

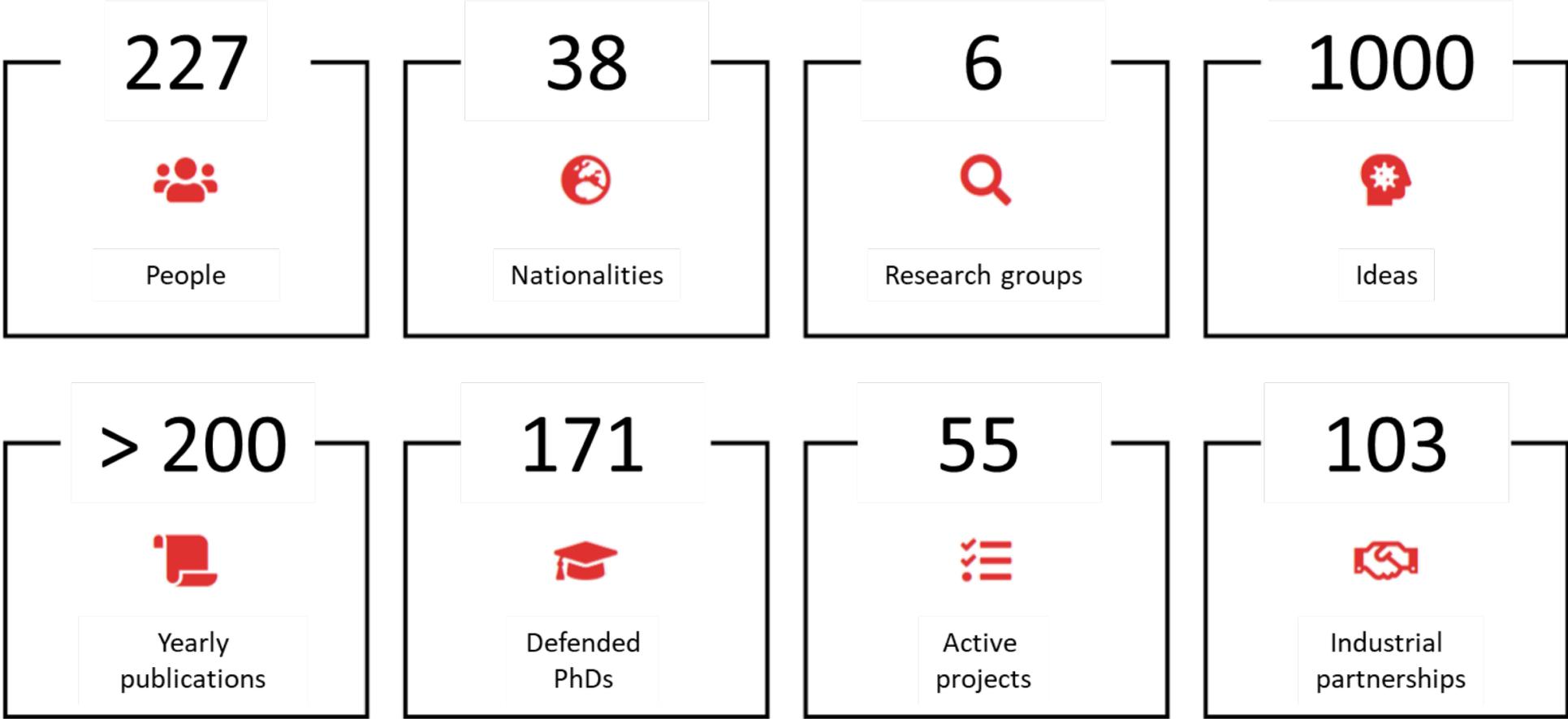


Interdisciplinary research in CMK: Lessons & Challenges

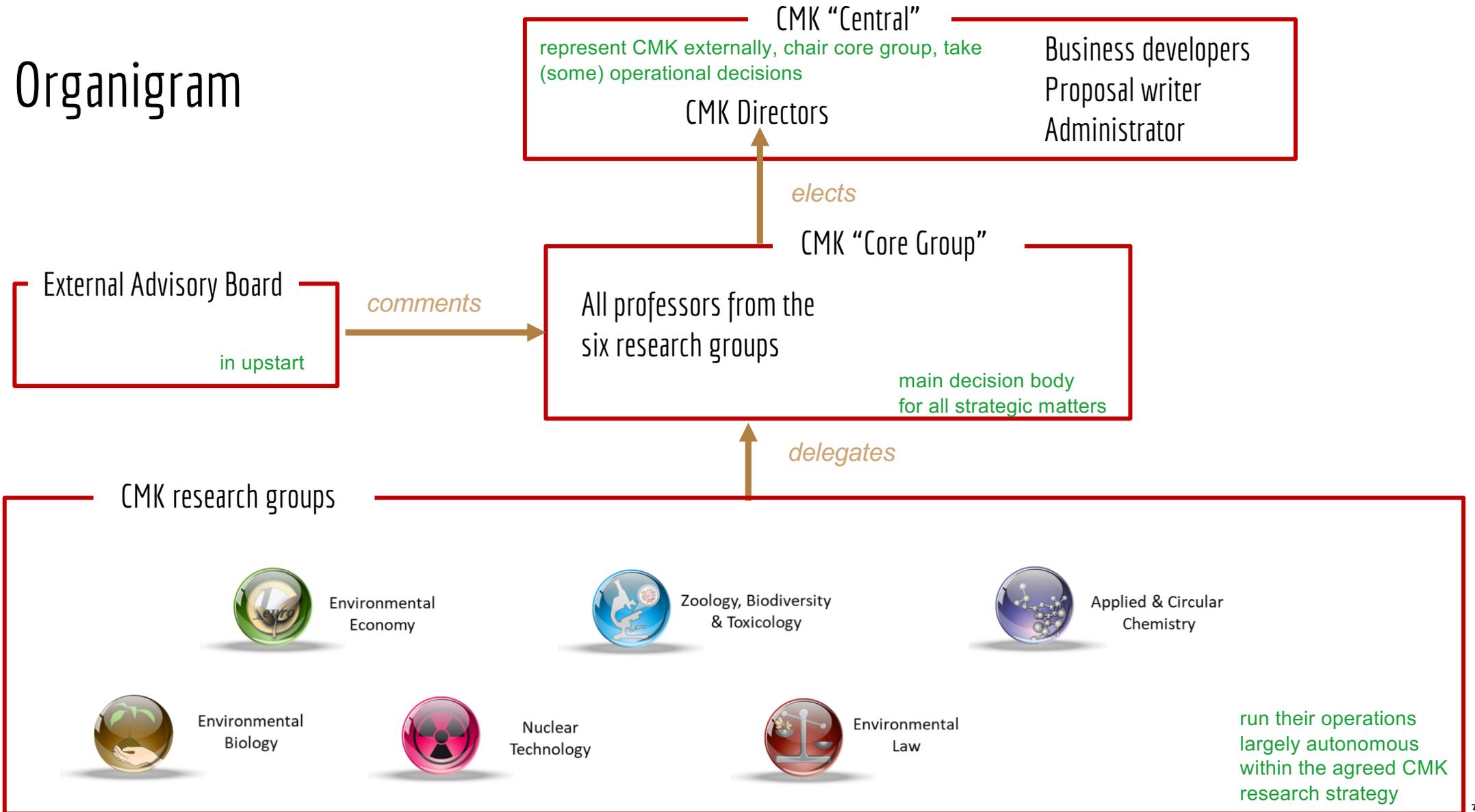
ILEE Symposium May 30, 2022 – Namur
Robert Malina



CMK at a glance



Organigram



CMK strategy

Every 4 years we sit together in order **to revisit our research lines**, define our **research ambitions** and to translate this ambition into **strategic** and **operational goals**.

The result of this exercise is our **strategic plan**.

Strategic Plan

2019-2022

Centre for Environmental Sciences

Hasselt University

February 2019



CMK strategy: Our ambition

“The Centre for Environmental Sciences is striving to be an **international academic leader** in **holistic, multi-, and transdisciplinary analyses** pertaining to the environment, a source of **robust science-driven advice** to public and private decision-makers from the local to the international level, and an active **promoter of academic and educational expertise** in developed and developing countries.”

This ambition is what unites CMK.



CMK strategy: Our research lines

We address **3 research themes** that have **high societal urgency**:



Understanding **influences** of the **environment** on **organisms**



Developing and assessing **Sustainable Clean Technologies** to mitigate influences of the environment on organisms



Monitoring, valuing & optimizing **Biodiversity & Ecosystem services** under different stress conditions, including climate change.

