

HORIZON EUROPE 2025/2026 CALLS

CLUSTER 5 - CLIMATE, ENERGY AND MOBILITY

AAU Fundraising & Project Management Office



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HORIZON-CL5-2025-01-D5-04: Extended lifetime of road Battery Electric Vehicles (BEV) (2ZERO Partnership) (IA)
HORIZON-CL5-2025-04-D5-08: NEXT GENERATION TESTING CAPABILITIES IN STRATEGIC EU WIND TUNNELS
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INTRODUCTION

AAU HORIZON EUROPE COMPENDIUM

Interested in finding academic partners for the upcoming Horizon Europe calls? At AAU, we have collected, mapped, and showcased AAU researchers' interest in collaborating on specific topics within the six clusters of Pillar 2 (including EU Missions & Cross-cutting activities). Each compendium displays our showcased researcher's relevant expertise within each identified topic, which makes it easy to locate AAU researchers who are interested in collaborating and providing their expertise in your next Horizon Europe proposal.

ABOUT AAU

AAU has campuses in Aalborg, Copenhagen, and Esbjerg, as well as an EU office in Brussels. We have 3.700 staff, 18.000 students and an annual turnover of DKK 3 billion.

AAU is a comprehensive university covering <u>four faculties and 18 departments</u>, such as Sustainability and Planning, Energy, Health Science and Technology, Computer Science, Built Environment, Politics and Society, Culture and Learning.

With problem-based learning at the heart of educational programs, AAU researchers and students are well-equipped to take on current and future societal, environmental and economic challenges.

OUR PROFILE AND DNA - WHY SHOULD YOU PARTNER WITH US?

Collaboration is heavily embedded in the DNA of AAU. We have a strong and natural collaboration with industry and the surrounding society – thus our current strategy is labeled "Knowledge for the World 2.0".

We are a mission-oriented university, with three identified AAU Missions:

- 1. A Sustainable Danish Energy System
- 2. Improved Wellbeing Among Children and Youth in Denmark
- 3. Improving Health Through Coherence and Individualisation

As the second best ranked engineering university in Europe, and being no. 16 globally <u>(ranking from the U.S. News & World Report)</u>, as well as being in top 5 of universities pursuing the UN sustainable development goals (<u>THE University Impact Rating</u>), we are a very capable partner and collaborator.

AAU has contributed as coordinator or partner in close to 200 projects in the EU Horizon 2020 Framework Programme. For Horizon Europe we have — so far — contributed to more than 150 projects. We are setting even more ambitious targets for Horizon Europe in 2025 and going forward.

DESTINATION 1

CLIMATE SCIENCES AND RESPONSES FOR THE TRANSFORMATION TOWARDS CLIMATE NETURALITY

DESTINATION 1: CALLS

CALL - CLIMATE SCIENCES AND RESPONSES FOR THE TRANSFORMATION TOWARDS CLIMATE NETURALITY

<u>HORIZON-CL5-2025-05-Two-Stage-D1-05:</u> Adaptation to Climate Change: <u>Effectiveness and Limits (RIA)</u>

<u>HORIZON-CL5-2025-06-D1-06</u>: Fostering equity and justice in climate policies – Societal Readiness Pilot (RIA)

HORIZON-CL5-2025-05-TWO-STAGE-D1-05: ADAPTATION TO CLIMATE CHANGE: EFFECTIVENESS AND LIMITS (RIA)



Laura Bang Lindegaard

Department of Culture and Learning
The Faculty of Social Sciences and Humanities

CONTACT INFORMATION

Laura Bang Lindegaard laura@ikl.aau.dk +45 26277431

https://vbn.aau.dk/da/persons/120308

HIGHLIGHTED AAU RESEARCH GROUPS

I am head of the new research group RECAST (Research in sociocultural aspects of sustainability and green transitions). This interdisciplinary group provides new knowledge and understandings of sociocultural aspects of sustainability and green transitions. The current sustainability crises are co-constituted through human and social activities and therefore need to be explored through humanities and social science perspectives.

AREA OF EXPERTISE

My interdisciplinary profile spans from studies in Danish grammar to studies of governmentality and mobilities studies. Theoretically and methodologically my research is grounded in discourse approaches to communication. Topically, it has developed around the question of a green, equitable transition of everyday transport practices, and my current projects all concerns public transport. I have recently closed a research project on the governing of appropriate 'travelling together', particularly in relation to the risk of contagion, and I am currently in the start-up phase of an Inge Lehmann-project that concerns identities and rationalities in public transport, and in August 2025 I will start one more DFF-project that concerns communicative accessibility in public transport for people with various invisible disabilities.

RELEVANT PROJECTS

I think I can contribute to all calls with my SSH profile, more specifically with my knowledge of the role of language, communication, interaction and practice in societal change. Furthermore, I have particular knowledge of normative barriers for change, and of public transport as a public space.

I have experience as a research group leader and as project PI, so I would have the appropriate experience for taking on the role as a work-package leader.

HORIZON-CL5-2025-06-D1-06: FOSTERING EQUITY AND JUSTICE IN CLIMATE POLICIES – SOCIETAL READINESS PILOT (RIA)



Laura Bang Lindegaard

Department of Culture and Learning
The Faculty of Social Sciences and Humanities

CONTACT INFORMATION

Laura Bang Lindegaard laura@ikl.aau.dk +45 26277431

https://vbn.aau.dk/da/persons/120308

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I have experience as a research group leader and as project PI, so I would have the appropriate experience for taking on the role as a work-package leader.

DESTINATION 2

DRIVING URBAN TRANSITION CO-FUNDED PARTNERSHIP

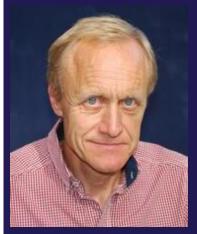
DESTINATION 2: CALLS

CALL - DRIVING URBAN TRANSITION CO-FUNDED PARTNERSHIP

<u>HORIZON-CL5-2025-06-D2-07: Driving Urban Transition to a sustainable future</u>
(DUT) Co-Funded Partnership

HORIZON-CL5-2025-02-D2-08: Coordinated call with India on waste to renewable hydrogen (RIA)

HORIZON-CL5-2025-06-D2-07: DRIVING URBAN TRANSITION TO A SUSTAINABLE FUTURE (DUT) CO-FUNDED PARTNERSHIP



Ole Michael Jensen

Department of the Built Environment Faculty of Engineering and Science

CONTACT INFORMATION

Ole Michael Jensen omrj@build.aau.dk +45 99402373

https://vbn.aau.dk/da/persons/omrj

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings, BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Danish Authority of Social Services and Housing, Danish Energy Agency

AREA OF EXPERTISE

Energy efficiency of buildings Energy renovation of buildings Renewable energy systems Measured and calculated energy consumption Energy labeling data Benchmarking of Energy consumption Sustainable building and refurbishment Climate impact of building energy systems Low carbon building and refurbishment Energy flexibility

RELEVANT PROJECTS

EU-project - EPISCOPE
Energy Performance
Indicator Tracking
Schemes for the
Continuous Optimisation
of Refurbishment
Processes in European
Housing Stocks
EU project TABULA Typology Approach for
Building Stock Energy
Assessment



Jørgen Rose

Department of the Built Environment Faculty of Engineering and Science

CONTACT INFORMATION

Jørgen Rose jro@build.aau.dk +45 99402226

https://vbn.aau.dk/da/persons/jro

HIGHLIGHTED AAU RESEARCH GROUPS

Research group leader in Division of Sustainability of Buildings, BUILD – Department of the Built Environment

MEMBERSHIP OF EU PARTNERSHIPS

POC for AAU in - ECTP Energy Efficient Buildings (E2B)

RELEVANT LINKS OUTSIDE ACADEMIA

Member of IBPSA-Nordic, Danish Authority of Social Services and Housing, Danish Energy Agency, Various consultancies throughout Europe

AREA OF EXPERTISE

Energy efficiency of buildings
Energy renovation of buildings
Renewable energy systems
Building stock modelling and analysis
Measured and calculated energy consumption
Thermal bridges
Low-energy buildings
Energy flexibility
Positive energy districts
District energy simulation

RELEVANT PROJECTS IEA EBC Annex 56: CostEffective Energy and Carbon Emissions Optimization in Building Renovation IEA EBC Annex 73: Towards Net Zero Energy Public Communities IEA EBC Annex 75: Costeffective Building Renovation at District Level Combining Energy

Efficiency & Renewables



Kim B. Wittchen

Department of the Built Environment Faculty of Engineering and Science

CONTACT INFORMATION

Kim B. Wittchen KiWi@build.aau.dk +45 99402379

https://vbn.aau.dk/da/persons/kiwi

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of
Sustainability of Buildings, BUILD

– Department of the Built
Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Board member of IBPSA-Nordic, Danish Energy Agency, Danish Social- and Housing Agency, Various consultancies throughout Europe.

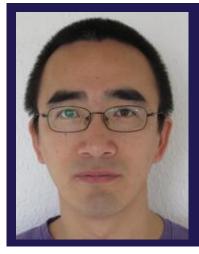
AREA OF EXPERTISE

Energy efficiency of new and existing buildings
Calculation and simulation of buildings energy and indoor climate performance
Field measurements
Building energy regulation
Building Energy certificate database analyses
Renewable energy systems
Building stock modelling and analysis
Smart buildings
Energy flexibility

RELEVANT PROJECTS

IEA EBC Annex 71 –
Building Energy
Performance Assessment
Based on In-situ
Measurements
IEA EBC Annex 82 Energy flexible buildings
towards resilient low
carbon energy systems
IEA EBC Annex 70 Building Energy
Epidemiology
EU Concerted Action 25, Energy Performance of
Buildings Directive

HORIZON-CL5-2025-02-D2-08: COORDINATED CALL WITH INDIA ON WASTE TO RENEWABLE HYDROGEN (RIA)



Chungen Yin

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Chungen Yin chy@et.aau.dk +45 30622577 https://vbn.aau.dk/en/persons/chy

HIGHLIGHTED AAU RESEARCH GROUPS

Bioenergy; Electro-fuels; Multiphase Flow

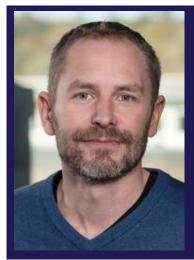
MEMBERSHIP OF EU PARTNERSHIPS EERA

AREA OF EXPERTISE

Thermal/Fluids Energy Components & Technologies Advanced CFD and digital twins CCUS Reacting multiphase flows Pyrolysis/Gasification/ Combustion

RELEVANT PROJECTS

Attempted to file grant applications on such topics before, together with Indian partners



Morten Enggrob Simonsen

Department of Chemistry and Bioscience The Faculty of Engineering and Science

CONTACT INFORMATION

Morten Enggrob Simonsen mes@bio.aau.dk +45 21626924

https://vbn.aau.dk/da/persons/111907

RELEVANT LINKS OUTSIDE ACADEMIA

Many Industrial partners in different sectors both in Denmark and in Europe

AREA OF EXPERTISE

Development, characterization, and testing of materials (polymers, composites, metals, and ceramics). Chemical recycling of mixed plastic waste, textiles, thermoset plastic and composite materials by pyrolysis and solvolysis. Chemical recycling of batteries and E-waste. Separation and purification technologies Quantitative chemical analysis High temperature and high pressure technologies Supercritical CO2 extraction

RELEVANT PROJECTS

Pyrolysis for green fuels and enabling future green hydrogen (Pyrogreen), Innovationsfonden Denmark, (PI/Project leader for AAU)

DESTINATION 3

SUSTAINABLE, SECURE AND COMPETITIVE SUPPLY

DESTINATION 3: CALLS

CALL - SUSTAINABLE, SECURE AND COMPETITIVE SUPPLY

HORIZON-CL5-2025-02-D3-23: Critical elements for energy security of grid and storage technologies (RIA)

HORIZON-CL5-2026-02-D3-01: Large-scale production of liquid advanced biofuels and renewable fuels of non-biological origin (IA)

HORIZON-CL5-2026-02-D3-02: Competitiveness, energy security and integration aspects of advanced biofuels and renewable fuels of non-biological origin value chains (RIA)

HORIZON-CL5-2026-02-D3-05: Demonstration of thermal energy storage solutions for solar thermal plants and systems (IA)

<u>HORIZON-CL5-2026-02-D3-07:</u> Improved reliability and optimised operations and maintenance for wind energy systems (RIA)

