current scenario, the pretreated MLW eventually enters the water bodies where algae naturally treat our wastewater. We adapted our algae to biologically treat the MLW and consume its nutrients in a single step, while eliminating harmful bacteria, viruses, TDS, BOD, and most importantly the odor.

# IWA WWC 2022 Scholarship





Picture from left to right: Abhilesh Agarwal and Akanksha Agarwal

Winner:

Waterkiosk Limited

#### **Team Members:**

Samuel Kinyanjui Hamed Beheshti

**Link to Description & Pitch video** (soon to be uploaded):

https://nextgenerationwate raction.com/youngentrepreneurs-1/#waterkiosk

#### **Short Description:**

Waterkiosk Africa installs, operates, and maintains solar water desalination systems for off-grid communities around Africa, Waterkiosk ensures inclusivity in its model of operation ensuring impactoriented results, engaging community stakeholders, and promoting women as kiosk operators. Community members benefit from increased incomes and access to sustainable employment, as well as, minimizing the effort and dangers of traveling to collect drinking water.

# IWA WWC 2022 Scholarship





Picture from left to right: Prof. Dr. -Ing. John Mwangi Gathenya (local partner) and Samuel Kinyanjui





### **Best Pitch Award**

#### **About the award:**

From both tracks, the Best Pitch was selected and is awarded with tailored support to boost their further communication efforts worth 400 EUR.

The Best Pitch award of the Young Academics Track goes to the team with the highest score in the evaluation criteria "Pitch Video" and "Live Q&A Performance" across all 21 participating student teams.

The Best Pitch award of the Young Entrepreneurs Track goes to the team with the highest score in the evaluation criteria "Live Pitch and Q&A Performance" across all 10 participating startup teams.











**Winner:** 

Team Denmark (3.DK)

**Team Name / Solution Title:**SludgeX

**Team Members:** 

Xingzhou Lyu Sindhu Halemani Jagadeesha Benny Kaan Nielsen Manon Chloé Villers Nataniel Andreas Olden-Jørgensen Claire Chudobova Tianyi Ma

# Link to Description & Pitch video:

https://nextgenerationwatera ction.com/team-3-dk-sludgex/

#### **Short Description:**

SludgeX has transformed from a group of bright master's students from around the world into a startup team with the goal of globally optimizing the sustainability of wastewater treatment plants!

### **Best Pitch Award**

### - Young Academics





Picture from left to right: Benny **Kaan** Nielsen, Nataniel Andreas Olden-Jørgensen, Sindhu Halemani Jagadeesha & Manon Chloé Villers

Winner: 4Life Solutions

### Team Members:

Julia Hammann Roskva Richardt

**Link to Description & Pitch video** (soon to be uploaded):

https://nextgenerationwateraction.com/young-entrepreneurs-1/#4life

#### **Short Description:**

4Life Solutions is a Danish based impact-company aiming to deliver clean, sustainable water to everyone who needs it by developing and implementing the affordable household water purification device, the SolarSack, SaWa 4life is an affordable and straightforward water purification device that can clean 4 litres of water in 4 hours using only sunlight. Solarsack's purification technology is based on Solar Water Disinfection (SODIS), a process that has been endorsed by WHO. The process works by harnessing UV-rays and heat from the sun to reduce bacteria and virus by 99,99%

#### **Best Pitch Award**





On the picture: Julia Hammann





# Challenge Awards: MOST PROMISING IDEA

### **About the award:**

For each challenge track, the Most Promising Idea is awarded to the finalist team based on the highest score across all evaluation criteria in its challenge track. The team therewith is the Challenge track winner!

The IWA World Water Congress 2022 Scholarships have been awarded to the Top 3 Most Promising Ideas of the 5 Tracks. Further, we hope that you, as a challenge owner, will give the teams further support by promoting the winning teams of your challenge!











#### **Winner:**

Team Denmark (1.DK)

**Team Name / Solution Title:**PipeData

#### **Team Members:**

Marius-Cristian Mic Anna Groes-Petersen Dušan Popovski Mohammad Mansoor Samadi Dennis Jensen Ralitsa Petkova

# Link to Description & Pitch video:

https://nextgenerationwateraction.com/le34-ghana-team-1-dk/

#### **Short Description:**

PipeData application is visualization software that allows construction workers in Accra, Ghana to view 2D and 3D pipe maps at the construction site. Thus, the number of broken pipes is reduced and as a result,

#### CONTACT INFO

If you are interested in contacting the team, please contact the team leader:
Marius-Cristian Mic,
s193282@student.dtu.dk

#### **MOST PROMISING IDEA**

### - LE34 & GWCL Challenge





Picture from left to right: Dušan Popovski, Dennis Jensen & Ralitsa Petkova

#### Interview with the team in P1 radio:

https://www.dr.dk/radio/p1/orientering/orientering-2021-05-18/01:16:29

### Team mentioned in TV in Ghana News Night from 26:22: (10) MATCH LIVE: #NowsNight on

from 26:32: <u>(19) WATCH LIVE: #NewsNight on</u> #MetroTV / Twitter

Winner:

Team Kenya (2.KE)

# Team Name / Solution Title:

Chromium Recovery from Tannery Wastewater

#### **Team Members:**

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#### **Short Description:**

Protecting the environment and humanity from the toxicity of hexavalent chromium (Cr+6) in wastewater while recovering these non-renewable resources for reuse in the industry: a move towards circular economy.

