



FACULTY OF ELECTRICAL department of electrical
ENGINEERING and electronic technology
AND COMMUNICATION



Design a optimalizace výrobků pomocí simulací

doc. Ing. Petr Vyroubal, Ph.D.

Výzkumná skupina

Baterie, space, teplo



doc. Ing. Petr Vyroubal, Ph.D.



Ing. Marek Sedlařík

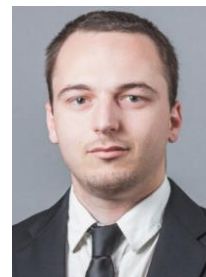


 **AIT**
AUSTRIAN INSTITUTE
OF TECHNOLOGY
Ing. Martin Mačák, Ph.D.
Externista AIT

Elektronová mikroskopie, fluidika, mechanika



doc. Ing. Jiří Maxa, Ph.D.



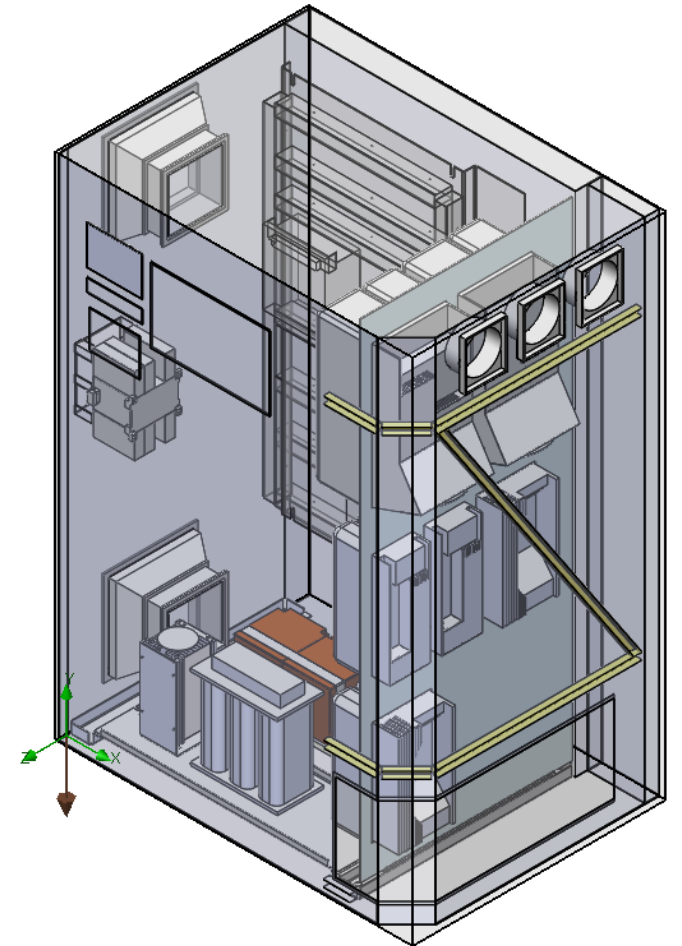
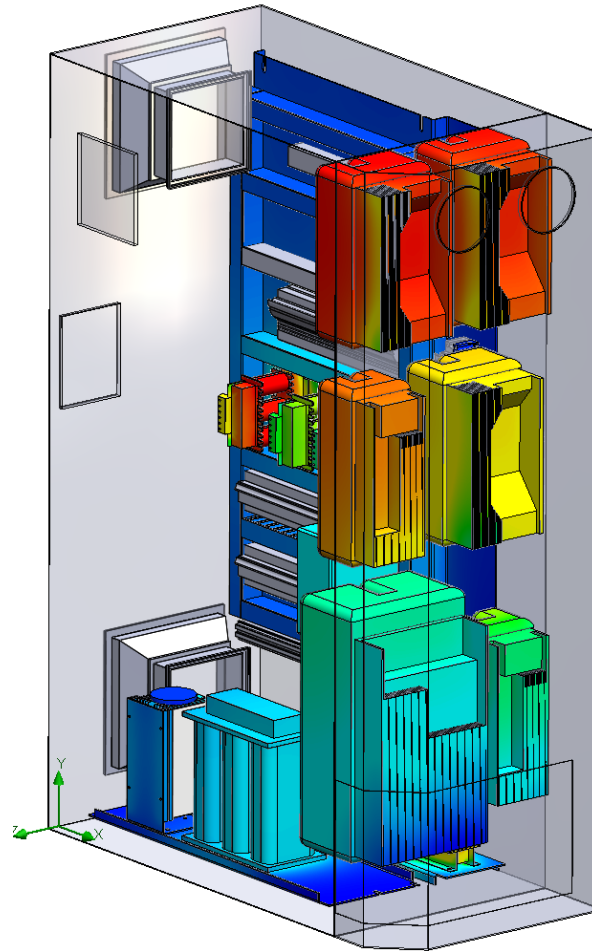
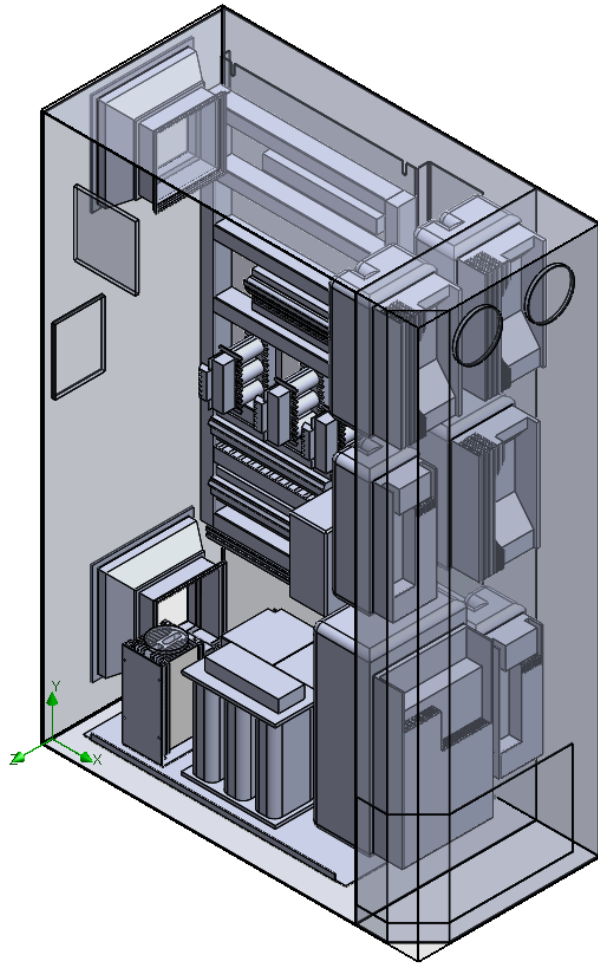
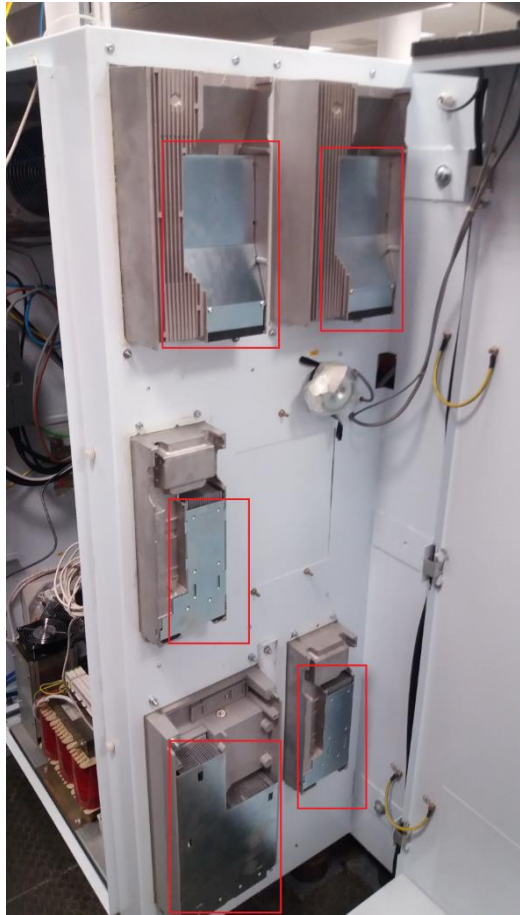
Ing. Robert
Bayer, Ph.D.



Ing. Pavla
Šabacká, Ph.D.