Strategic Plan

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CMK strategy: Our research ambitions within the 3 research lines



1. Increase academic leadership on environmental stressors on plants and their microbiome
2. Enlarge expertise in plant toxicology to improve plant safety and quality
3. Exploit birth cohort
4. Expand knowledge on nature-based solutions
5. Enlarge expertise in toxicology and epidemiology
6. Further develop innovative toxicity tests
7. Enhance academic leadership on black carbon exposure
8. Enhance understanding of radiation influence on living tissues
9. Enlarge dosimetry expertise



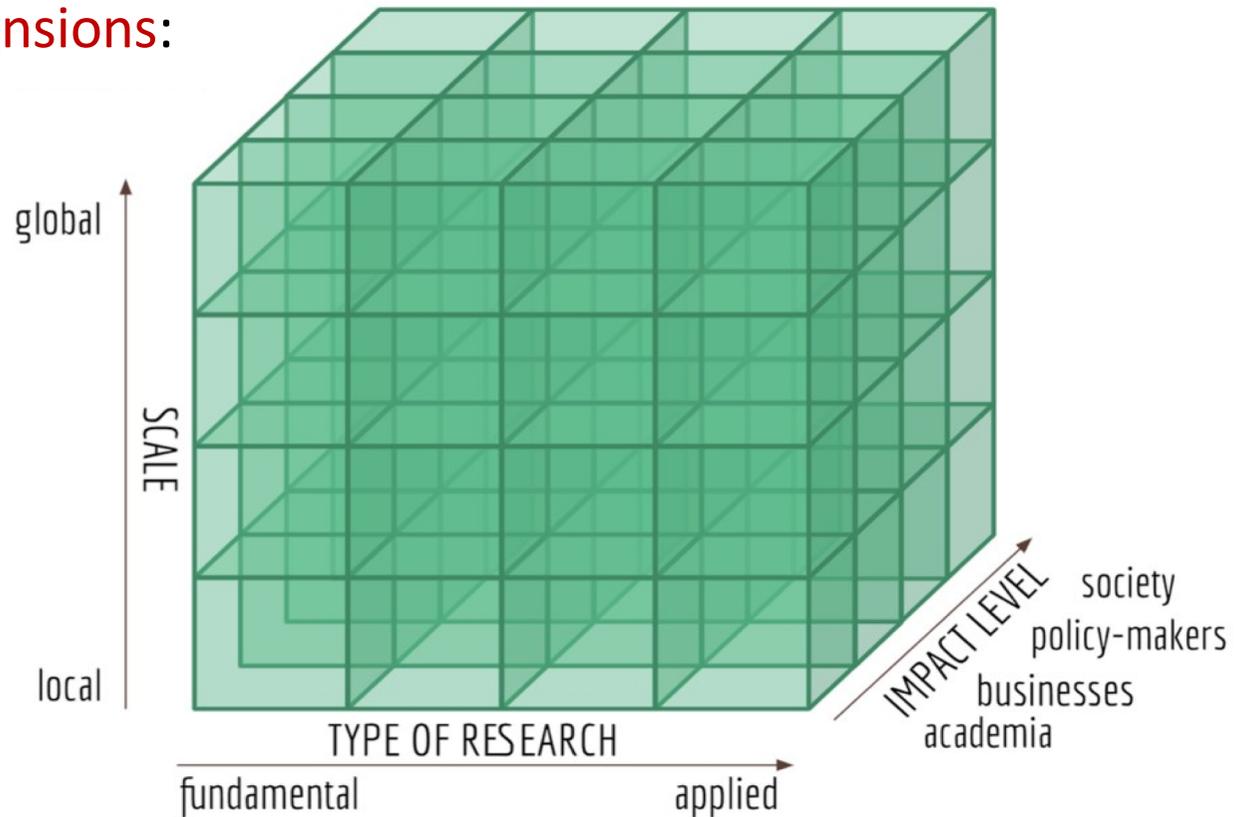
1. Further increase academic leadership on phytoremediation technologies
2. Build-up expertise in new pyrolysis techniques for the production of adsorbents for air, soil and water quality improvements
3. Become expert in the development of sustainable amendments for improved plant growth
4. Become European expert in safe reuse of NORM
5. Build-up expertise in nuclear waste management and decommissioning
6. Become international leader in sustainability assessments
7. Become a European reference in the legal analysis of clean technologies