HORIZON-CL5-2026-02-D3-12: Extending the lifetime of crystalline silicon PV modules (EUPI-PV Partnership) (RIA)

HORIZON-CL5-2026-02-D3-14: Development of innovative solutions strengthening the security of renewable energy value chains (CSA)

<u>HORIZON-CL5-2026-02-D3-19</u>: Innovation solutions for a Generative Al-powered digital spine of the EU energy system (IA)

HORIZON-CL5-2026-02-D3-20: Innovative tools and services to manage and empower energy communities (IA)

HORIZON-CL5-2026-02-D3-24: New CO2 capture technologies (RIA)

HORIZON-CL5-2025-02-D3-23: CRITICAL ELEMENTS FOR ENERGY SECURITY OF GRID AND STORAGE TECHNOLOGIES (RIA)



Yushuai Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Yushuai Li yusli@cs.aau.dk +45 52731293 https://vbn.aau.dk/en/persons/yusli

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

AREA OF EXPERTISE

Reinforcement learning
Deep learning
Digital twin
Digital energy
Digital transportation

RELEVANT PROJECTS

Expertise specific to
this call: Digital twin,
Digital energy, AI-based
energy decision-making,
Reinforcement learning
Relevant projects
EU project: H2020
MSCA-IF, SPOCEI:
Smart Planning,
Operation and Control for
Energy Internet
National project: The
Association of Danish
Industry, Digital Energy
Hub

HORIZON-CL5-2026-02-D3-01: LARGE-SCALE PRODUCTION OF LIQUID ADVANCED BIOFUELS AND RENEWABLE FUELS OF NON-BIOLOGICAL ORIGIN (IA)



Vincenzo Liso

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Vincenzo Liso vli@energy.aau.dk +45 21370207

https://vbn.aau.dk/da/persons/vli

HIGHLIGHTED AAU RESEARCH GROUPS

Lead member of the "Hydrongen and Electro Fuels" research group

MEMBERSHIP OF EU PARTNERSHIPS

Hydrogen Europe IEA group on hydrogen Ammonia Institute

AREA OF EXPERTISE

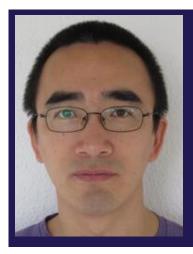
Fuel cells
Electrolysis
Power to X
efuels synthesis
Thermal integration
Thermal digital twins

Expertise in synthesizing renewable fuels of non-biological origin, including hydrogen-derived fuels and other synthetic hydrocarbons, through processes like electrolysis and carbon capture and utilization (CCU).

RELEVANT PROJECTS

Hystram
Electrolife
Power2met

HORIZON-CL5-2026-02-D3-02: COMPETITIVENESS, ENERGY SECURITY AND INTEGRATION ASPECTS OF ADVANCED BIOFUELS AND RENEWABLE FUELS OF NON-BIOLOGICAL ORIGIN VALUE CHAINS (RIA)



Chungen Yin

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Chungen Yin chy@et.aau.dk +45 30622577 https://vbn.aau.dk/en/persons/chy

HIGHLIGHTED AAU RESEARCH GROUPS

Bioenergy; Electro-fuels; Multiphase Flow

MEMBERSHIP OF EU PARTNERSHIPS EERA

AREA OF EXPERTISE

Thermal/Fluids Energy
Components & Technologies
Advanced CFD and digital
twins CCUS
Reacting multiphase flows
Pyrolysis/Gasification/
Combustion

RELEVANT PROJECTS

GREEN-OIL (previous FP7 project) FLEXIfuel (previous project under Sino-Danish collaboration) Advanced modelling of biomass pyrolysis and Combustion (previously supervised PhD project)



Vincenzo Liso

Department of Energy The Faculty of Engineering and Science

CONTACT INFORMATION

Vincenzo Liso vli@energy.aau.dk +45 21370207

https://vbn.aau.dk/da/persons/vli

HIGHLIGHTED AAU RESEARCH **GROUPS**

Lead member of the "Hydrongen and Electro Fuels" research group fuels based on hydrogen.

MEMBERSHIP OF EU PARTNERSHIPS

Hydrogen Europe IEA group on hydrogen Ammonia Institute

AREA OF EXPERTISE

Fuel cells Electrolysis Power to X efuels synthesis Thermal integration Thermal digital twins

Experience in synthetic

RELEVANT PROJECTS

LH2Vessel Electrolife Power2met

HORIZON-CL5-2026-02-D3-05: DEMONSTRATION OF THERMAL ENERGY STORAGE SOLUTIONS FOR SOLAR THERMAL PLANTS AND SYSTEMS (IA)



Chungen Yin

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Chungen Yin chy@et.aau.dk +45 30622577 https://vbn.aau.dk/en/persons/chy

HIGHLIGHTED AAU RESEARCH GROUPS

Bioenergy; Electro-fuels; Multiphase Flow

MEMBERSHIP OF EU PARTNERSHIPS EERA

AREA OF EXPERTISE

Thermal/Fluids Energy
Components & Technologies
Advanced CFD and digital
twins CCUS
Reacting multiphase flows
Pyrolysis/Gasification/
Combustion

RELEVANT PROJECTS

Research with publications

HORIZON-CL5-2026-02-D3-07: IMPROVED RELIABILITY AND OPTIMISED OPERATIONS AND MAINTENANCE FOR WIND ENERGY SYSTEMS (RIA)



Yushuai Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Yushuai Li yusli@cs.aau.dk +45 52731293

https://vbn.aau.dk/en/persons/yusli

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

AREA OF EXPERTISE

Reinforcement learning
Deep learning
Digital twin
Digital energy
Digital transportation

RELEVANT PROJECTS

Expertise specific to
this call: Digital twin,
Digital energy, Al-based
energy decision-making,
Reinforcement learning
Relevant projects
EU project: H2020
MSCA-IF, SPOCEI:
Smart Planning,
Operation and Control for
Energy Internet
National project: The
Association of Danish
Industry, Digital Energy
Hub



Shuai Zhao

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Shuai Zhao szh@energy.aau.dk +45 91193838

https://vbn.aau.dk/en/persons/szh

HIGHLIGHTED AAU RESEARCH GROUPS

Reliability of Power Electronic Converters

AREA OF EXPERTISE

Artificial intelligence and system informatics: physics-informed machine learning, information fusion, data analytics, digital twin, condition & health monitoring, prognostics and health management.

Reliability for power electronics: Physics-of-failure, degradation modeling, lifetime and reliability estimation, accelerated testing experiment, health-aware control.

RELEVANT PROJECTS

European Projects:

TEAMING: E-powertrain
Predictive Maintenance
Using Physics Informed
Learning, European Horizon
MSCA

ALL2GAN: Affordable smart GaN IC solutions as enabler of greener applications, European Chips Jointundertaking

National Projects:

Phy-caliper: Discovering Unknown Physics for Calibrating Predictive Maintenance in Power Electronics, Villum Experiment.

Light-AI: Light-AI for Cognitive Power Electronics,

Villum Synergy.

Al-Power: Physics-informed Al for Next Generation Power Electronics, IFD grand solution.



Morten Enggrob Simonsen

Department of Chemistry and Bioscience The Faculty of Engineering and Science

CONTACT INFORMATION

Morten Enggrob Simonsen mes@bio.aau.dk +45 21626924

https://vbn.aau.dk/da/persons/111907

RELEVANT LINKS OUTSIDE ACADEMIA

Many Industrial partners in different sectors both in Denmark and in Europe

AREA OF EXPERTISE

Development, characterization, and testing of materials (polymers, composites, metals, and ceramics).

Chemical recycling of mixed plastic waste, textiles, thermoset plastic and composite materials by pyrolysis and solvolysis.

Chemical recycling of batteries and E-waste.
Separation and purification technologies
Quantitative chemical analysis
High temperature and high pressure technologies
Supercritical CO2 extraction
Test and characterization of leading edge protection

HORIZON-CL5-2026-02-D3-12: EXTENDING THE LIFETIME OF CRYSTALLINE SILICON PV MODULES (EUPI-PV PARTNERSHIP) (RIA)



Shuai Zhao

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Shuai Zhao szh@energy.aau.dk +45 91193838

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HIGHLIGHTED AAU RESEARCH GROUPS

Reliability of Power Electronic Converters

AREA OF EXPERTISE

Artificial intelligence and system informatics: physics-informed machine learning, information fusion, data analytics, digital twin, condition & health monitoring, prognostics and health management.

Reliability for power electronics: Physics-of-failure, degradation modeling, lifetime and reliability estimation, accelerated testing experiment, health-aware control.

RELEVANT PROJECTS

European Projects:
TEAMING: E-powertrain
Predictive Maintenance
Using Physics Informed
Learning, European Horizon
MSCA

ALL2GAN: Affordable smart GaN IC solutions as enabler of greener applications, European Chips Jointundertaking

National Projects:

Phy-caliper: Discovering Unknown Physics for Calibrating Predictive Maintenance in Power Electronics, Villum Experiment.

Light-Al: Light-Al for Cognitive Power Electronics,

Villum Synergy.

Al-Power: Physics-informed Al for Next Generation Power Electronics, IFD grand solution.

HORIZON-CL5-2026-02-D3-14: DEVELOPMENT OF INNOVATIVE SOLUTIONS STRENGTHENING THE SECURITY OF RENEWABLE ENERGY VALUE CHAINS (CSA)



Yushuai Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Yushuai Li yusli@cs.aau.dk +45 52731293 https://vbn.aau.dk/en/persons/yusli

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

AREA OF EXPERTISE

Reinforcement learning
Deep learning
Digital twin
Digital energy
Digital transportation

RELEVANT PROJECTS

Expertise specific to
this call: Digital twin,
Digital energy, Al-based
energy decision-making,
Reinforcement learning
Relevant projects
EU project: H2020
MSCA-IF, SPOCEI:
Smart Planning,
Operation and Control for
Energy Internet
National project: The
Association of Danish
Industry, Digital Energy
Hub

HORIZON-CL5-2026-02-D3-19: INNOVATION SOLUTIONS FOR A GENERATIVE AI-POWERED DIGITAL SPINE OF THE EU ENERGY SYSTEM (IA)



Yushuai Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Yushuai Li yusli@cs.aau.dk +45 52731293

https://vbn.aau.dk/en/persons/yusli

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

AREA OF EXPERTISE

Reinforcement learning
Deep learning
Digital twin
Digital energy
Digital transportation

RELEVANT PROJECTS

Expertise specific to
this call: Digital twin,
Digital energy, Al-based
energy decision-making,
Reinforcement learning
Relevant projects
EU project: H2020
MSCA-IF, SPOCEI:
Smart Planning,
Operation and Control for
Energy Internet
National project: The
Association of Danish
Industry, Digital Energy
Hub



Shuai Zhao

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Shuai Zhao szh@energy.aau.dk +45 91193838

https://vbn.aau.dk/en/persons/szh

HIGHLIGHTED AAU RESEARCH GROUPS

Reliability of Power Electronic Converters

AREA OF EXPERTISE

Artificial intelligence and system informatics: physics-informed machine learning, information fusion, data analytics, digital twin, condition & health monitoring, prognostics and health management.

Reliability for power electronics: Physics-of-failure, degradation modeling, lifetime and reliability estimation, accelerated testing experiment, health-aware control.

RELEVANT PROJECTS

European Projects:

TEAMING: E-powertrain Predictive Maintenance Using Physics Informed Learning, European Horizon MSCA

ALL2GAN: Affordable smart GaN IC solutions as enabler of greener applications, European Chips Jointundertaking

National Projects:

Phy-caliper: Discovering Unknown Physics for Calibrating Predictive Maintenance in Power Electronics, Villum Experiment.

Light-AI: Light-AI for Cognitive Power Electronics,

Villum Synergy.

Al-Power: Physics-informed Al for Next Generation Power Electronics, IFD grand solution.