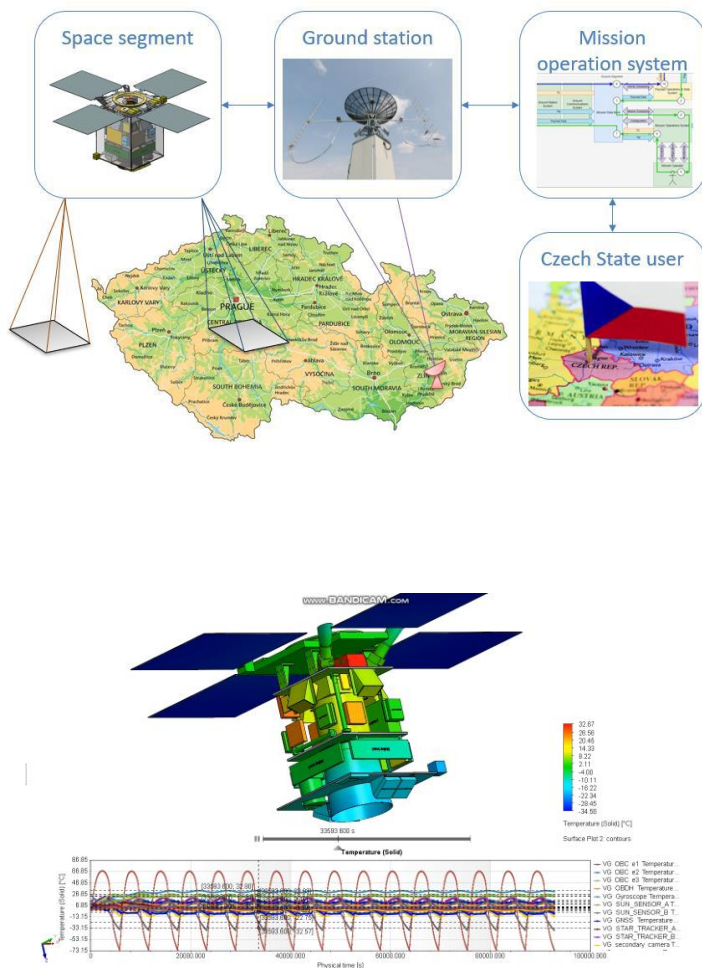
Optimalizace zařízení z pohledu tepla

3f rozvaděč průmyslového elektrického stroje

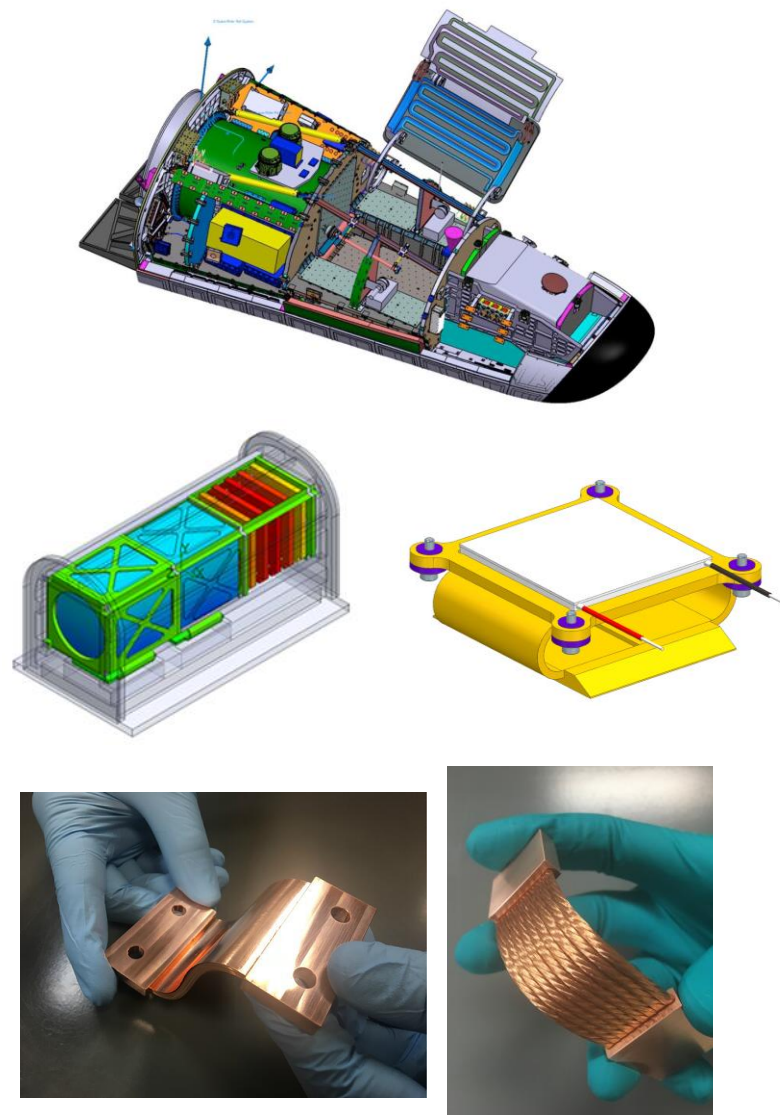