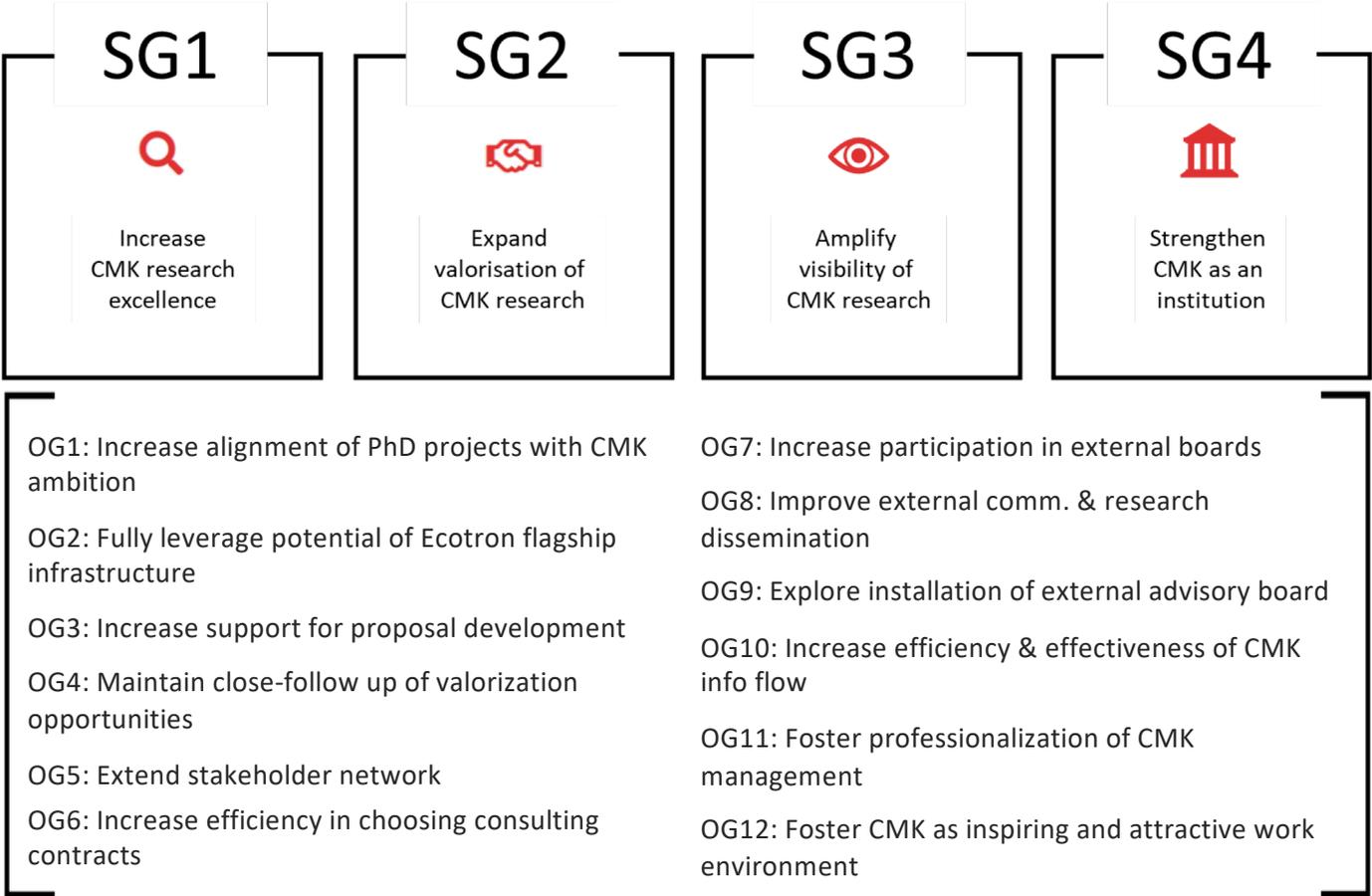
1. Become global leader in multidisciplinary research on climate change impacts on ecosystem services based on controlled experiments
2. Establish the Field Research Centre as platform for high-quality research and education
3. Become a European reference on biological assessment of services provided by green infrastructure and their integrated assessments
4. Further enhance academic leadership on innovative methods for valuation of ecosystem services
5. Elaborate research on conservation management in protected areas
6. Further enhance academic leadership on biodiversity studies in aquatic systems

CMK strategy: Mapping of research

We encourage our researchers to **position themselves** in **3 dimensions**:



CMK strategy: Goals



Strategic Plan
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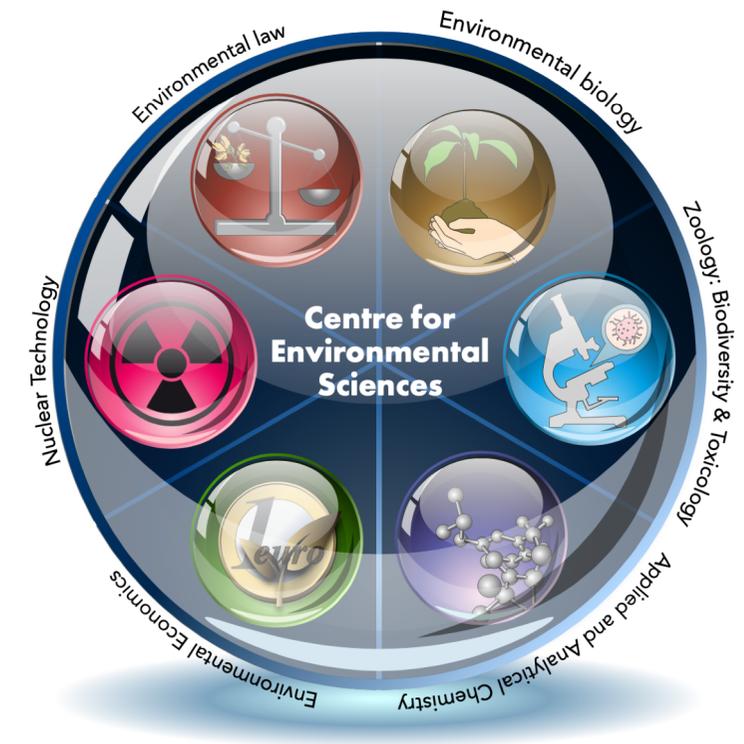
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CMK strategy: Our ambition

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How do we try to foster collaboration within the institute?

CMK Strategy process



Our research strategy makes multidisciplinary explicit and states operational goals on how to achieve it

CMK PhD fellowships



CMK PhD fellowship proposals need to have involvement from 2 CMK research groups

CMK Proposal writer



Part time proposal writer, supporting proposals with involvement of at least 2 research groups that are of strategic importance for CMK

How do we try to foster collaboration within the institute?

CMK Valorization managers



CMK Valorization managers make connections between research groups

Hiring decisions



Nadia Soudzilovskaia · 2nd
Professor Ecosystem Functioning, Leader Ecotron Research at Hasselt University

A cross-disciplinary openness is an important factor in the hiring decisions

CMK Infrastructure



Joint infrastructure used by several research groups

How do we try to foster collaboration within the institute?

CMK "culture"

CMK Research Seminar: Green infrastructure
Biodiversity, Ecosystem services, Wellbeing & Toolkit

Prof. Tom Artois Prof. François Rineau
Prof. Sebastien Lizin Sabine Hubrechts

Total: 76 online CMK participants

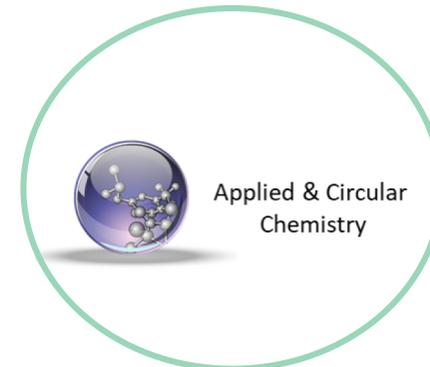
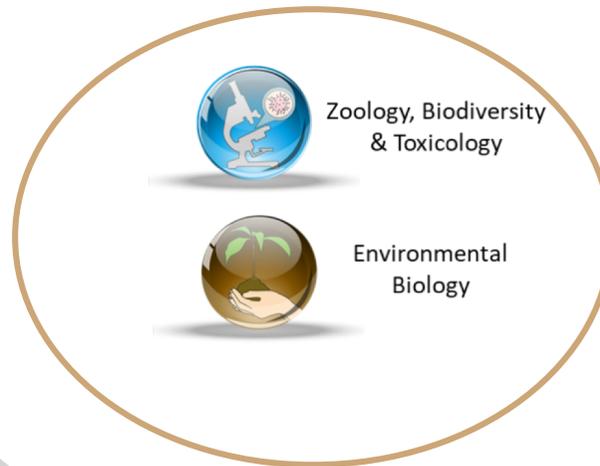
matteofermeglia

Love it

AND IN FULL STYLE WITH THE ONE AND ONLY @CMK_UHASSELT HOODIE

An important aspect that we miss

A physical home



CMK is spread around 5 buildings in Hasselt and Diepenbeek.

So how does collaboration with CMK
actually work?



RadoNorm
Managing risks from radon and NORM

Transdisciplinary research on marketing and societal challenges of using NORM in building material

Nazanin Love



This project has received funding from the Euratom research and training programme 2019-2020 under grant agreement No 900009.