HORIZON-CL5-2026-02-D3-20: INNOVATIVE TOOLS AND SERVICES TO MANAGE AND EMPOWER ENERGY COMMUNITIES (IA)



Yushuai Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Yushuai Li yusli@cs.aau.dk +45 52731293

https://vbn.aau.dk/en/persons/yusli

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

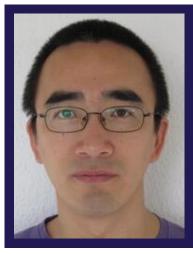
AREA OF EXPERTISE

Reinforcement learning
Deep learning
Digital twin
Digital energy
Digital transportation

RELEVANT PROJECTS

Expertise specific to
this call: Digital twin,
Digital energy, Al-based
energy decision-making,
Reinforcement learning
Relevant projects
EU project: H2020
MSCA-IF, SPOCEI:
Smart Planning,
Operation and Control for
Energy Internet
National project: The
Association of Danish
Industry, Digital Energy
Hub

HORIZON-CL5-2026-02-D3-24: NEW CO2 CAPTURE TECHNOLOGIES (RIA)



Chungen Yin

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Chungen Yin Thermal/Flu
chy@et.aau.dk Components
+45 30622577 Advanced C
https://vbn.aau.dk/en/persons/chy twins CCUS

HIGHLIGHTED AAU RESEARCH GROUPS

Bioenergy; Electro-fuels; Multiphase Flow

MEMBERSHIP OF EU PARTNERSHIPS FERA

AREA OF EXPERTISE

Thermal/Fluids Energy
Components & Technologies
Advanced CFD and digital
twins CCUS
Reacting multiphase flows
Pyrolysis/Gasification/
Combustion

RELEVANT PROJECTS

BioNETzero (ongoing EU project)

DESTINATION 4

EFFICIENT, SUSTAINABLE AND INCLUSIVE ENERGY USE

DESTINATION 4: CALLS

CALL - EFFICIENT, SUSTAINABLE AND INCLUSIVE ENERGY USE

HORIZON-CL5-2026-02-D4-01: On-site innovative robotic and automated solutions and techniques for more sustainable and less disruptive building renovation and construction (RIA)

HORIZON-CL5-2026-02-D4-02: Smarter buildings as part of the energy system for increased efficiency and flexibility – Societal Readiness Pilot (IA)

HORIZON-CL5-2026-02-D4-03: Innovative pathways for low carbon and climate resilient building stock and built environment (Built4People Partnership) (RIA)

HORIZON-CL5-2026-02-D4-04: Innovative approaches for the deployment of Positive Energy Districts (IA)

HORIZON-CL5-2026-02-D4-05: Optimal combination of low embodied carbon construction products, technical building systems and circularity principles for climate neutral buildings (Built4People Partnership) (RIA)

HORIZON-CL5-2026-02-D4-06: Phase out fossil fuel in energy intensive industries, through the integration of renewable energy sources (IA)

HORIZON-CL5-2026-02-D4-02: SMARTER BUILDINGS AS PART OF THE ENERGY SYSTEM FOR INCREASED EFFICIENCY AND FLEXIBILITY – SOCIETAL READINESS PILOT (IA)



Kim B. Wittchen

Department of the Built Environment Faculty of Engineering and Science

CONTACT INFORMATION

Kim B. Wittchen KiWi@build.aau.dk +45 99402379

https://vbn.aau.dk/da/persons/kiwi

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of
Sustainability of Buildings, BUILD

- Department of the Built
Environment

RELEVANT LINKS OUTSIDE ACADEMIA

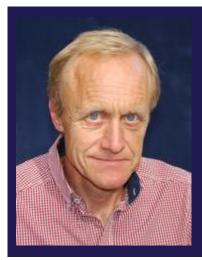
Board member of IBPSA-Nordic, Danish Energy Agency, Danish Social- and Housing Agency, Various consultancies throughout Europe.

AREA OF EXPERTISE

Energy efficiency of new and existing buildings
Calculation and simulation of buildings energy and indoor climate performance Field measurements
Building energy regulation
Building Energy certificate database analyses
Renewable energy systems
Building stock modelling and analysis
Smart buildings
Energy flexibility

RELEVANT PROJECTS

IEA EBC Annex 82 Energy flexible buildings
towards resilient low
carbon energy systems
IEA EBC Annex 70 Building Energy
Epidemiology
IEA EBC Annex 66 Definition and Simulation
of Occupant Behaviour in
Buildings
EU Concerted Action (25) - Energy Performance of
Buildings Directive



Ole Michael Jensen

Department of the Built Environment Faculty of Engineering and Science

CONTACT INFORMATION

Ole Michael Jensen omrj@build.aau.dk +45 99402373

https://vbn.aau.dk/da/persons/omrj

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings, BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Danish Authority of Social Services and Housing, Danish Energy Agency

AREA OF EXPERTISE

Energy efficiency of buildings Energy renovation of buildings Renewable energy systems Measured and calculated energy consumption Energy labeling data Benchmarking of Energy consumption Sustainable building and refurbishment Climate impact of building energy systems Low carbon building and refurbishment Energy flexibility

RELEVANT PROJECTS EU-project - ENERFUND (horizon2020) (An ENErgy Retrofit FUNDing rating tool). Call: H2020EE-2015-3-MarketUptake



Yushuai Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Yushuai Li yusli@cs.aau.dk +45 52731293

https://vbn.aau.dk/en/persons/yusli

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

AREA OF EXPERTISE

Reinforcement learning
Deep learning
Digital twin
Digital energy
Digital transportation

RELEVANT PROJECTS

Expertise specific to
this call: Digital twin,
Digital energy, Al-based
energy decision-making,
Reinforcement learning
Relevant projects
EU project: H2020
MSCA-IF, SPOCEI:
Smart Planning,
Operation and Control for
Energy Internet
National project: The
Association of Danish
Industry, Digital Energy
Hub



Simon Pommerencke Melgaard

Department of the Built Environment
The Faculty of Engineering and Science
Division of Architectural Engineering

CONTACT INFORMATION

Simon Pommerencke Melgaard simonpm@build.aau.dk +45 99407027

https://vbn.aau.dk/da/persons/simonpm

HIGHLIGHTED AAU RESEARCH GROUPS

Energy and Buildings Research Group

AREA OF EXPERTISE

My research focuses on the use of building management system data and includes areas such as fault detection and diagnosis, performance monitoring of HVAC systems, energy optimization and building simulation.

RELEVANT PROJECTS

Self Assessment Towards Optimization of Building Energy (SATO) https://cordis.europa.eu/project/id/957128

Holistic Energy management And Thermal Waste Integrated System for Energy optimization (HEATWISE)

https://cordis.europa.eu/project/id/101138491

HORIZON-CL5-2026-02-D4-03: INNOVATIVE PATHWAYS FOR LOW CARBON AND CLIMATE RESILIENT BUILDING STOCK AND BUILT ENVIRONMENT (BUILT4PEOPLE PARTNERSHIP) (RIA)



Jørgen Rose

Department of the Built Environment Faculty of Engineering and Science Division of Sustainability of Buildings

CONTACT INFORMATION

Jørgen Rose jro@build.aau.dk +45 99402226

https://vbn.aau.dk/da/persons/jro

HIGHLIGHTED AAU RESEARCH GROUPS

Research group leader in
Division of Sustainability of
Buildings, BUILD – Department
of the Built Environment

MEMBERSHIP OF EU PARTNERSHIPS

POC for AAU in - ECTP Energy Efficient Buildings (E2B)

RELEVANT LINKS OUTSIDE

Member of IBPSA-Nordic, Danish Authority of Social Services and Housing, Danish Energy Agency, Various consultancies throughout Europe

AREA OF EXPERTISE

Energy efficiency of buildings
Energy renovation of buildings
Renewable energy systems
Building stock modelling and analysis
Measured and calculated energy consumption
Thermal bridges
Low-energy buildings
Energy flexibility
Positive energy districts
District energy simulation

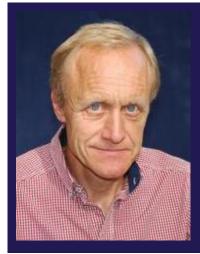
RELEVANT PROJECTS

IEA EBC Annex 56:
Cost-Effective Energy
and Carbon Emissions
Optimization in Building
Renovation
IEA EBC Annex 73:
Towards Net Zero Energy
Public Communities
IEA EBC Annex 75:
Cost-effective Building
Renovation at District
Level Combining Energy

IEA EBC Annex 83: Positive Energy Districts

Efficiency &

Renewables



Ole Michael Jensen

Department of the Built Environment Faculty of Engineering and Science Division of Sustainability of Buildings

CONTACT INFORMATION

Ole Michael Jensen omrj@build.aau.dk +45 99402373 https://vbn.aau.dk/da/persons/omri BUILD - Department of the

HIGHLIGHTED AAU **RESEARCH GROUPS**

Member of Division of Sustainability of Buildings, Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Danish Authority of Social Services and Housing, Danish Energy Agency

AREA OF EXPERTISE

Energy efficiency of buildings Energy renovation of buildings Renewable energy systems Measured and calculated energy consumption Energy labeling data Benchmarking of Energy consumption Sustainable building and refurbishment Climate impact of building energy systems Low carbon building and refurbishment Energy flexibility

RELEVANT PROJECTS

EU-project - ENERFUND (horizon2020) (An ENErgy Retrofit FUNDing rating tool). Call: H2020-EE-2015-3-MarketUptake

EU-project - EPISCOPE Energy Performance Indicator Tracking Schemes for the Continuous Optimisation of Refurbishment Processes in European Housing Stocks



Kim B. Wittchen

Department of the Built Environment Faculty of Engineering and Science Division of Sustainability of Buildings

CONTACT INFORMATION

Kim B. Wittchen KiWi@build.aau.dk +45 99402379 https://vbn.aau.dk/da/persons/kiwi

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings, BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Board member of IBPSA-Nordic, Danish Energy Agency, Danish Social- and Housing Agency, Various consultancies throughout Europe.

AREA OF EXPERTISE

Energy efficiency of new and existing buildings
Calculation and simulation of buildings energy and indoor climate performance Field measurements
Building energy regulation
Building Energy certificate database analyses
Renewable energy systems
Building stock modelling and analysis
Smart buildings
Energy flexibility

RELEVANT PROJECTS IEA EBC Annex 71 -

Building Energy

Performance Assessment Based on In-situ Measurements EU Horizon2020 project -Solution sets for the Cost reduction of new Nearly Zero-Energy Buildings (CoNZEBs) IEA EBC Annex 82 -Energy flexible buildings towards resilient low carbon energy systems IEA EBC Annex 70 -**Building Energy** Epidemiology **EU Concerted Action (2-**5) - Energy Performance of **Buildings Directive** EU-project - Energy Performance Indicator Tracking Schemes for the Continuous Optimisation of Refurbishment Processes in European Housing Stocks (EPISCOPE) **EU project REQUEST -**Renovation through Quality supply chains and EPC Standards EU project TABULA -Typology Approach for Building Stock Energy Assessment



Lasse Rohde

Department of the Built Environment
The Faculty of Engineering and Science
Division of Architectural Engineering

CONTACT INFORMATION

Lasse Rohde Indoor Environme
Iro@build.aau.dk Holistic IEQ Asse
+45 51521256 tools
https://vbn.aau.dk/da/persons/Iro Decision support

HIGHLIGHTED AAU RESEARCH GROUPS

Energy and Buildings Research Group

RELEVANT LINKS OUTSIDE ACADEMIA

Large national network from previous research projects across all built environment stakeholders, such as professional building owners, housing associations, architects, engineering consultants, research institutions, funding agencies and authorities.

AREA OF EXPERTISE

Indoor Environmental Quality
Holistic IEQ Assessment
tools
Decision support
Visual comfort (daylight,
chronobiology, view in
privacy, view out quality)

RELEVANT PROJECTS

INBLANC SATO Trees as Solar Shading IEQ Compass



Harpa Birgisdottir

Department of the Built Environment The Faculty of Engineering and Science Division of Sustainability of Buildings

CONTACT INFORMATION

Harpa Birgisdottir hbi@build.aau.dk +45 51904845

https://vbn.aau.dk/da/persons/hbi

HIGHLIGHTED AAU RESEARCH GROUPS

Head of Division of Sustainability of Buildings
BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Board member: (1) Danish Green Building Council, (2) Board member of Molio (Danish knowledge center for buildings and infrastructure). Advisory board: (1) Green transition Denmark, (2) EPD Denmark. Danish Governmental climate partnerships for construction (2019-2020). Danish governmental advisory board for ecological building practice (2013-2015). Nordic and Europewide consultancy firms, Danish building industry, Danish Authority of Social Services and Housing, CEN/TC350/WG1 (former participant). Nordic building Authorities.

AREA OF EXPERTISE

Life Cycle Assessment (LCA) for buildings, infrastructure and construction products Sustainable building refurbishment strategies Development of environmental assessment tools
Environmental assessment of

Environmental assessment of circular economy solutions
Sustainable building certification processes
National LCA methodologies for building regulation
Embodied carbon benchmarks and targets
Biobased products and construction
Biodiversity assessments for the built environment
Dynamic and consequential
LCA

Absolute environmental sustainability assessments LCA methodology to evaluate building stock in larger scales.