### **MOST PROMISING IDEA**

### - Grundfos Challenge





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#### **MOST PROMISING IDEA**

### - Daegu City Challenge





Picture from left to right: Benny Kaan Nielsen, Nataniel Andreas Olden-lørgensen, Sindhu Halemani Jagadeesha & Manon Chloé Villers

Winner: Team India (4.IN)

**Team Name / Solution Title:**Ekatvam

#### **Team Members:**

Rishabh Ravichandra Mihir Palav Piyush Bhandarkar

# Link to Description & Pitch video:

https://nextgenerationwateraction.com/ramboll-team-4-in/

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#### MOST PROMISING IDEA

### - Rambøll Challenge





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### **MOST PROMISING IDEA**

- NITI Aayog & AIM Challenge





Picture from left to right: Jakob Vestergaard Offersen and Magnus Falkenberg





# Challenge Awards: ACCELERATION SCHOLARSHIP

### **About the award:**

For each challenge track, one Acceleration Scholarship is awarded to the team based on the highest score in the evaluation criteria "Acceleration Potential" in the challenge semifinal.

The winning team will be awarded a 1.000 EUR scholarship to further accelerate their project - sponsored by the challenge owner.











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s193282@student.dtu.dk

# ACCELERATION SCHOLARSHIP

### - LE34 & GWCL Challenge





Picture from left to right: Dušan Popovski, Dennis Jensen & Ralitsa Petkova

#### Interview with the team in P1 radio:

https://www.dr.dk/radio/p1/orientering/orientering-2021-05-18/01:16:29

**Team mentioned in TV in Ghana News Night** from 26:32: (19) WATCH LIVE: #NewsNight on #MetroTV / Twitter

Winner:

Team Ghana (2.GH)

**Team Name / Solution Title:**Recovery of Phosphorus from Municipal
Wastewater

**Team Members:** 

Francis Adu-Boahene Michelle Agbozo Zenobia Kusi-Afrakoma

# Link to Description & Pitch video:

https://nextgenerationwateraction.com/recovery-of-phosphorus-from-municipal-wastewater/

#### **Short Description:**

There has been a drastic demand for phosphorus. Phosphorus deposits are entirely dependent on imports and are therefore vulnerable to market fluctuations. One of many measures for reducing dependency is the recovery of Phosphorus from obviously available but currently often unexploited national Phosphorus sources. Our solution combines two waste products, aluminium foil and depulped coffee cherries, to recover phosphorus from municipal wastewater!

# ACCELERATION SCHOLARSHIP

### - Grundfos Challenge





Picture from left to right: Michelle Agbozo, Francis Adu-Boahene, Tom Nørring (Ambassador at Danish Embassy in Accra, Ghana) & Zenobia Kusi-Afrakoma

**Team mentioned in TV in Ghana News Night** from 26:32: (19) WATCH LIVE: #NewsNight on #MetroTV / Twitter

**Winner:** 

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# ACCELERATION SCHOLARSHIP

- Daegu City Challenge





Picture from left to right: Benny Kaan Nielsen, Nataniel Andreas Olden-lørgensen, Sindhu Halemani Jagadeesha & Manon Chloé Villers

**Winner:** 

Team Kenya (4.KE)

Team Name / Solution Title:

**Floodizens** 

#### **Team Members:**

Feisal Hassan June Jerop Kimaiyo Nkenen Brendaline Shieke Maureen Mutune Kennedy Wekesa Murunga

# Link to Description & Pitch video:

https://nextgenerationwateraction.com/ramboll-team-4-ke/

#### **Short Description:**

Floodizens; meaning citizens for flood fights, is an application that will integrate a robust citizen science based early warning system and a decision support tool. The citizens will help in data collection through photos into the app showing rainfall and temperature from weather stations, blocked sewer/storm sewer system points before and during a flood, where and extension of the flood during a flood incidence.

# ACCELERATION SCHOLARSHIP

### - Rambøll Challenge





Picture from left to right: Maureen Mutune & Ole Thonke (Ambassador at Royal Danish Embassy in Nairobi)

Winner:

Team India (5.IN1)

**Team Name / Solution Title:**Colorimetric Affordable Test
Strips

**Team Members:** Vaishali Choudhary Kowsalya Vellengiri

# Link to Description & Pitch video:

https://nextgenerationwateraction.com/niti-aayog-team-5-in1/

#### **Short Description:**

Efficient water monitoring tools provide ways to detect pollution before it happens - yet common sensor technologies are not portable nor user friendly. We propose the detection of emerging pollutants by using colorimetric affordable test strips using a simple and spot in dipcheck method. Briefly, the fabricated strips enable the detection by simply dipping the probe in test water and observing naked eye color change - which can then be further analyzed by a simple mobile app.

# ACCELERATION SCHOLARSHIP

- NITI Aayog & AIM Challenge





Picture from left to right: Vaishali Choudhary & Kowsalya Vellengiri