Space aplikace

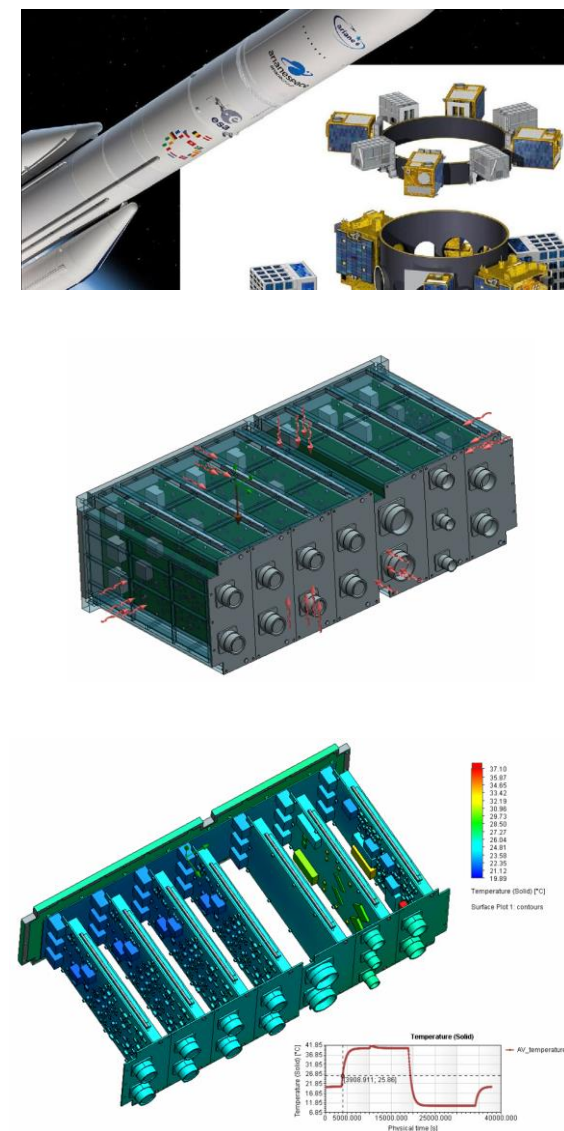
AMBIC



IOSLAB

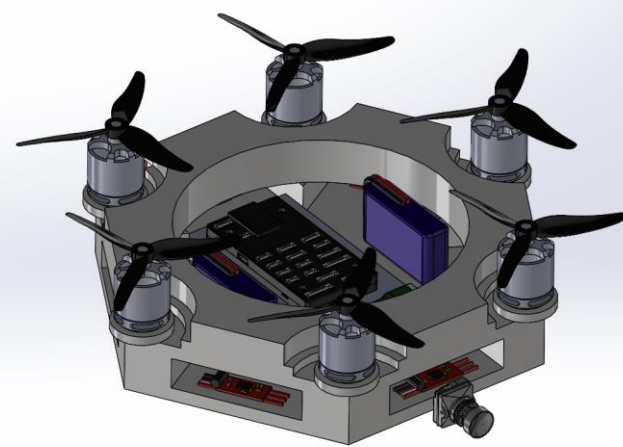
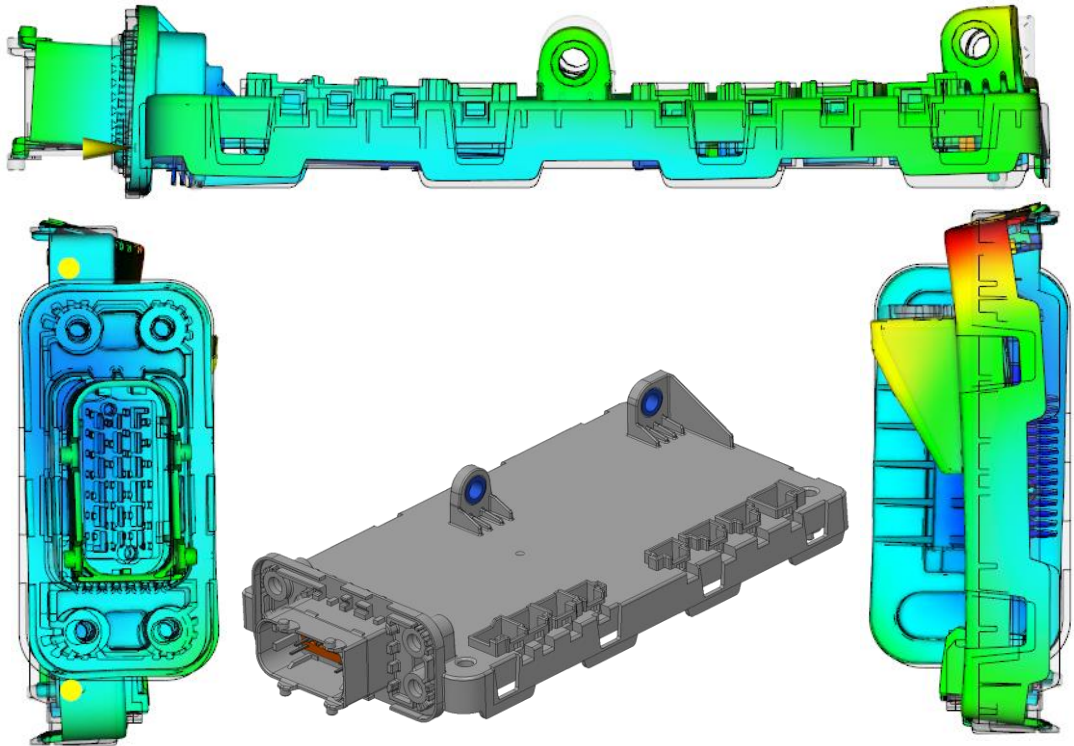