Deep knowledge on carbon footprint within the built environment.

RELEVANT PROJECTS

iBuildGreen: building stock modelling to support a circular and green transition (national project)

GROW/2022/OP/0005:

Analysis of Life-cycle
Greenhouse Gas
Emissions and Removals
of EU Buildings and
Construction (European
project)
Residential Construction
from 4 to 1 planet
(national project)



Endrit Hoxha

Department of the Built Environment
The Faculty of Engineering and Science
Division of Sustainability of Buildings

CONTACT INFORMATION

Endrit Hoxha enho@build.aau.dk +45 29603472

https://vbn.aau.dk/da/persons/enho

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Danish building industry, Danish Authority of Social Services and Housing, Danish strategy network for sustainable buildings, Sustainable Energy Authority of Ireland, Natural Sciences and Engineering Research Council of Canada (NSERC), European Social Fund

AREA OF EXPERTISE

Life Cycle Assessment (LCA) for buildings and construction products Sustainable building refurbishment strategies Development of environmental assessment tools

Environmental assessment of circular economy solutions
Sustainable building
certification processes
National LCA methodologies
for building regulation
Embodied carbon
benchmarks and targets
Biobased products and
construction
Biodiversity assessments for
the built environment

Absolute environmental sustainability assessments Future-oriented LCA Uncertainty and sensitivity analysis LCA methodology to evaluate building stock in larger

Dynamic and consequential

LCA

scales.

Deep knowledge on carbon footprint within the built environment.

RELEVANT PROJECTS

iBuildGreen: building stock modelling to support a circular and green transition (national project)

GROW/2022/OP/0005:

Analysis of Life-cycle Greenhouse Gas Emissions and Removals of EU Buildings and Construction (European project)

INBLANC:

Industrialisation of Building Lifecycle data Accumulation, Numeracy and Capitalisation (European project)



Kai Kanafani

Department of the Built Environment
The Faculty of Engineering and Science
Division of Sustainability of Buildings

CONTACT INFORMATION

Kai Kanafani kak@build.aau.dk +45 27485144

https://vbn.aau.dk/da/persons/kak

HIGHLIGHTED AAU RESEARCH GROUPS

Member of the
Division of Sustainability of
Buildings
BUILD – Department of the Built
Environment

RELEVANT LINKS OUTSIDE ACADEMIA

CEN/TC350/SC1 - Circular Economy in the Construction Sector (participant), IEA EBC Annex 95 - Human-Centric Buildings for a Changing Climate (participant), Nordic sustainable construction (projects), Danish Authority of Social Services and Housing (projects), Danish construction sector (projects), Danish strategy network for sustainable buildings (member, projects), Danish Association of Architects (member)

AREA OF EXPERTISE Biobased / regenerative

architecture Sufficiency, efficiency, consistency Net-zero emission buildings Design for Disassembly (DfD), Design for Adaptability (DfA), Circular economy Building design, urban planning, landscape, construction process, construction products Life Cycle Assessment (LCA), Carbon footprinting Environmental assessment methods and tools Multi-objective optimization Energy performance, renewable energy, energy retrofitting Building regulation, policy making Energy Performance of Buildings Directive (EPBD)

RELEVANT PROJECTS National building carbon

limits (background analyses) Limit values - Task 4 activities of project "Nordic harmonisation of life cycle assessment" Break-even between embodies and operational impacts Climate data for retrofitting VCBK - Danish Expertise Center for Building Carbon Footprinting IEA EBC Annex 95 -Human-Centric Buildings for a Changing Climate



Maria Balouktsi

Department of the Built Environment
The Faculty of Engineering and Science
Division of Sustainability of Buildings

CONTACT INFORMATION

Maria Balouktsi mariab@build.aau.dk +45 99402431

https://vbn.aau.dk/en/persons/mariab

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings
BUILD – Department of the Built
Environment

MEMBERSHIP OF EU PARTNERSHIPS

European Network of Building Research Institutes (ENBRI)

RELEVANT LINKS OUTSIDE ACADEMIA

CEN/TC350/WG1, Nordic Sustainable Construction Group (Nordic Innovation), Nordic, Swiss, German and Europe-wide consultancy firms, Danish building industry, Danish Authority of Social Services and Housing

AREA OF EXPERTISE

Life Cycle Assessment (LCA) for buildings and construction products Environmental impact benchmarking and targetsetting LCA methodologies for building regulations and policy development Performance assessment for circular building strategies Low carbon, net zero carbon and carbon negative building and urban solutions Sustainable building refurbishment methods Development of environmental assessment Sustainable building certification processes Carbon storage accounting approaches Future-oriented LCA

Sustainable urban development Standardization

RELEVANT PROJECTS GROW/2022/OP/0005:

Analysis of Life-cycle Greenhouse Gas Emissions and Removals of EU Buildings and Construction (European project)

IEA EBC Annex 89:

Ways to Implement Netzero Whole Life Carbon Buildings (International project)

IEA EBC Annex 72: Assessing Life Cycle Related Environmental Impacts Caused by Buildings (international project)



Regitze Kjær Zimmermann

Department of the Built Environment
The Faculty of Engineering and Science
Division of Sustainability of Buildings

CONTACT INFORMATION

Regitze Kjær Zimmermann rkz@build.aau.dk +45 93562344

https://vbn.aau.dk/da/persons/rkz

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Danish building industry, Danish Authority of Social Services and Housing, Danish strategy network for sustainable buildings

AREA OF EXPERTISE

Sustainable building refurbishment strategies Environmental assessment of refurbishment Development of environmental assessment Life Cycle Assessment (LCA) for buildings and construction products Environmental assessment of circular economy solutions Embodied carbon benchmarks and targets Environmental assessment in building design Sustainable building certifications National LCA methodologies for building regulation

RELEVANT PROJECTS

Low-energy buildings and embodied energy in a sustainability perspective: New knowledge and tools for consultants and clients: Method and tools for designing low energy and carbon buildings. Tools are aimed at consultants and clients in early design stages. Climate impacts from 60 building cases. **Development of** possible reference values: Assessment of climate impacts from 60 different buildings from the industry.

SoBB: Together for Sustainable Construction: Cataloging and assessing circular and low-carbon solutions in social housing and public buildings. Including interviewing consultants and clients.



Rasmus Nøddegaard Hansen

Department of the Built Environment The Faculty of Engineering and Science Division of Sustainability of Buildings

CONTACT INFORMATION

Rasmus Nøddegaard Hansen rnh@build.aau.dk +45 99402315

https://vbn.aau.dk/da/persons/rnh

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Consultancy for the Danish
Authority of Social Services and
Housing
Consultancy for the Agency for
Public Finance and Management
- Ministry of Finance
Consultancy for the Danish

Business Authority

AREA OF EXPERTISE

System thinking and modelling
Life cycle assessment (LCA)
Consequential life cycle assessment (CLCA)
Input-output modelling
Absolute environmental sustainability assessment
Forestry management and modelling
Dynamic GHG modelling
Buildings of wood and biogenic materials
Sustainable buildings
Material flow analysis

System modelling in life cycle assessment Scenario development Sensitivity analysis Material flow analysis and building stock modelling

RELEVANT PROJECTS

Environmental
assessment of increased
use of wood in buildings
Documentation and
research efforts —
Climate and
environmental impact of
using timber in
construction
EUDP — Minimizing
resource consumption at
construction sites



Camilla Marlene Ernst Andersen

Department of the Built Environment
The Faculty of Engineering and Science
Division of Sustainability of Buildings

CONTACT INFORMATION

Camilla Marlene Ernst Andersen caa@build.aau.dk +45 99402234

https://vbn.aau.dk/da/persons/caa

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Consultancy and collaboration with the Danish building industry Consultancy for the Danish Authority of Social Services and Housing

AREA OF EXPERTISE

Life Cycle Assessment of product systems, with a particular focus on buildings Timber and biobased constructions Dynamic Life Cycle Assessment Biogenic carbon accounting in Life Cycle Assessment Absolute environmental sustainability assessments Environmental assessments of circular economy General building background with a focus on load-bearing structures

RELEVANT PROJECTS

Environmental
assessment of increased
use of wood in buildings
Documentation and
research efforts —
Climate and
environmental impact of
using timber in
construction
The climate impacts of
buildings and the
development of reference
values for LCA of
buildings



Olena Kalyanova Larse

Department of the Built Environment
The Faculty of Engineering and Science

CONTACT INFORMATION

Olena Kalyanova Larsen ok@build.aau.dk +45 25676671

https://vbn.aau.dk/da/persons/ok

HIGHLIGHTED AAU RESEARCH GROUPS

Energy in Buildings

RELEVANT LINKS OUTSIDE ACADEMIA

Teacher in the Sustainable Building Renovation course offered by Molio, the knowledge center for the Danish construction and civil engineering industry.

AREA OF EXPERTISE

Intelligent glazed facades - methods for performance evaluation

Models for thermal and energy performance evaluation Natural ventilation and flow behaviour, including ventilated cavities of double-skin facades Building Energy Efficiency, including simulation of performance and dynamic energy certification methodologies

Low-carbon renovation, climate-neutral building design Non-visible light properties in built environment Valuation of renovation actions – quantification of an added value in the renovation of social housing

Development of low-carbon renovation methods, including methods for direct utilization of reclaimed glazing units.

Development of an approach for swift, non-intrusive renovation

HORIZON-CL5-2026-02-D4-04: INNOVATIVE APPROACHES FOR THE DEPLOYMENT OF POSITIVE ENERGY DISTRICTS (IA)



Jesper Kragh

Department of the Built Environment Faculty of Engineering and Science Division of Sustainability of Buildings

CONTACT INFORMATION

Jesper Kragh jkra@build.aau.dk +45 61704660

https://vbn.aau.dk/en/persons/jkra

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of
Sustainability of Buildings, BUILD

- Department of the Built
Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Danish Authority of Social Services and Housing, Danish Energy Agency

AREA OF EXPERTISE

Energy efficiency of
buildings
Energy renovation of
buildings
Renewable energy systems
Building stock modelling and
analysis
Measured and calculated
energy consumption
Energy labeling data
Low-energy buildings
Smart buildings
Energy flexibility

RELEVANT PROJECTS

EU-project - EPISCOPE
Energy Performance
Indicator Tracking
Schemes for the
Continuous Optimisation
of Refurbishment
Processes in European
Housing Stocks
EU project TABULA Typology Approach for
Building Stock Energy
Assessment



Jørgen Rose

Department of the Built Environment Faculty of Engineering and Science Division of Sustainability of Buildings

CONTACT INFORMATION

Jørgen Rose jro@build.aau.dk +45 99402226

https://vbn.aau.dk/da/persons/jro

HIGHLIGHTED AAU RESEARCH GROUPS

Research group leader in Division of Sustainability of Buildings, BUILD – Department of the Built Environment

MEMBERSHIP OF EU PARTNERSHIPS

POC for AAU in - ECTP Energy Efficient Buildings (E2B)

RELEVANT LINKS OUTSIDE ACADEMIA

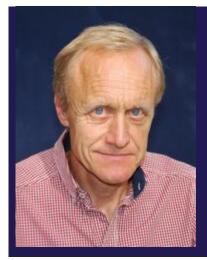
Member of IBPSA-Nordic, Danish Authority of Social Services and Housing, Danish Energy Agency, Various consultancies throughout Europe

AREA OF EXPERTISE

Energy efficiency of buildings
Energy renovation of buildings
Renewable energy systems
Building stock modelling and analysis
Measured and calculated energy consumption
Thermal bridges
Low-energy buildings
Energy flexibility
Positive energy districts
District energy simulation

RELEVANT PROJECTS

IEA EBC Annex 73:
Towards Net Zero Energy
Public Communities
IEA EBC Annex 75:
Cost-effective Building
Renovation at District
Level Combining Energy
Efficiency & Renewables
IEA EBC Annex 83:
Positive Energy Districts



Ole Michael Jensen

Department of the Built Environment Faculty of Engineering and Science Division of Sustainability of Buildings

CONTACT INFORMATION

Ole Michael Jensen omrj@build.aau.dk +45 99402373

https://vbn.aau.dk/da/persons/omrj

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of
Sustainability of Buildings, BUILD

– Department of the Built
Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Danish Authority of Social Services and Housing, Danish Energy Agency

AREA OF EXPERTISE

Energy efficiency of buildings Energy renovation of buildings Renewable energy systems Measured and calculated energy consumption Energy labeling data Benchmarking of Energy consumption Sustainable building and refurbishment Climate impact of building energy systems Low carbon building and refurbishment Energy flexibility

RELEVANT PROJECTS EU-project - ENERFUND (horizon2020) (An ENErgy Retrofit FUNDing rating tool). Call: H2020EE-2015-3-MarketUptake EU-project - EPISCOPE Energy Performance Indicator Tracking Schemes for the Continuous Optimisation of Refurbishment Processes in European Housing Stocks



Kim B. Wittchen

Department of the Built Environment Faculty of Engineering and Science Division of Sustainability of Buildings

CONTACT INFORMATION

Kim B. Wittchen KiWi@build.aau.dk +45 99402379

https://vbn.aau.dk/da/persons/kiwi

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings, BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Board member of IBPSA-Nordic, Danish Energy Agency, Danish Social- and Housing Agency, Various consultancies throughout Europe.