[Link to Video](#)

0:09 / 10:20



Environmental
Economics



Nuclear
Technology



Marketing
Strategy



Risk
Communication



Sociology



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Life as a PhD student

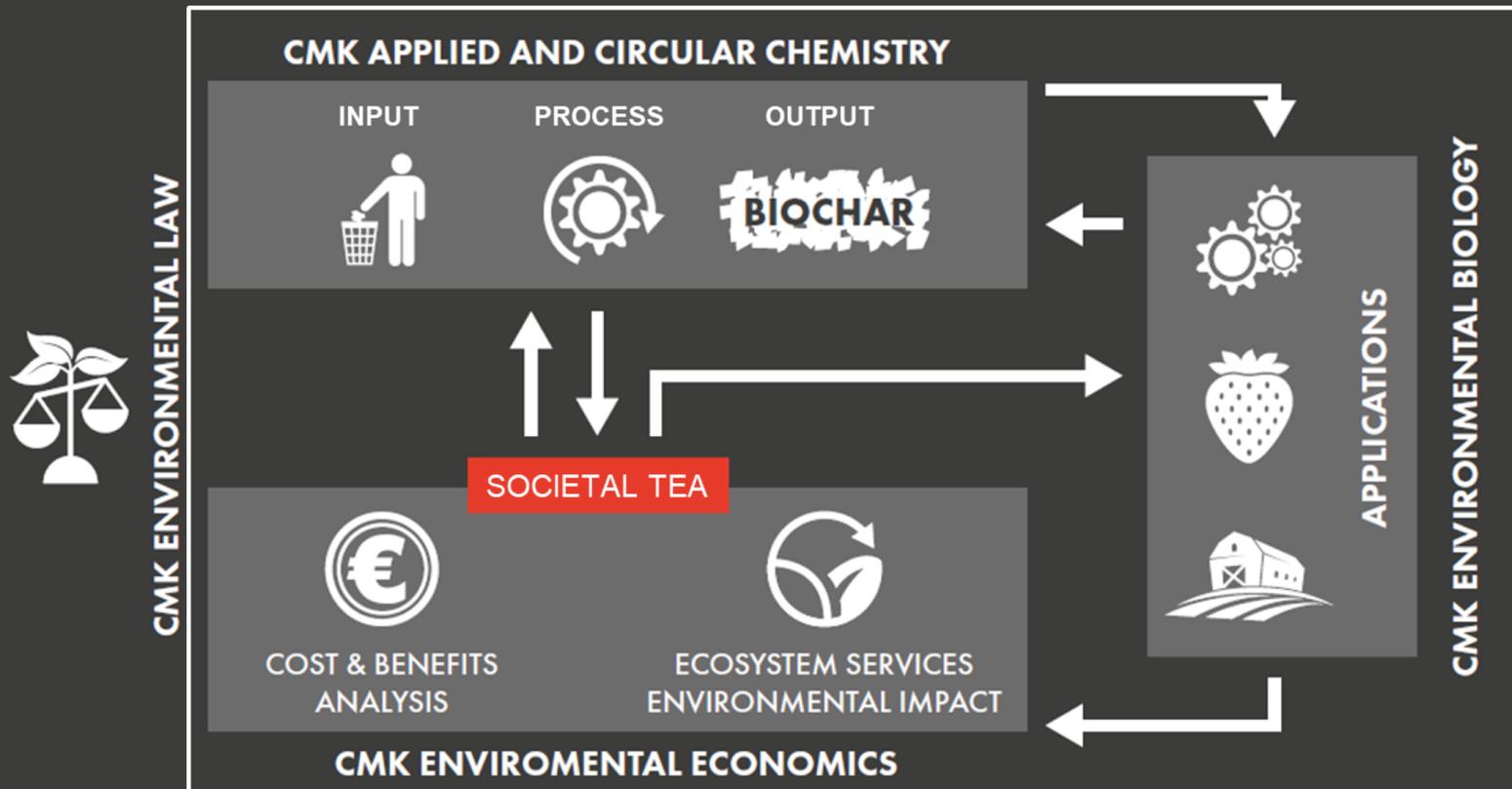


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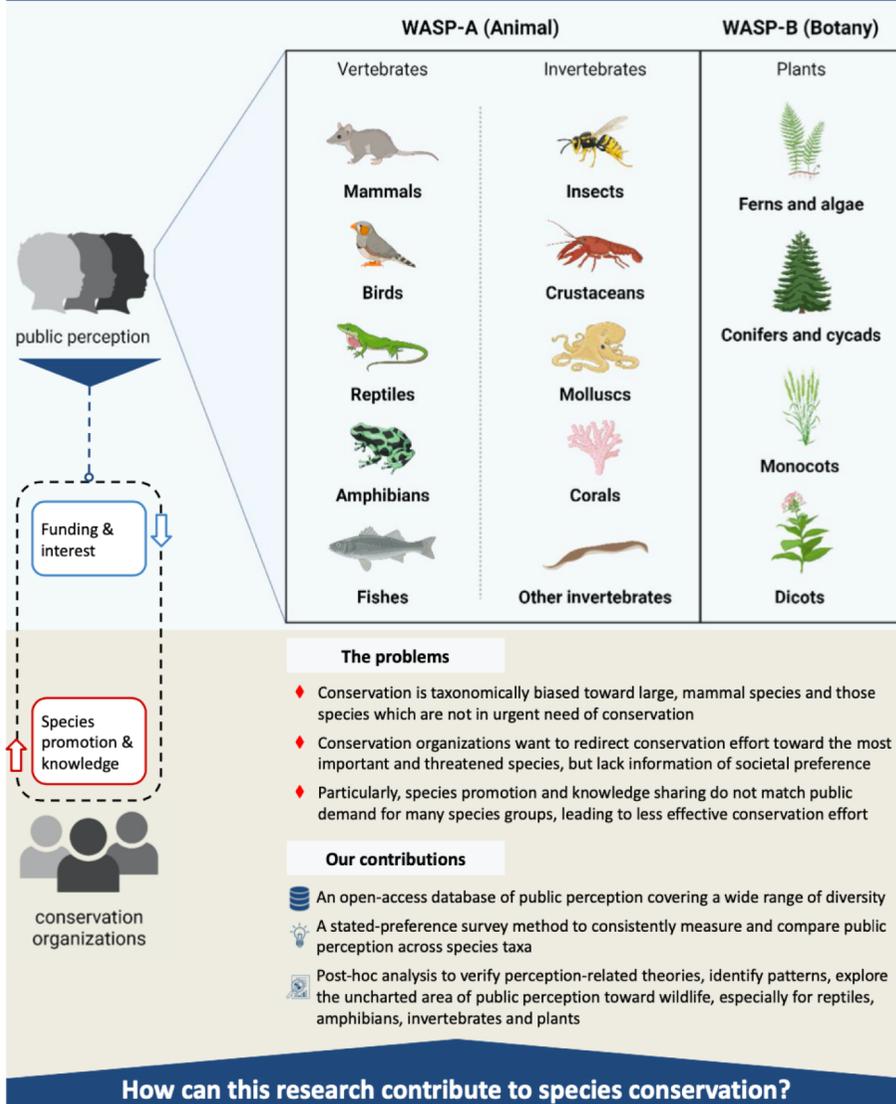


BASTA

INTER-INSTITUTE COLLABORATION

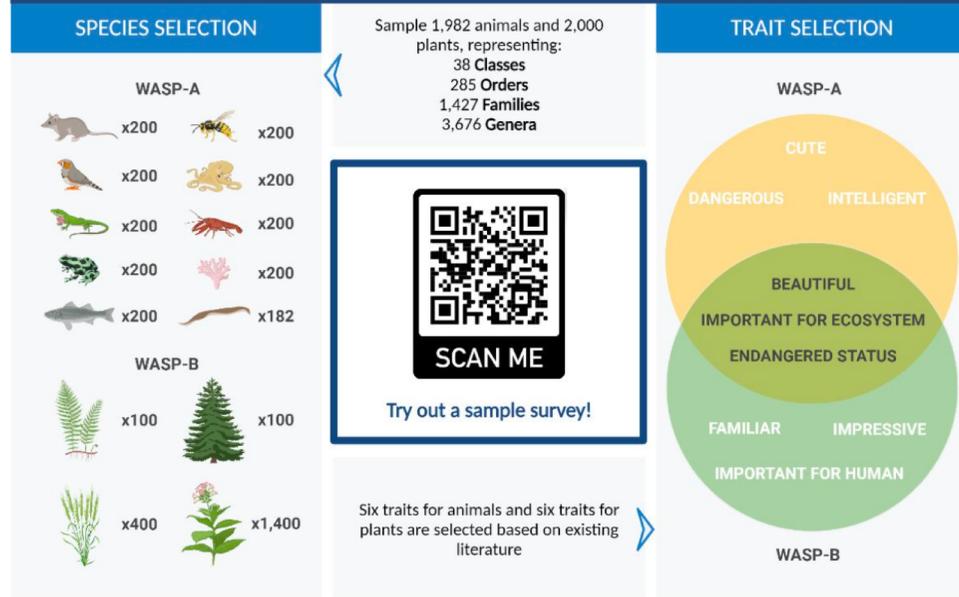


What is this research project?