Ariane 6 Sequencer

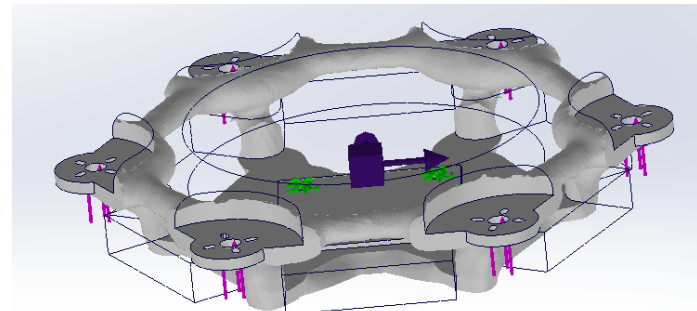
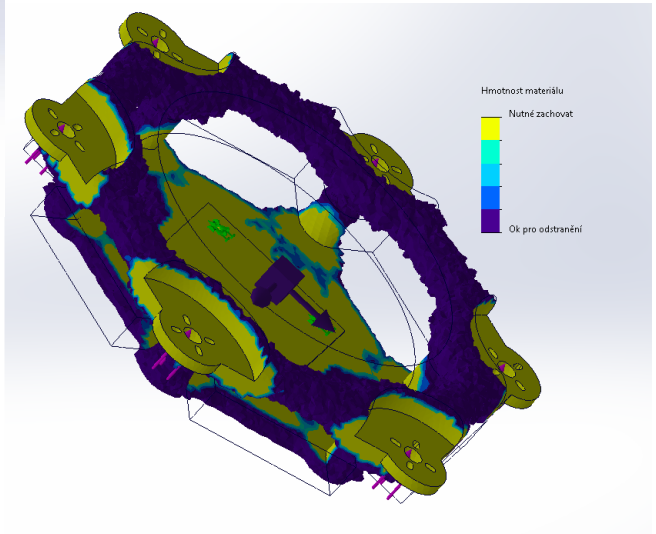