AREA OF EXPERTISE

Energy flexibility

Energy efficiency of new and existing buildings
Calculation and simulation of buildings energy and indoor climate performance
Field measurements
Building energy regulation
Building Energy certificate database analyses
Renewable energy systems
Building stock modelling and analysis
Smart buildings

RELEVANT PROJECTS

IEA EBC Annex 82 - Energy flexible buildings towards resilient low carbon energy systems
IEA EBC Annex 71 - Building Energy Performance Assessment Based on In-situ
Measurements

EU Horizon2020 project - Solution sets for the Cost reduction of new Nearly Zero-Energy Buildings (CoNZEBs)

IEA EBC Annex 70 - Building Energy Epidemiology

IEA EBC Annex 66 - Definition and Simulation of Occupant Behaviour in Buildings

EU Concerted Action (2-5) - Energy Performance of Buildings Directive

EU-project – EPISCOPE Energy Performance Indicator Tracking Schemes for the Continuous Optimisation of Refurbishment Processes in European Housing Stocks

EU project TABULA - Typology Approach for Building Stock Energy Assessment

EU project REQUEST - REnovation through QUality supply chains and EPC Standards

EU project TABULA - Typology Approach for Building Stock Energy Assessment

IEA SHC Task 40 / IEA EBC Annex 52 - Zero Energy/Emission Buildings

HORIZON-CL5-2026-02-D4-05: OPTIMAL COMBINATION OF LOW EMBODIED CARBON CONSTRUCTION PRODUCTS, TECHNICAL BUILDING SYSTEMS AND CIRCULARITY PRINCIPLES FOR CLIMATE NEUTRAL BUILDINGS (BUILT4PEOPLE PARTNERSHIP) (RIA)



Lasse Rohde

Department of the Built Environment
The Faculty of Engineering and Science
Division of Architectural Engineering

CONTACT INFORMATION

Lasse Rohde Iro@build.aau.dk +45 51521256

https://vbn.aau.dk/da/persons/Iro

HIGHLIGHTED AAU RESEARCH GROUPS

Energy and Buildings Research Group

RELEVANT LINKS OUTSIDE ACADEMIA

Large national network from previous research projects across all built environment stakeholders, such as professional building owners, housing associations, architects, engineering consultants, research institutions, funding agencies and authorities.

AREA OF EXPERTISE

Indoor Environmental Quality
Holistic IEQ Assessment
tools
Decision support
Visual comfort (daylight,
chronobiology, view in
privacy, view out quality)

RELEVANT PROJECTS

REBUS Circular Innovation in Partnerships I-DIFFER



Kai Kanafani

Department of the Built Environment
The Faculty of Engineering and Science
Division of Sustainability of Buildings

CONTACT INFORMATION

Kai Kanafani kak@build.aau.dk +45 27485144

https://vbn.aau.dk/da/persons/kak

HIGHLIGHTED AAU RESEARCH GROUPS

Member of the
Division of Sustainability of
Buildings
BUILD – Department of the Built
Environment

RELEVANT LINKS OUTSIDE ACADEMIA

CEN/TC350/SC1 - Circular Economy in the Construction Sector (participant), IEA EBC Annex 95 - Human-Centric Buildings for a Changing Climate (participant), Nordic sustainable construction (projects), Danish Authority of Social Services and Housing (projects), Danish construction sector (projects), Danish strategy network for sustainable buildings (member, projects), Danish Association of Architects (member)

AREA OF EXPERTISE

Biobased / regenerative architecture Sufficiency, efficiency, consistency Net-zero emission buildings Design for Disassembly (DfD), Design for Adaptability (DfA), Circular economy Building design, urban planning, landscape, construction process, construction products Life Cycle Assessment (LCA), Carbon footprinting Environmental assessment methods and tools Multi-objective optimization Energy performance, renewable energy, energy retrofitting Building regulation, policy making Energy Performance of Buildings Directive (EPBD)

RELEVANT PROJECTS Circularity City: Carbon footprint of upcycling in construction

Assessment tool for early design stage LCA / carbon footprinting



Harpa Birgisdottir

Department of the Built Environment The Faculty of Engineering and Science Division of Sustainability of Buildings

CONTACT INFORMATION

Harpa Birgisdottir hbi@build.aau.dk +45 51904845

https://vbn.aau.dk/da/persons/hbi

HIGHLIGHTED AAU RESEARCH GROUPS

Head of Division of Sustainability of Buildings BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Board member: (1) Danish Green Building Council, (2) Board member of Molio (Danish knowledge center for buildings and infrastructure). Advisory board: (1) Green transition Denmark, (2) EPD Denmark. Danish Governmental climate partnerships for construction (2019-2020). Danish governmental advisory board for ecological building practice (2013-2015). Nordic and Europewide consultancy firms, Danish building industry, Danish Authority of Social Services and Housing, CEN/TC350/WG1 (former participant). Nordic building Authorities.

AREA OF EXPERTISE

Life Cycle Assessment (LCA) for buildings, infrastructure and construction products
Sustainable building refurbishment strategies
Development of environmental assessment tools

Environmental assessment of circular economy solutions
Sustainable building
certification processes
National LCA methodologies
for building regulation
Embodied carbon
benchmarks and targets
Biobased products and
construction
Biodiversity assessments for
the built environment
Dynamic and consequential
LCA

Absolute environmental sustainability assessments

RELEVANT PROJECTS

IEA EBC Annex 89: Ways
to Implement Net-zero
Whole Life Carbon
Buildings
iBuildGreen: building
stock modelling to
support a circular and
green transition (national
project)

GROW/2022/OP/0005: Analysis of Life-cycle

Greenhouse Gas
Emissions and Removals
of EU Buildings and
Construction (European
project)

Unwrapping the climate impacts of the built environment for mitigation strategies: A building-data-driven investigation of new construction in Denmark (national project)



Endrit Hoxha

Department of the Built Environment
The Faculty of Engineering and Science
Division of Sustainability of Buildings

CONTACT INFORMATION

Endrit Hoxha enho@build.aau.dk +45 29603472

https://vbn.aau.dk/da/persons/enho

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Danish building industry, Danish Authority of Social Services and Housing, Danish strategy network for sustainable buildings, Sustainable Energy Authority of Ireland, Natural Sciences and Engineering Research Council of Canada (NSERC), European Social Fund

AREA OF EXPERTISE

Life Cycle Assessment (LCA) for buildings and construction products Sustainable building refurbishment strategies Development of environmental assessment tools
Environmental assessment of

Environmental assessment of circular economy solutions
Sustainable building certification processes
National LCA methodologies for building regulation
Embodied carbon benchmarks and targets
Biobased products and construction
Biodiversity assessments for the built environment
Dynamic and consequential
LCA

Absolute environmental sustainability assessments Future-oriented LCA Uncertainty and sensitivity analysis

RELEVANT PROJECTS

iBuildGreen: building stock modelling to support a circular and green transition (national project)

GROW/2022/OP/0005:

Analysis of Life-cycle Greenhouse Gas Emissions and Removals of EU Buildings and Construction (European project)

Unwrapping the climate impacts of the built environment for mitigation strategies: A building-data-driven investigation of new construction in Denmark (national project)
IEA EBC Annex 90/ SHC

Task 70: Low Carbon, High Comfort Integrated Lighting



Regitze Kjær Zimmermann

Department of the Built Environment
The Faculty of Engineering and Science
Division of Sustainability of Buildings

CONTACT INFORMATION

Regitze Kjær Zimmermann rkz@build.aau.dk +45 93562344

https://vbn.aau.dk/da/persons/rkz

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Danish building industry, Danish Authority of Social Services and Housing, Danish strategy network for sustainable buildings

AREA OF EXPERTISE

Sustainable building refurbishment strategies Environmental assessment of refurbishment Development of environmental assessment tools Life Cycle Assessment (LCA) for buildings and construction products Environmental assessment of circular economy solutions Embodied carbon benchmarks and targets Environmental assessment in building design Sustainable building certifications National LCA methodologies for building regulation

RELEVANT PROJECTS

From element construction to material bank - The Resource **Block** (Ressource Blokken): methods and benefits of ensuring reuse of hollow concrete slabs from demolished buildings in the most challenged vulnerable residential regions in Denmark (Danish project) Circularity City: Guide and methods for designing and assessing the climate impact of circular solutions in buildings.



Maria Balouktsi

Department of the Built Environment
The Faculty of Engineering and Science
Division of Sustainability of Buildings

CONTACT INFORMATION

Maria Balouktsi mariab@build.aau.dk +45 99402431

https://vbn.aau.dk/en/persons/mariab

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings
BUILD – Department of the Built
Environment

MEMBERSHIP OF EU PARTNERSHIPS

European Network of Building Research Institutes (ENBRI)

RELEVANT LINKS OUTSIDE ACADEMIA

CEN/TC350/WG1, Nordic Sustainable Construction Group (Nordic Innovation), Nordic, Swiss, German and Europe-wide consultancy firms, Danish building industry, Danish Authority of Social Services and Housing

AREA OF EXPERTISE

Life Cycle Assessment (LCA) for buildings and construction products Environmental impact benchmarking and targetsetting LCA methodologies for building regulations and policy development Performance assessment for circular building strategies Low carbon, net zero carbon and carbon negative building and urban solutions Sustainable building refurbishment methods Development of environmental assessment Sustainable building certification processes Carbon storage accounting approaches Future-oriented LCA Sustainable urban development Standardization

RELEVANT PROJECTS IEA EBC Annex 89:

Ways to Implement Netzero Whole Life Carbon Buildings (International project)

IEA EBC Annex 72: Assessing Life Cycle Related Environmental Impacts Caused by Buildings

GROW/2022/OP/0005:

Analysis of Life-cycle Greenhouse Gas Emissions and Removals of EU Buildings and Construction

From element
construction to material
bank - The Resource
Block (Ressource
Blokken): methods and
benefits of ensuring
reuse of hollow concrete
slabs from demolished
buildings in the most
challenged vulnerable
residential regions in
Denmark

Acceleration
Programme: Knowledge
Sharing Clinics and
Best Practice
Catalogues: Task 5
activities of project
"Nordic harmonisation of
life cycle assessment"



Olena Kalyanova Larse

Department of the Built Environment
The Faculty of Engineering and Science

CONTACT INFORMATION

Olena Kalyanova Larsen ok@build.aau.dk +45 25676671

https://vbn.aau.dk/da/persons/ok

HIGHLIGHTED AAU RESEARCH GROUPS

Energy in Buildings

RELEVANT LINKS OUTSIDE ACADEMIA

Teacher in the Sustainable
Building Renovation course
offered by Molio, the knowledge
center for the Danish construction
and civil engineering industry.

AREA OF EXPERTISE

Intelligent glazed facades - methods for performance evaluation

Models for thermal and energy performance evaluation Natural ventilation and flow behaviour, including ventilated cavities of double-skin facades Building Energy Efficiency, including simulation of performance and dynamic energy certification methodologies

Low-carbon renovation, climate-neutral building design Non-visible light properties in built environment Valuation of renovation actions – quantification of an added value in the renovation of social housing

Development of low-carbon renovation methods, including methods for direct utilization of reclaimed glazing units.

