



UARctic
Thematic Networks

Year In Review

Thematic Network on Arctic Urban Planning and Design

RAJNISH KAUR CALAY

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Strengthening Partnerships and Holistic Development in Arctic Urban Planning and Design

Arctic Urban Planning and Design (ARUP) continues to bring the technological perspectives of urban development together with the social experiences to ensure holistic development in the Arctic region. Dr Jacob Huffman from Calgary and Dr U. Moghul from Arctic Experts AS joined the network representing university and industry interests, respectively. The network members were involved in many joint activities which included faculty and student exchange visits to Japan and Norway, sponsored by various joint projects. The collaborative work resulted in joint courses and project proposals. We wait for the outcome of the two proposals so that academic and research activities can be undertaken in the coming years.

We look forward to further collaboration with partner institutions in the Arctic to strengthen the research network, joint education, and mobility.



Wind shield. Field experimental setup by UiT PhD student in Hokkaido University, Japan. Photo: Erlend Entner



Student Seminar at UiT, Narvik attended by researchers from Hokkaido University, Sintef, Narvik and UiT. Photo: Somil Thakur

Projects

The Department of Building, Energy and Material Technology is engaged in several projects that align with the ARUP network.

- **ENFORCE Interreg NPA** projects on Energy & Resource Recovery from Wastewater for Circular Economy. This project is established collaboration with partners from Faroes Islands and Ireland.
- **The Bauhaus Goes North (BGN)** project is an international research and co-design initiative involving UiT the Arctic University of Norway alongside the City of Bodø and other Nordic and Irish partners. The project applies to the EU's New European Bauhaus (NEB) principles - sustainability, aesthetics, and inclusion - to foster a circular and resource-efficient built environment across the Northern Periphery and Arctic (NPA) region.
- **NoBiCC** (Northern Buildings in Changing Climate) provides recommendations and guidelines for sustainable climate change adaptation for existing and future buildings located in different climatical zones in the arctic and subarctic areas.
- **Ar2CorD** (Low Carbon Concrete for Arctic Climate with Excellent Sustainability and Durability).
- **EU-MAT** (Effective Urban Material Mining in Cities) focuses on low material circularity in construction across northern Norway, Sweden, and Finland by utilizing advanced material analysis and tackling cross-border regulatory barriers.

Arctic Six Chair

Professor Mohamad Mustafa from the Faculty of Engineering in Narvik has been appointed as one of the Arctic Six Chairs (2026-2028). His research focuses on sustainable Arctic infrastructure, circular economy solutions, hydrogen technology, and fuel cells.

Research Visits

These visits helped the exchange students to widen their academic as well as cultural perspectives. They could access the resources and expertise available at the host institution to conduct extra experiments and improve their learning experiences.

- Two PhD researchers from Hokkaido University, Sapporo, Japan, one of the ARUP network partners visited for one month to undertake joint research activities.
- One PhD researcher and two master's students visited Hokkaido University for three-month research visits.
- Three faculty members had a short visit to Hokkaido University for future research collaborations.

Conferences and Meetings

- The highlight of all the activities is the organization of an international conference, **Midnight Sun Summit in Mathematics and Engineering** (MSSME) at Narvik in June 2026. The international conference, which was attended by participants from more than 50 countries, gave participants the opportunity to extend their network and learn from world-famous experts.
- Researchers from UiT participated in **H2 Science biennial international conference** in Trondheim, Norway hosted by FME HYDROGENi. Faculty of Engineering, Narvik is a partner in this project which focuses on education and research related to fuel cells and the hydrogen value chain.

New Online Courses

Department of Building, Energy and Material Technology launched a new 5 ECTS online course "Sustainable Development, Green Transition and the Arctic". The course is developed jointly with the University of Oulu in Finland, and Nord University in Norway, under project "Academic Collaboration for Zero Carbon Energy Technologies in the Arctic (ZeroET)".

UiT delivers two International Courses on European University Alliance for Global Health (EUGLOH) platform: "Environmental Sustainability and Global Health" and "Prefabricated Concrete Structures for Healthy and Sustainable Built Environment". These courses are developed by Professor Mohamad Mustafa at the Department of Civil and Environmental Engineering.

FIND OUT MORE !

<https://www.uarctic.org/activities/thematic-networks/arctic-urban-planning-and-design/>