Vstřikování plastů a topologické optimalizace pro 3D tisk

Dvojité zastříkávání konektorů

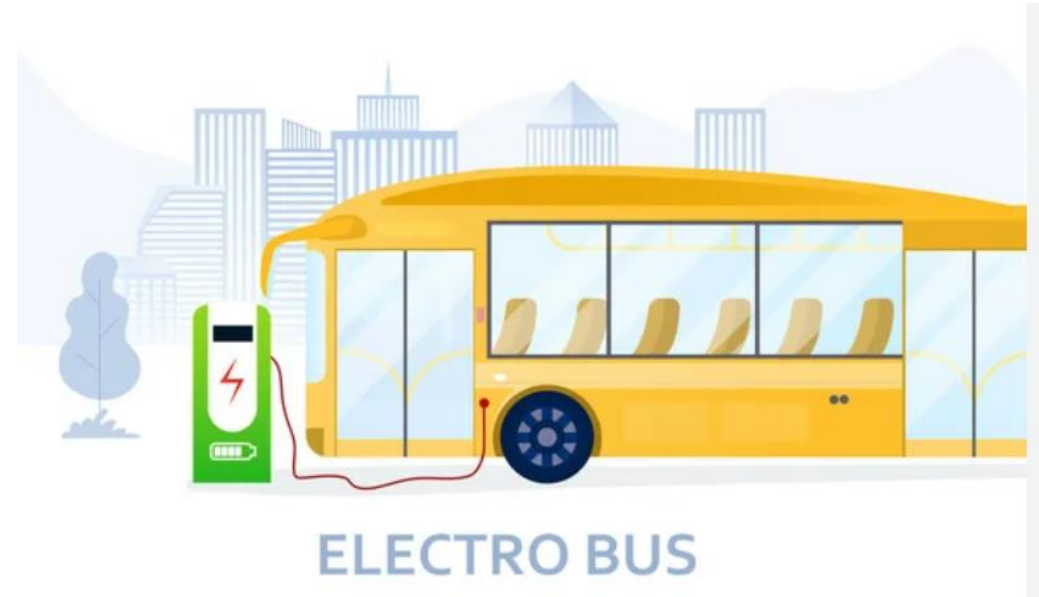
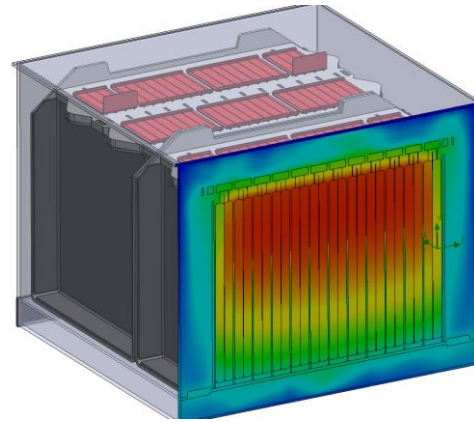


Topologická optimalizace rámu dronu

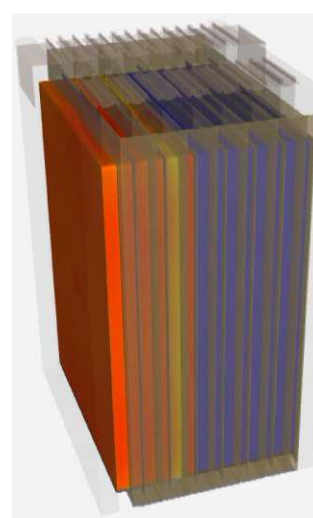
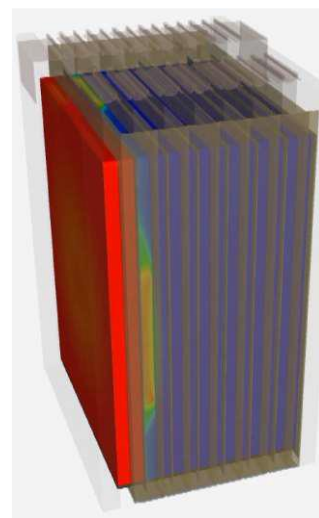
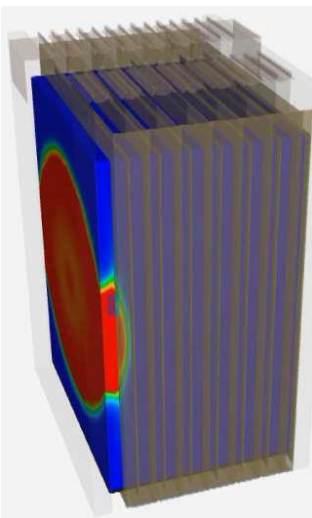
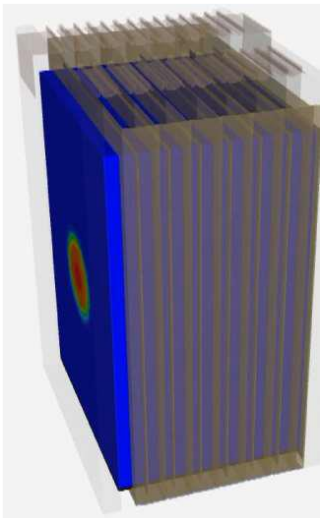