Development of an approach for swift, non-intrusive renovation



Camilla Marlene Ernst Andersen

Department of the Built Environment
The Faculty of Engineering and Science
Division of Sustainability of Buildings

CONTACT INFORMATION

Camilla Marlene Ernst Andersen caa@build.aau.dk +45 99402234

https://vbn.aau.dk/da/persons/caa

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Division of Sustainability of Buildings BUILD – Department of the Built Environment

RELEVANT LINKS OUTSIDE ACADEMIA

Consultancy and collaboration with the Danish building industry Consultancy for the Danish Authority of Social Services and Housing

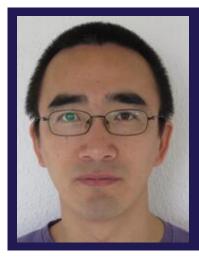
AREA OF EXPERTISE

Life Cycle Assessment of product systems, with a particular focus on buildings Timber and biobased constructions Dynamic Life Cycle Assessment Biogenic carbon accounting in Life Cycle Assessment Absolute environmental sustainability assessments Environmental assessments of circular economy General building background with a focus on load-bearing structures

RELEVANT PROJECTS

Environmental
assessment of increased
use of wood in buildings
Documentation and
research efforts —
Climate and
environmental impact of
using timber in
construction
The climate impacts of
buildings and the
development of reference
values for LCA of
buildings
Circularity City

HORIZON-CL5-2025-05-D4-06: PHASE OUT FOSSIL FUEL IN ENERGY INTENSIVE INDUSTRIES, THROUGH THE INTEGRATION OF RENEWABLE ENERGY SOURCES (IA)



Chungen Yin

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Chungen Yin chy@et.aau.dk +45 30622577

https://vbn.aau.dk/en/persons/chy

HIGHLIGHTED AAU RESEARCH GROUPS

Bioenergy; Electro-fuels; Multiphase Flow

MEMBERSHIP OF EU PARTNERSHIPS EERA

AREA OF EXPERTISE

Thermal/Fluids Energy
Components & Technologies
Advanced CFD and digital
twins CCUS
Reacting multiphase flows
Pyrolysis/Gasification/
Combustion

RELEVANT PROJECTS

Research with some publications



Vincenzo Liso

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Vincenzo Liso vli@energy.aau.dk +45 21370207

https://vbn.aau.dk/da/persons/vli

HIGHLIGHTED AAU RESEARCH GROUPS

Lead member of the "Hydrongen and Electro Fuels" research group

MEMBERSHIP OF EU PARTNERSHIPS

Hydrogen Europe IEA group on hydrogen Ammonia Institute

AREA OF EXPERTISE

Fuel cells
Electrolysis
Power to X
efuels synthesis
Thermal integration
Thermal digital twins

Expertise in hydrogen and ammonia applications is particularly relevant for addressing challenges in hard-to-abate sectors such as steel, cement, and fertilizers. Process intensification and advanced modeling techniques e.g. CFD; thermal system integration.

RELEVANT PROJECTS

Hystram
Electrolife
Power2met

DESTINATION 5

CLEAN AND COMPETITIVE SOLUTIONS FOR ALL TRANSPORT MODES

DESTINATION 5: CALLS

CALL - CLEAN AND COMPETITIVE SOLUTIONS FOR ALL TRANSPORT MODES

<u>HORIZON-CL5-2025-04-D5-01:</u> Efficient wireless stationary bidirectional charging solutions for road Light Duty Vehicles (2ZERO Partnership) – Societal Readiness <u>Pilot (IA)</u>

HORIZON-CL5-2025-04-D5-02: Cybersecure and resilient road e-mobility ecosystem (2ZERO Partnership) (IA)

HORIZON-CL5-2025-04-D5-04: Extended lifetime of road Battery Electric Vehicles (BEV) (2ZERO Partnership) (IA)

HORIZON-CL5-2025-01-D5-08: Next generation testing capabilities in strategic EU wind tunnels (RIA)

HORIZON-CL5-2025-04-D5-10: Innovative solutions for energy conversion and safety of low and zero-carbon fuels in waterborne transport (ZEWT Partnership) (IA)

HORIZON-CL5-2025-01-D5-17: Real time monitoring of regulated and nonregulated emissions from all types of vessels and other port activities in order to enforce emission limits in waterfront cities (IA)

HORIZON-CL5-2025-01-D5-01: EFFICIENT WIRELESS STATIONARY BIDIRECTIONAL CHARGING SOLUTIONS FOR ROAD LIGHT DUTY VEHICLES (2ZERO PARTNERSHIP) – SOCIETAL READINESS PILOT (IA)



Laura Bang Lindegaard

Department of Culture and Learning
The Faculty of Social Sciences and Humanities

CONTACT INFORMATION

Laura Bang Lindegaard laura@ikl.aau.dk +45 26277431

https://vbn.aau.dk/da/persons/120308

HIGHLIGHTED AAU RESEARCH GROUPS

I am head of the new research group RECAST (Research in sociocultural aspects of sustainability and green transitions). This interdisciplinary group provides new knowledge and understandings of sociocultural aspects of sustainability and green transitions. The current sustainability crises are co-constituted through human and social activities and therefore need to be explored through humanities and social science perspectives.

AREA OF EXPERTISE

My interdisciplinary profile spans from studies in Danish grammar to studies of governmentality and mobilities studies. Theoretically and methodologically my research is grounded in discourse approaches to communication. Topically, it has developed around the question of a green, equitable transition of everyday transport practices, and my current projects all concerns public transport. I have recently closed a research project on the governing of appropriate 'travelling together', particularly in relation to the risk of contagion, and I am currently in the start-up phase of an Inge Lehmann-project that concerns identities and rationalities in public transport, and in August 2025 I will start one more DFF-project that concerns communicative accessibility in public transport for people with various invisible disabilities.

RELEVANT PROJECTS

I think I can contribute to all calls with my SSH profile, more specifically with my knowledge of the role of language, communication, interaction and practice in societal change. Furthermore, I have particular knowledge of normative barriers for change, and of public transport as a public space.

I have experience as a research group leader and as project PI, so I would have the appropriate experience for taking on the role as a work-package leader.



Hossam Farag

Department of Electronic Systems
The Technical Faculty of IT and Design

CONTACT INFORMATION

Hossam Farag hmf@es.aau.dk +45 99408674

https://vbn.aau.dk/en/persons/hmf

HIGHLIGHTED AAU RESEARCH GROUPS

Member of ECN research group

RELEVANT LINKS OUTSIDE ACADEMIA

Nokia, BOSCH, Toshiba, Ericsson

AREA OF EXPERTISE

Wireless communication and networking Industrial IoT Application of AI/ML in wireless communication

Networks, mobile communication, Industrial IoT

HORIZON-CL5-2025-01-D5-02: CYBERSECURE AND RESILIENT ROAD E-MOBILITY ECOSYSTEM (2ZERO PARTNERSHIP) (IA)



Tianyi Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Tianyi Li tianyi@cs.aau.dk +45 71682193

https://vbn.aau.dk/en/persons/tianyi

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

MEMBERSHIP OF EU PARTNERSHIPS

Associate Editor
IEEE Network
IEEE Transactions on Intelligent
Vehicles

AREA OF EXPERTISE

Data management and analytics
Intelligent transportation
Artificial intelligence and machine learning
Digital twin
Internet of Things
Edge and distributed computing
Autonomous vehicles

Expertise specific to this call: spatio-temporal data management and analytics, data fusion, intelligent transportation, edge computing

RELEVANT PROJECTS

Project co-investigator, HORIZON, MobiSpaces: New Data Spaces for Green Mobility

Project co-investigator, DIREC, Multimodal Data Processing of Earth Observation Data

HORIZON-CL5-2025-01-D5-04: EXTENDED LIFETIME OF ROAD BATTERY ELECTRIC VEHICLES (BEV) (2ZERO PARTNERSHIP) (IA)



Shuai Zhao

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Shuai Zhao szh@energy.aau.dk +45 91193838

https://vbn.aau.dk/en/persons/szh

HIGHLIGHTED AAU RESEARCH GROUPS

Reliability of Power Electronic Converters

AREA OF EXPERTISE

Artificial intelligence and system informatics: physics-informed machine learning, information fusion, data analytics, digital twin, condition & health monitoring, prognostics and health management.

Reliability for power electronics: Physics-of-failure, degradation modeling, lifetime and reliability estimation, accelerated testing experiment, health-aware control.

RELEVANT PROJECTS

European Projects:
TEAMING: E-powertrain
Predictive Maintenance
Using Physics Informed
Learning, European Horizon
MSCA

ALL2GAN: Affordable smart GaN IC solutions as enabler of greener applications, European Chips Jointundertaking

National Projects:

Phy-caliper: Discovering Unknown Physics for Calibrating Predictive Maintenance in Power Electronics, Villum Experiment.

Light-Al: Light-Al for Cognitive Power Electronics,

Villum Synergy.

Al-Power: Physics-informed Al for Next Generation Power Electronics, IFD grand solution.

HORIZON-CL5-2025-04-D5-08: NEXT GENERATION TESTING CAPABILITIES IN STRATEGIC EU WIND TUNNELS



Vincenzo Liso

Department of Energy The Faculty of Engineering and Science

CONTACT INFORMATION

Vincenzo Liso vli@energy.aau.dk +45 21370207

https://vbn.aau.dk/da/persons/vli

HIGHLIGHTED AAU RESEARCH **GROUPS**

Lead member of the "Hydrongen and Expertise in modeling and Electro Fuels" research group

MEMBERSHIP OF EU PARTNERSHIPS

Hydrogen Europe IEA group on hydrogen Ammonia Institute

AREA OF EXPERTISE

Fuel cells Electrolysis Power to X efuels synthesis Thermal integration Thermal digital twins

testing systems based on hydrogen and electrofuels.

RELEVANT PROJECTS

LH2Vessel Electrolife Power2met

HORIZON-CL5-2025-01-D5-11: INNOVATIVE SOLUTIONS FOR ENERGY CONVERSION AND SAFETY OF LOW AND ZERO-CARBON FUELS IN WATERBORNE TRANSPORT (ZEWT PARTNERSHIP) (IA)



Vincenzo Liso

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Vincenzo Liso vli@energy.aau.dk +45 21370207

https://vbn.aau.dk/da/persons/vli

HIGHLIGHTED AAU RESEARCH GROUPS

Lead member of the "Hydrongen and Electro Fuels" research group

MEMBERSHIP OF EU PARTNERSHIPS

Hydrogen Europe IEA group on hydrogen Ammonia Institute

AREA OF EXPERTISE

Fuel cells
Electrolysis
Power to X
efuels synthesis
Thermal integration
Thermal digital twins

Experience in integrating hydrogen, ammonia, methanol as alternative fuels in maritime operations, addressing challenges such as storage, safety, and engine compatibility. Development and validation of advanced power conversion systems, including fuel cells and turbines, optimized for low and zero-carbon fuels in marine environments.

RELEVANT PROJECTS

LH2Vessel Electrolife Power2met

HORIZON-CL5-2025-01-D5-17: REAL TIME MONITORING OF REGULATED AND NON-REGULATED EMISSIONS FROM ALL TYPES OF VESSELS AND OTHER PORT ACTIVITIES IN ORDER TO ENFORCE EMISSION LIMITS IN WATERFRONT CITIES (IA)



Daojuan Wang

Aalborg University Business School
The Faculty of Social Sciences and Humanities

CONTACT INFORMATION

Daojuan Wang daw@business.aau.dk +45 31408503

https://vbn.aau.dk/da/persons/daw

HIGHLIGHTED AAU RESEARCH GROUPS

Research Group of International Business; Member of Sustainability Lab; Member of Green Society

MEMBERSHIP OF EU PARTNERSHIPS

Member of European International Business Academy

RELEVANT LINKS OUTSIDE ACADEMIA

Connections with Innovation
Center Denmark (ICDK),
Shanghai; Port of Aalborg
(Denmark) and other big ports in
China; ESG consulting companies
(China and Denmark); Textile
industry associations and relevant
companies, China; Retail industry
contacts in China; big Chinese
banks; cross-border M&A
consulting companies

AREA OF EXPERTISE

My expertise and research intersect the disciplines of International Business and Corporate Finance, employing both quantitative methods and qualitative case study approaches. Specifically, my work focuses on: Companies' international business strategies and collaboration, including strategic alliances and cross-border mergers and acquisitions CSR/ESG, green transition and investment, sustainable business model Cross-cultural management in global business contexts Organizational change management Corporate governance

RELEVANT PROJECTS

Now working on the project titled "Assessing and Enhancing Strategic Sustainability of the Port of Aalborg as an Infrastructure Hub", collaborating with Port of Aalborg.

