Graz University of Technology

ibpsc

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Open topics for master thesis

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Project 2: Univ Prof Dr Robert McLeod or Univ Prof Dr Christina Hopfe

Project 3: DI Fatos Pollozhani or Univ Prof Dr Robert McLeod or Univ Prof Dr Christina Hopfe

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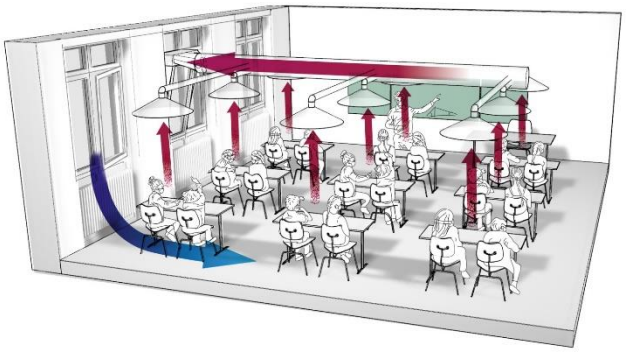
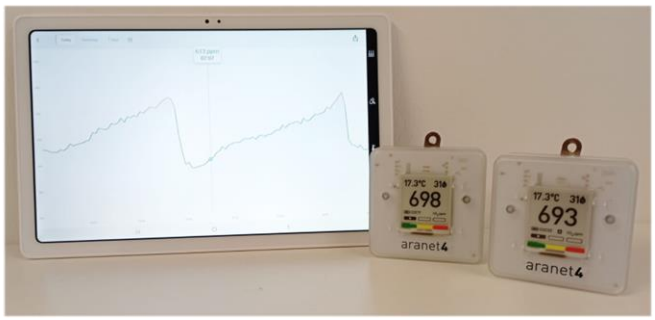
1. In relation to the **CovEd** project (www.coved.tugraz.at), practical measurements of **CO_2 and VOC** will be carried out in classrooms and at Graz University of Technology. In this context, the study can look at quantitative data evaluation of indoor air quality in school and university contexts.



https://www.tugraz.at/en/institutes/ibpsc/research/research-projects/ongoing-projects/coved

2. As part of the new project **ImpAQS**, funded by the Ministry of Education, different **measurement methods and sensor techniques** are compared in terms of their applicability, calibration and inaccuracies.



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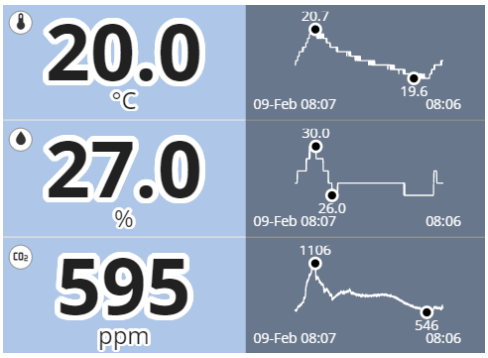
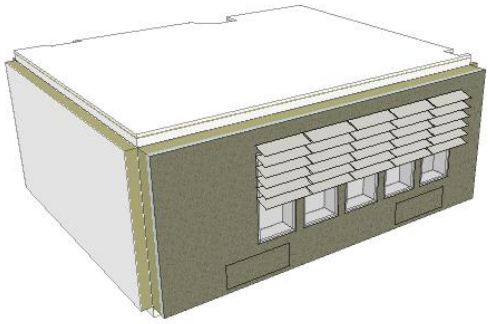
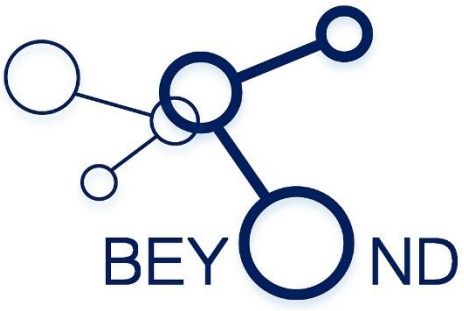
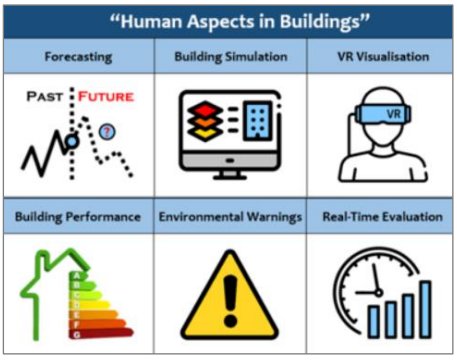
3. (Experimental and simulative) investigation of the **quality of the indoor climate in schools** in terms of indoor air quality, thermal comfort and protection against overheating in summer. A series of indoor climate measurements can be conducted or simulation tools such as IDA ICE can be applied.





4. As part of the **Beyond** project: Implementation and testing of different **learning methods in building physics**.





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5. Simulations and analysis of the **energy performance of buildings** in the low, plus and average energy range. Based on the energy crisis and the subsequent costs of heating, the influence of a change in input variables (such as room temperature) on the behaviour of a building in **relation to comfort** could be analysed.