Battery packy v provozu

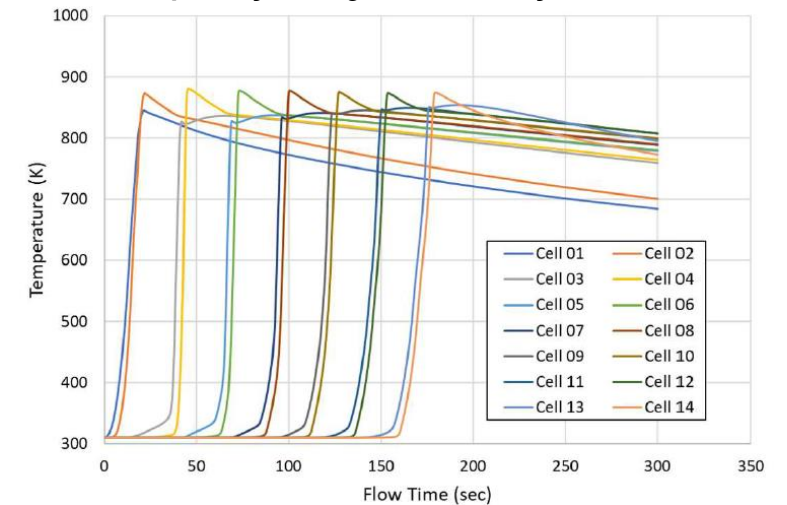
Battery pack



Průběh nail-testu v čase

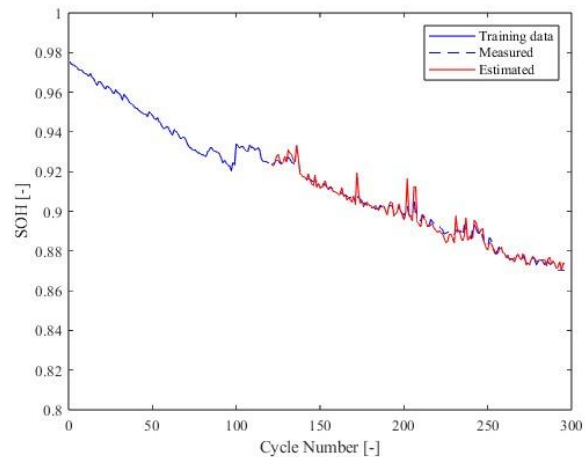
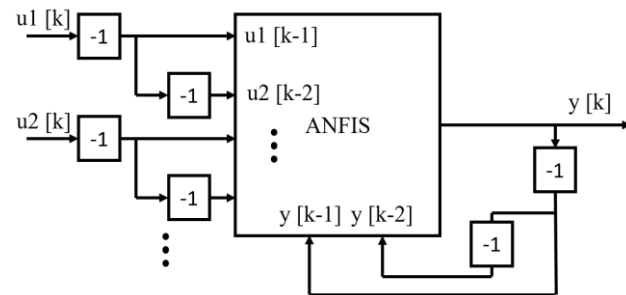
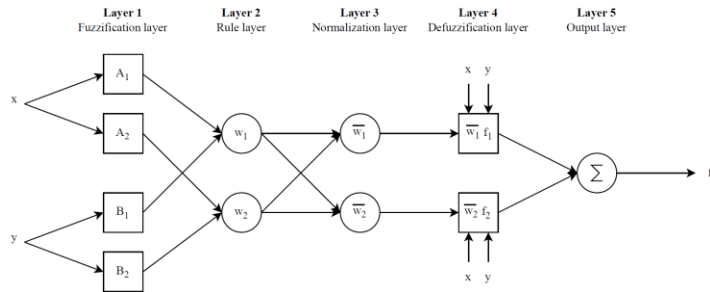