WORLD ARCHIVES OF SPECIES PERCEPTION (The WASP Project)

Database Design

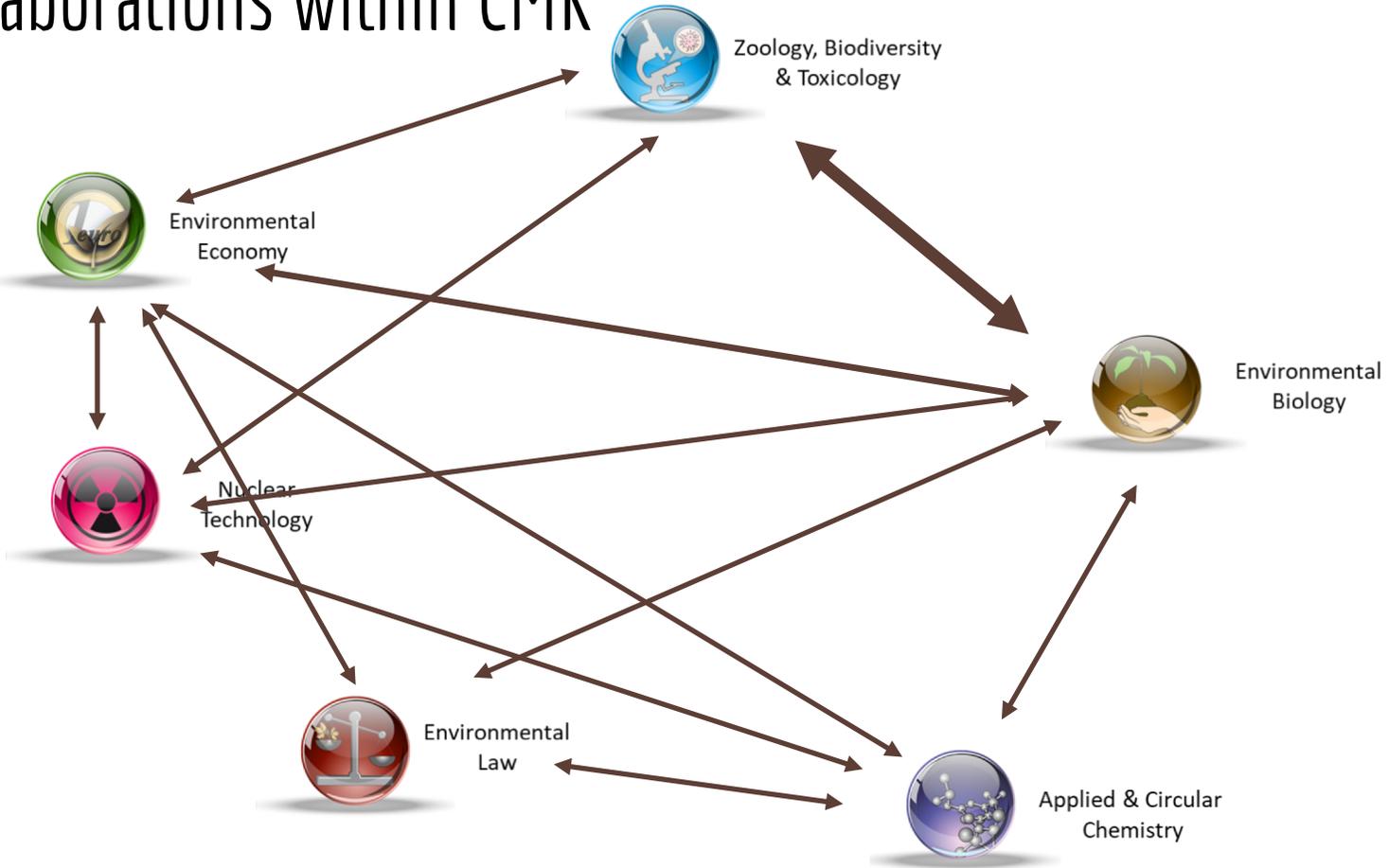


Survey Illustration



Cute	1	2	3	4	5	6	7	8	9
Beautiful	1	2	3	4	5	6	7	8	9
Dangerous	1	2	3	4	5	6	7	8	9
Endangered	1	2	3	4	5	6	7	8	9
Intelligent	1	2	3	4	5	6	7	8	9
Important for Ecosystems	1	2	3	4	5	6	7	8	9

Existing collaborations within CMK



Width of arrow indicative of intensity of collaboration



25 YEARS

CMK

CENTRE FOR
ENVIRONMENTAL SCIENCES



UHASSELT

robert.malina@uhasselt.be