DESTINATION 6

SAFE, RESILIENT TRANSPORT AND SMART MOBILITY SERVICES FOR PASSENGERS AND GOODS

DESTINATION 6: CALLS

CALL – SAFE, RESILIENT TRANSPORT AND SMART MOBILITY SERVICES FOR PASSENGERS AND GOODS

HORIZON-CL5-2025-04-D6-01: Advancing remote operations to enable the sustainable and smart mobility of people and goods based on operational and societal needs (CCAM Partnership) – Societal Readiness Pilot (RIA)

<u>HORIZON-CL5-2025-04-D6-02: Preparing for large-scale CCAM demonstrations</u>
(CCAM Partnership) – Societal Readiness Pilot (CSA)

HORIZON-CL5-2025-04-D6-11: Innovative air mobility and services for sustainable and smart urban, peri-urban transport – Societal Readiness pilot (RIA)

<u>HORIZON-CL5-2025-04-D6-12</u>: Safe Human-Technology Interaction (HTI) in the vehicle systems of the coming decade – Societal Readiness Pilot (IA)

<u>HORIZON-CL5-2026-01-D6-03: Next-generation environment perception for real</u> <u>world CCAM operations: Error-free and secure technologies to improve energy-efficiency, cost-effectiveness, and circularity (CCAM Partnership) (RIA)</u>

HORIZON-CL5-2026-01-D6-04: Integration of human driving behaviour in the validation of CCAM systems (CCAM Partnership) (RIA)

HORIZON-CL5-2026-01-D6-09: Reliable data and practices to measure and account transport emissions in multimodal transport chains (CSA)

<u>HORIZON-CL5-2026-01-D6-10:</u> Integrating inland waterway transport in smart shipping and multimodal logistics chains (IA)

<u>HORIZON-CL5-2026-01-D6-13:</u> Safety of Cyclists, Pedestrians and Users of <u>Micromobility Devices (RIA)</u>

HORIZON-CL5-2026-01-D6-14: Predicting and avoiding road crashes based on Artificial Intelligence (AI) and big data (RIA)

HORIZON-CL5-2026-01-D6-15: Icing in the context of sustainable aviation (RIA)

HORIZON-CL5-2025-04-D6-01: ADVANCING REMOTE OPERATIONS TO ENABLE THE SUSTAINABLE AND SMART MOBILITY OF PEOPLE AND GOODS BASED ON OPERATIONAL AND SOCIETAL NEEDS (CCAM PARTNERSHIP) – SOCIETAL READINESS PILOT (RIA)



Hossam Farag

Department of Electronic Systems
The Technical Faculty of IT and Design

CONTACT INFORMATION

Hossam Farag hmf@es.aau.dk +45 99408674 https://vbn.aau.dk/en/persons/hmf

HIGHLIGHTED AAU RESEARCH GROUPS

Member of ECN research group

RELEVANT LINKS OUTSIDE ACADEMIA

Nokia, BOSCH, Toshiba, Ericsson

AREA OF EXPERTISE

Wireless communication and networking Industrial IoT Application of AI/ML in wireless communication

Networks, mobile communication, Industrial IoT



Laura Bang Lindegaard

Department of Culture and Learning
The Faculty of Social Sciences and Humanities

CONTACT INFORMATION

Laura Bang Lindegaard laura@ikl.aau.dk +45 26277431

https://vbn.aau.dk/da/persons/120308

HIGHLIGHTED AAU RESEARCH GROUPS

I am head of the new research group RECAST (Research in sociocultural aspects of sustainability and green transitions). This interdisciplinary group provides new knowledge and understandings of sociocultural aspects of sustainability and green transitions. The current sustainability crises are co-constituted through human and social activities and therefore need to be explored through humanities and social science perspectives.

AREA OF EXPERTISE

My interdisciplinary profile spans from studies in Danish grammar to studies of governmentality and mobilities studies. Theoretically and methodologically my research is grounded in discourse approaches to communication. Topically, it has developed around the question of a green, equitable transition of everyday transport practices, and my current projects all concerns public transport. I have recently closed a research project on the governing of appropriate 'travelling together', particularly in relation to the risk of contagion, and I am currently in the start-up phase of an Inge Lehmann-project that concerns identities and rationalities in public transport, and in August 2025 I will start one more DFF-project that concerns communicative accessibility in public transport for people with various invisible disabilities.

RELEVANT PROJECTS

I think I can contribute to all calls with my SSH profile, more specifically with my knowledge of the role of language, communication, interaction and practice in societal change. Furthermore, I have particular knowledge of normative barriers for change, and of public transport as a public space.

I have experience as a research group leader and as project PI, so I would have the appropriate experience for taking on the role as a work-package leader.

HORIZON-CL5-2025-04-D6-02: PREPARING FOR LARGE-SCALE CCAM DEMONSTRATIONS (CCAM PARTNERSHIP) - SOCIETAL READINESS PILOT (CSA)



Laura Bang Lindegaard

Department of Culture and Learning
The Faculty of Social Sciences and Humanities

CONTACT INFORMATION

Laura Bang Lindegaard laura@ikl.aau.dk +45 26277431

https://vbn.aau.dk/da/persons/120308

HIGHLIGHTED AAU RESEARCH GROUPS

I am head of the new research group RECAST (Research in sociocultural aspects of sustainability and green transitions). This interdisciplinary group provides new knowledge and understandings of sociocultural aspects of sustainability and green transitions. The current sustainability crises are co-constituted through human and social activities and therefore need to be explored through humanities and social science perspectives.

AREA OF EXPERTISE

My interdisciplinary profile spans from studies in Danish grammar to studies of governmentality and mobilities studies. Theoretically and methodologically my research is grounded in discourse approaches to communication. Topically, it has developed around the question of a green, equitable transition of everyday transport practices, and my current projects all concerns public transport. I have recently closed a research project on the governing of appropriate 'travelling together', particularly in relation to the risk of contagion, and I am currently in the start-up phase of an Inge Lehmann-project that concerns identities and rationalities in public transport, and in August 2025 I will start one more DFF-project that concerns communicative accessibility in public transport for people with various invisible disabilities.

RELEVANT PROJECTS

I think I can contribute to all calls with my SSH profile, more specifically with my knowledge of the role of language, communication, interaction and practice in societal change. Furthermore, I have particular knowledge of normative barriers for change, and of public transport as a public space.

I have experience as a research group leader and as project PI, so I would have the appropriate experience for taking on the role as a work-package leader.

HORIZON-CL5-2025-04-D6-11: INNOVATIVE AIR MOBILITY AND SERVICES FOR SUSTAINABLE AND SMART URBAN, PERI-URBAN TRANSPORT – SOCIETAL READINESS PILOT (RIA)

Tianyi Li



Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Tianyi Li tianyi@cs.aau.dk +45 71682193

https://vbn.aau.dk/en/persons/tianyi

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

MEMBERSHIP OF EU PARTNERSHIPS

Associate Editor
IEEE Network
IEEE Transactions on Intelligent
Vehicles

AREA OF EXPERTISE

Data management and analytics
Intelligent transportation Artificial intelligence and machine learning
Digital twin
Internet of Things
Edge and distributed computing
Autonomous vehicles

Expertise specific to this call: spatio-temporal data management and analytics, data fusion, intelligent transportation, edge computing

RELEVANT PROJECTS

Project co-investigator, HORIZON, MobiSpaces: New Data Spaces for Green Mobility

Project co-investigator, DIREC, Multimodal Data Processing of Earth Observation Data

HORIZON-CL5-2025-04-D6-12: SAFE HUMAN-TECHNOLOGY INTERACTION (HTI) IN THE VEHICLE SYSTEMS OF THE COMING DECADE – SOCIETAL READINESS PILOT (IA)



Tianyi Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Tianyi Li tianyi@cs.aau.dk +45 71682193

https://vbn.aau.dk/en/persons/tianyi

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

MEMBERSHIP OF EU PARTNERSHIPS

Associate Editor
IEEE Network
IEEE Transactions on Intelligent
Vehicles

AREA OF EXPERTISE

Data management and analytics
Intelligent transportation Artificial intelligence and machine learning
Digital twin
Internet of Things
Edge and distributed computing
Autonomous vehicles

Expertise specific to this call: intelligent transportation, electric vehicles, machine learning, autonomous driving

RELEVANT PROJECTS

Project co-investigator, HORIZON, MobiSpaces: New Data Spaces for Green Mobility

Project co-investigator, DIREC, Multimodal Data Processing of Earth Observation Data



Laura Bang Lindegaard

Department of Culture and Learning
The Faculty of Social Sciences and Humanities

CONTACT INFORMATION

Laura Bang Lindegaard laura@ikl.aau.dk +45 26277431

https://vbn.aau.dk/da/persons/120308

HIGHLIGHTED AAU RESEARCH GROUPS

I am head of the new research group RECAST (Research in sociocultural aspects of sustainability and green transitions). This interdisciplinary group provides new knowledge and understandings of sociocultural aspects of sustainability and green transitions. The current sustainability crises are co-constituted through human and social activities and therefore need to be explored through humanities and social science perspectives.

AREA OF EXPERTISE

My interdisciplinary profile spans from studies in Danish grammar to studies of governmentality and mobilities studies. Theoretically and methodologically my research is grounded in discourse approaches to communication. Topically, it has developed around the question of a green, equitable transition of everyday transport practices, and my current projects all concerns public transport. I have recently closed a research project on the governing of appropriate 'travelling together', particularly in relation to the risk of contagion, and I am currently in the start-up phase of an Inge Lehmann-project that concerns identities and rationalities in public transport, and in August 2025 I will start one more DFF-project that concerns communicative accessibility in public transport for people with various invisible disabilities.

RELEVANT PROJECTS

I think I can contribute to all calls with my SSH profile, more specifically with my knowledge of the role of language, communication, interaction and practice in societal change. Furthermore, I have particular knowledge of normative barriers for change, and of public transport as a public space.

I have experience as a research group leader and as project PI, so I would have the appropriate experience for taking on the role as a work-package leader.

HORIZON-CL5-2026-01-D6-03: NEXT-GENERATION ENVIRONMENT PERCEPTION FOR REAL WORLD CCAM OPERATIONS: ERROR-FREE AND SECURE TECHNOLOGIES TO IMPROVE ENERGY-EFFICIENCY, COST-EFFECTIVENESS, AND CIRCULARITY (CCAM PARTNERSHIP) (RIA)



Yushuai Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Yushuai Li yusli@cs.aau.dk +45 52731293 https://vbn.aau.dk/en/persons/yusli

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

AREA OF EXPERTISE

Reinforcement learning
Deep learning
Digital twin
Digital energy
Digital transportation

RELEVANT PROJECTS

Expertise specific to
this call: Digital twin,
Digital energy, AI-based
energy decision-making,
Reinforcement learning
Relevant projects
EU project: H2020
MSCA-IF, SPOCEI:
Smart Planning,
Operation and Control for
Energy Internet
National project: The
Association of Danish
Industry, Digital Energy
Hub

HORIZON-CL5-2026-01-D6-04: INTEGRATION OF HUMAN DRIVING BEHAVIOUR IN THE VALIDATION OF CCAM SYSTEMS (CCAM PARTNERSHIP) (RIA)



Laura Bang Lindegaard

Department of Culture and Learning
The Faculty of Social Sciences and Humanities

CONTACT INFORMATION

Laura Bang Lindegaard laura@ikl.aau.dk +45 26277431

https://vbn.aau.dk/da/persons/120308

HIGHLIGHTED AAU RESEARCH GROUPS

I am head of the new research group RECAST (Research in sociocultural aspects of sustainability and green transitions). This interdisciplinary group provides new knowledge and understandings of sociocultural aspects of sustainability and green transitions. The current sustainability crises are co-constituted through human and social activities and therefore need to be explored through humanities and social science perspectives.

AREA OF EXPERTISE

My interdisciplinary profile spans from studies in Danish grammar to studies of governmentality and mobilities studies. Theoretically and methodologically my research is grounded in discourse approaches to communication. Topically, it has developed around the question of a green, equitable transition of everyday transport practices, and my current projects all concerns public transport. I have recently closed a research project on the governing of appropriate 'travelling together', particularly in relation to the risk of contagion, and I am currently in the start-up phase of an Inge Lehmann-project that concerns identities and rationalities in public transport, and in August 2025 I will start one more DFF-project that concerns communicative accessibility in public transport for people with various invisible disabilities.