Průběh teploty na jednotlivých člancích



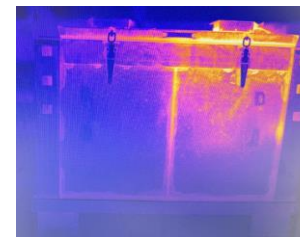
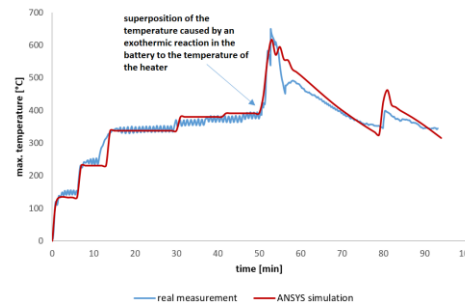
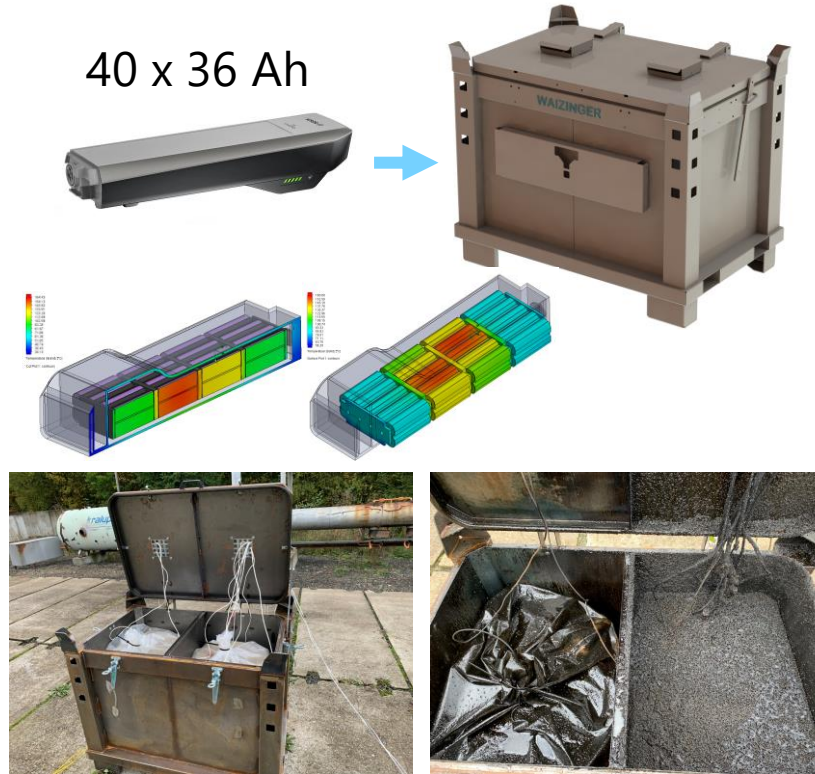
Projekty s bateriemi

Predikce stárnutí Li-ion baterií

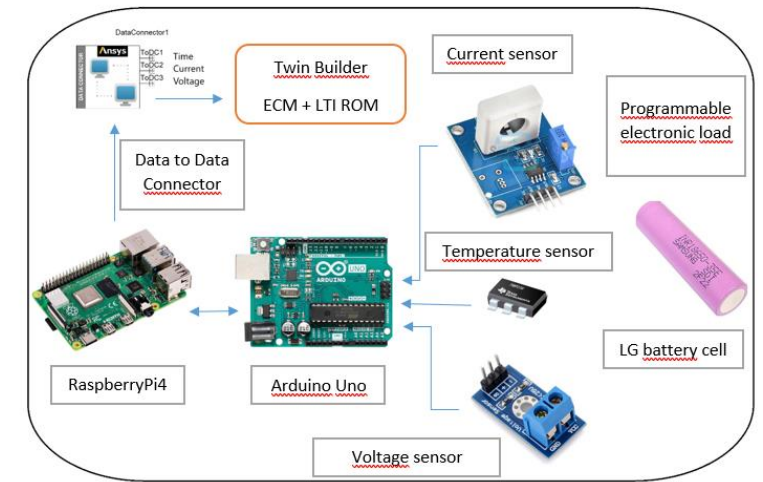


Thermal runaway

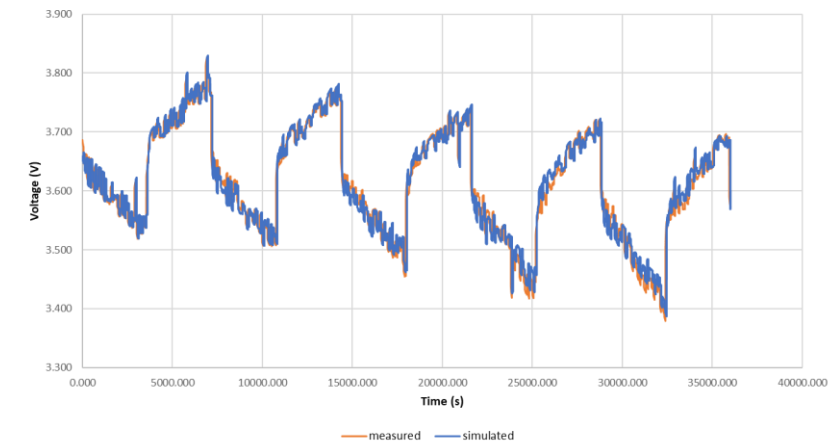
40 x 36 Ah



Digitální dvojče baterie



The comparison of the measured values of the test current profile with the model





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Děkuji za pozornost!

Assoc. prof. Petr Vyrubal, Ph.D.