Saal: Simulacron-3 | 20:00 | 01:00 | Day: 4 | Track: Hardware & Making | nA

Title: **Fueling the Revolution**

Subtitle: Personal production of bio-fuels

Speaker: **Gustaf Bjorksten**

Short: *Bio-fuels from waste can be part of the solution to stabilize climate change, but inaction by governments and industry means such fuels are not readily available. This talk will outline work being done to solve this problem at a personal level, by producing open source designs for equipment for local production of bio-fuels.*

Long: Bio-fuels are better for the environment and a key way we could be reducing CO2 emissions. However in many countries bio-fuels are not available at gas stations. It is also a little known fact that all modern gasoline cars can run on bio-ethanol without issues, and all diesel cars can run on bio-diesel. While manufacturers do not optimize their cars for bio-fuels, it is a fairly straightforward process to do this by tuning the cars ECU (Electronic Control Unit). To solve this problem of a lack of bio-fuels production in the developing world (and even in many western nations also!), a group of technologists in Costa Rica are working on open source designs for personal bio-fuels production equipment. These designs aim to be cheap and simple to construct, and use various forms of bio-waste as the primary input to produce the fuels. In this talk I will discuss the global context and outline the project's goals. I will take the audience through the various processes required in the production of bio-fuels, and I will discuss the project's progress in designing and prototyping very small scale bio-fuels production equipment.