RELEVANT PROJECTS

I think I can contribute to all calls with my SSH profile, more specifically with my knowledge of the role of language, communication, interaction and practice in societal change. Furthermore, I have particular knowledge of normative barriers for change, and of public transport as a public space.

I have experience as a research group leader and as project PI, so I would have the appropriate experience for taking on the role as a work-package leader.

HORIZON-CL5-2026-01-D6-09: RELIABLE DATA AND PRACTICES TO MEASURE AND ACCOUNT TRANSPORT EMISSIONS IN MULTIMODAL TRANSPORT CHAINS (CSA)



Tianyi Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Tianyi Li tianyi@cs.aau.dk +45 71682193

https://vbn.aau.dk/en/persons/tianyi

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

MEMBERSHIP OF EU PARTNERSHIPS

Associate Editor
IEEE Network
IEEE Transactions on Intelligent
Vehicles

AREA OF EXPERTISE

Data management and analytics
Intelligent transportation Artificial intelligence and machine learning
Digital twin
Internet of Things
Edge and distributed computing
Autonomous vehicles

Expertise specific to this call: data integration, data analytics, intelligent transportation

RELEVANT PROJECTS

Project co-investigator, HORIZON, MobiSpaces: New Data Spaces for Green Mobility

Project co-investigator, DIREC, Multimodal Data Processing of Earth Observation Data



Sean Bin Yang

Department of Computer Science

CONTACT INFORMATION

Sean Bin Yang seanbinyang@cs.aau.dk +45 99 40 89 50

HIGHLIGHTED AAU RESEARCH GROUPS

Data Engineering, Science and System Artificial Intelligence and Machine Learning

MEMBERSHIP OF EU PARTNERSHIPS

Chapter Treasurer of Denmark Section Chapter, IEEE Computer Society

RELEVANT LINKS OUTSIDE ACADEMIA

National Natural Science

Foundation of China (RMB: 300,000)
Chongqing Natural Science
Foundation Innovation and
Development Joint Project
(Grant No. CSTB2023NS CQ-LZX0170, Chongqing China)
Scientific and Technological
Research Program of
Chongqing Municipal Education
Commission (Grant No.
KJQN202400637, Chongqing,
China)

AREA OF EXPERTISE

My research mainly focusses on efficient, effective, and explainable representation learning (Foundation model) based on some advanced technologies, such as self-supervised learning, metalearning, increment learning, especially for the smart transportation systems and spatial-temporal data mining.

RELEVANT PROJECTS

National Natural Science Foundation of China:

Developing a
Generalizable and
Interpretable Foundation
Model for the
Spatiotemporal
Trajectories of Moving
Objects.

Chongqing Natural Science Foundation Innovation and Development Joint

Project: Study on intelligent control of cabin air conditioning.

Scientific and
Technological Research
Program of Chongqing
Municipal Education
Commission: Research on
Key Technologies for
General Multimodal
Spatiotemporal Data

Analysis of Moving Objects for Open Scenes (RMB 40,000) **Doctoral Research Start-**

up Funding Project:
Study on cross-domain
spatiotemporal trajectory
data representation

learning.

HORIZON-CL5-2026-01-D6-10: INTEGRATING INLAND WATERWAY TRANSPORT IN SMART SHIPPING AND MULTIMODAL LOGISTICS CHAINS (IA)



Nelson F. Coelho

Department of Sustainability and Planning AAU Arctic

CONTACT INFORMATION

Nelson F. Coelho nelsonfc@plan.aau.dk +45 99409782

https://vbn.aau.dk/en/persons/nelsonfc environmental rules and

HIGHLIGHTED AAU RESEARCH GROUPS

Centre for Blue Governance

AREA OF EXPERTISE

Nelson's academic domain is the International Law of the Sea, focusing on standards applicable to the maritime transport sector. He is interested in studying interactions between sovereign states, global and regional geopolitical conflicts and questions of territoriality, boundaries and space in the ocean. His postdoctoral experience led him to also become a policy and governance arrangement analyst. In research projects he is usually the lawyer in a team of marine scientists and naval engineers, providing insights on jurisdiction.

RELEVANT PROJECTS

AEGIS project (completed) PERMAGOV project (ongoing)

HORIZON-CL5-2026-01-D6-13: SAFETY OF CYCLISTS, PEDESTRIANS AND USERS OF MICROMOBILITY DEVICES (RIA)



Giulio Bianchi Piccinini

Department of the Built Environment
The Faculty of Engineering and Science
Division of Civil and Environmental Engineering

CONTACT INFORMATION

Giulio Bianchi Piccinini gbp@build.aau.dk +45 99408950

https://vbn.aau.dk/en/persons/gbp

HIGHLIGHTED AAU RESEARCH GROUPS

https://vbn.aau.dk/en/organisations/dataanalyse-og-menneskelige-faktorer-i-trafik

RELEVANT LINKS OUTSIDE ACADEMIA

Contacts with partners in different locations in Europe, due to previous employment (i.e., Chalmers, University of Porto) and previous collaborations in building European proposals.
Contacts with automotive industry in Sweden (e.g., Volvo Cars, Volvo, Autoliv).

Involvement in the work of the Human Factors and Ergonomics Society European Chapter.

AREA OF EXPERTISE

Giulio's research focuses on traffic safety, with a special interest in the understanding of crash causation mechanisms for crashes involving different road users and on modelling of road users.

RELEVANT PROJECTS

Giulio has worked on the safety of cyclists and partly on the safety of micromobilty users in different national projects in Sweden and in Denmark. Giulio has also published several articles on these topics (see more information at https://www.scopus.com/authid/ detail.uri?authorld=56140078200). The main experience that Giulio has built on this topic is related to the analysis of naturalistic data (i.e. video and sensor data) collected from bicycles and infrastructure.



Laura Bang Lindegaard

Department of Culture and Learning
The Faculty of Social Sciences and Humanities

CONTACT INFORMATION

Laura Bang Lindegaard laura@ikl.aau.dk +45 26277431

https://vbn.aau.dk/da/persons/120308

HIGHLIGHTED AAU RESEARCH GROUPS

I am head of the new research group RECAST (Research in sociocultural aspects of sustainability and green transitions). This interdisciplinary group provides new knowledge and understandings of sociocultural aspects of sustainability and green transitions. The current sustainability crises are co-constituted through human and social activities and therefore need to be explored through humanities and social science perspectives.

AREA OF EXPERTISE

My interdisciplinary profile spans from studies in Danish grammar to studies of governmentality and mobilities studies. Theoretically and methodologically my research is grounded in discourse approaches to communication. Topically, it has developed around the question of a green, equitable transition of everyday transport practices, and my current projects all concerns public transport. I have recently closed a research project on the governing of appropriate 'travelling together', particularly in relation to the risk of contagion, and I am currently in the start-up phase of an Inge Lehmann-project that concerns identities and rationalities in public transport, and in August 2025 I will start one more DFF-project that concerns communicative accessibility in public transport for people with various invisible disabilities.

RELEVANT PROJECTS

I think I can contribute to all calls with my SSH profile, more specifically with my knowledge of the role of language, communication, interaction and practice in societal change. Furthermore, I have particular knowledge of normative barriers for change, and of public transport as a public space.

I have experience as a research group leader and as project PI, so I would have the appropriate experience for taking on the role as a work-package leader. Additionally, also the Transport Research Group under Harry Larhmann at Aalborg University.

HORIZON-CL5-2026-01-D6-14: PREDICTING AND AVOIDING ROAD CRASHES BASED ON ARTIFICIAL INTELLIGENCE (AI) AND BIG DATA (RIA)



Giulio Bianchi Piccinini

Department of the Built Environment
The Faculty of Engineering and Science
Division of Civil and Environmental Engineering

CONTACT INFORMATION

Giulio Bianchi Piccinini gbp@build.aau.dk +45 99408950

https://vbn.aau.dk/en/persons/gbp

HIGHLIGHTED AAU RESEARCH GROUPS

https://vbn.aau.dk/en/organisations/dataanalyse-og-menneskelige-faktorer-i-trafik

RELEVANT LINKS OUTSIDE ACADEMIA

Contacts with partners in different locations in Europe, due to previous employment (i.e., Chalmers, University of Porto) and previous collaborations in building European proposals.
Contacts with automotive industry in Sweden (e.g., Volvo Cars, Volvo, Autoliv).
Involvement in the work of the

Involvement in the work of the Human Factors and Ergonomics Society European Chapter.

AREA OF EXPERTISE

Giulio's research focuses on traffic safety, with a special interest in the understanding of crash causation mechanisms for crashes involving different road users and on modelling of road users.

RELEVANT PROJECTS

Giulio has worked in partnership with another department at AAU on the use of computer vision for extracting information from videos to perform safety analyses on cycling traffic. Giulio has also relevant experience on the analysis of crash causation mechanisms for different users. including drivers, cyclists and users of micromobility users.



Sean Bin Yang

Department of Computer Science

CONTACT INFORMATION

Sean Bin Yang seanbinyang@cs.aau.dk +45 99408950

HIGHLIGHTED AAU RESEARCH GROUPS

Data Engineering, Science and System Artificial Intelligence and Machine Learning

MEMBERSHIP OF EU PARTNERSHIPS

Chapter Treasurer of Denmark Section Chapter, IEEE Computer Society

RELEVANT LINKS OUTSIDE ACADEMIA

National Natural Science
Foundation of China (RMB: 300,000)
Chongqing Natural Science
Foundation Innovation and
Development Joint Project
(Grant No. CSTB2023NS CQLZX0170, Chongqing China)
Scientific and Technological
Research Program of
Chongqing Municipal Education
Commission (Grant No.
KJQN202400637, Chongqing,
China)

AREA OF EXPERTISE

My research mainly focusses on efficient, effective, and explainable representation learning (Foundation model) based on some advanced technologies, such as self-supervised learning, metalearning, increment learning, especially for the smart transportation systems and spatial-temporal data mining.

RELEVANT PROJECTS

National Natural Science Foundation of China: Developing a Generalizable and Interpretable Foundation Model for the Spatiotemporal Trajectories of Moving Objects (RMB 300,000) **Chongging Natural** Science Foundation Innovation and **Development Joint** Project: Study on intelligent control of cabin air conditioning (RMB

1,000,000)

Scientific and

Technological Research
Program of Chongqing
Municipal Education
Commission: Research on
Key Technologies for
General Multimodal
Spatiotemporal Data
Analysis of Moving
Objects for Open Scenes
(RMB 40,000)
Doctoral Research Startup Funding Project:

up Funding Project: Study on cross-domain spatiotemporal trajectory data representation learning (RMB 85,000)



Tianyi Li

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION

Tianyi Li tianyi@cs.aau.dk +45 71682193

https://vbn.aau.dk/en/persons/tianyi

HIGHLIGHTED AAU RESEARCH GROUPS

Member of Data Engineering, Science and Systems (DESS) group

MEMBERSHIP OF EU PARTNERSHIPS

Associate Editor
IEEE Network
IEEE Transactions on Intelligent
Vehicles

AREA OF EXPERTISE

Data management and analytics
Intelligent transportation
Artificial intelligence and machine learning
Digital twin
Internet of Things
Edge and distributed computing
Autonomous vehicles

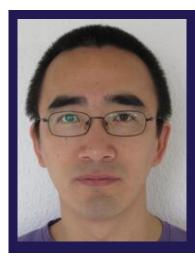
Expertise specific to this call: spatio-temporal data management and analytics, data fusion, intelligent transportation, edge computing

RELEVANT PROJECTS

Project co-investigator, HORIZON, MobiSpaces: New Data Spaces for Green Mobility

Project co-investigator, DIREC, Multimodal Data Processing of Earth Observation Data

HORIZON-CL5-2026-01-D6-15: ICING IN THE CONTEXT OF SUSTAINABLE AVIATION (RIA)



Chungen Yin

Department of Energy
The Faculty of Engineering and Science

CONTACT INFORMATION

Chungen Yin chy@et.aau.dk +45 30622577

https://vbn.aau.dk/en/persons/chy

HIGHLIGHTED AAU RESEARCH GROUPS

Bioenergy; Electro-fuels; Multiphase Flow

MEMBERSHIP OF EU PARTNERSHIPS EERA

AREA OF EXPERTISE

Thermal/Fluids Energy
Components & Technologies
Advanced CFD and digital
twins CCUS
Reacting multiphase flows
Pyrolysis/Gasification/
Combustion

RELEVANT PROJECTS

WINDICE (previous research project)