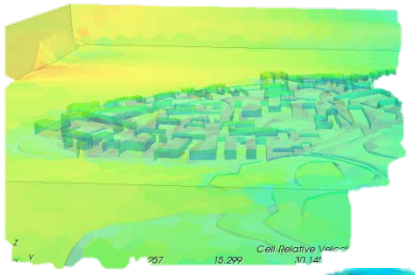
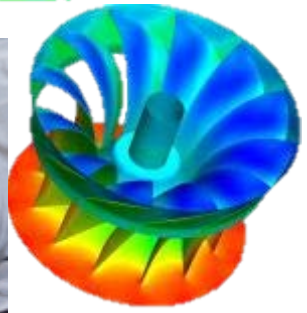
KTH Royal Institute of Technology

Royal Institute of Technology (KTH) - Stockholm
MSc Renewable Energy - RENE



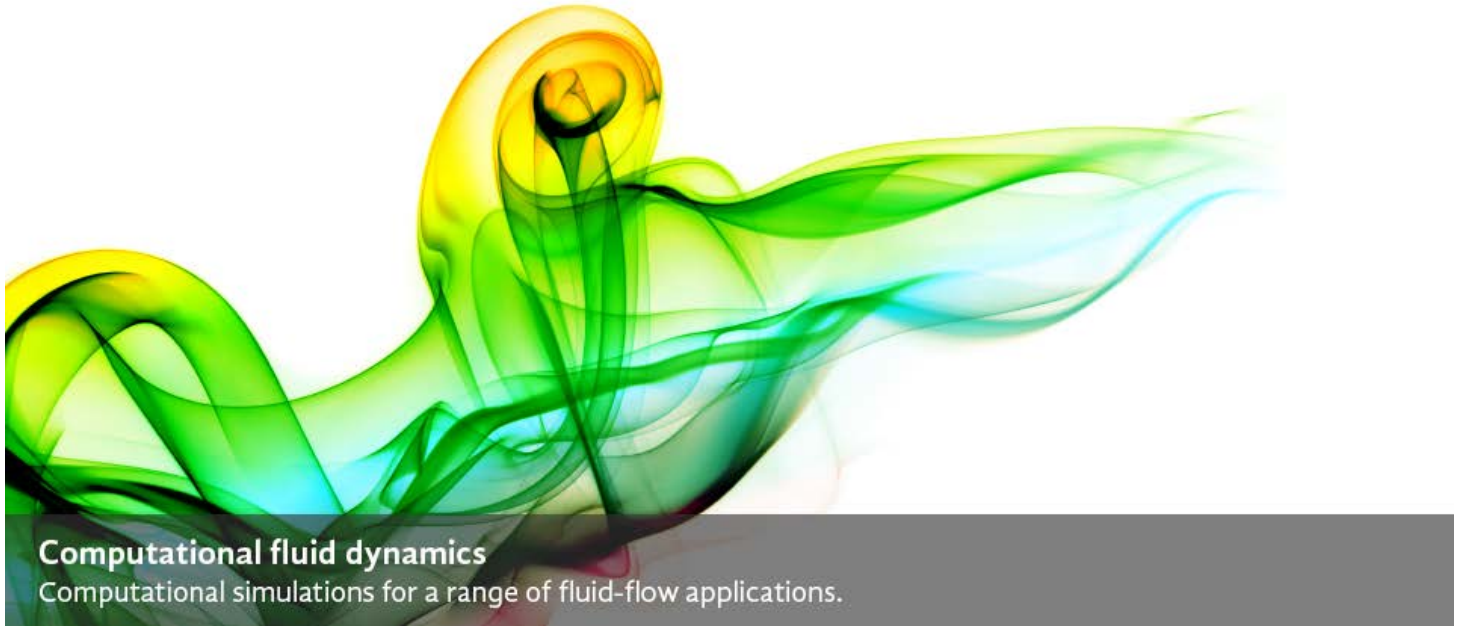


Program Coordinator :

Dr. Reza Fakhrai

Learn by Doing

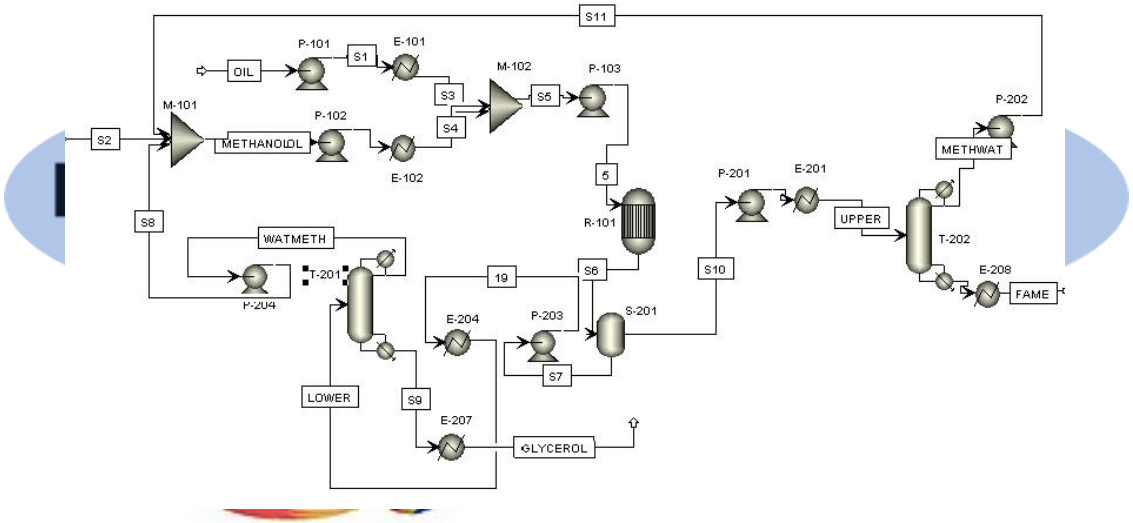
Renewable hybrid system



Student Life at KTH

RENE at KTH :

- What KTH has to offer:
  - Theoretical knowledge at advance level (working with PhD's)
  - Simulation and design tools
  - System analysis
  - Industrial partners

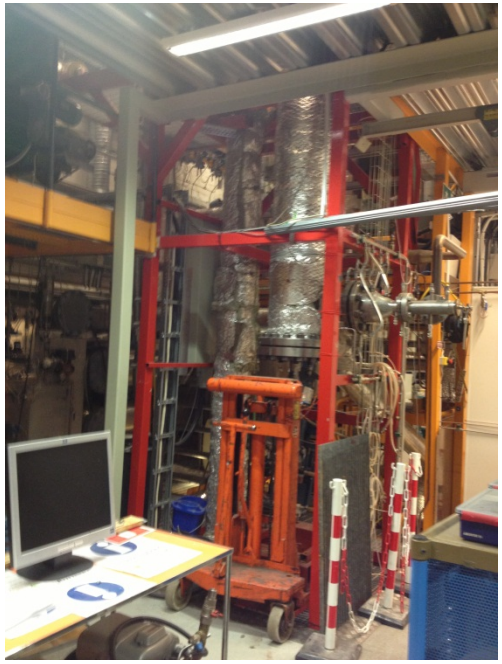


Hybrid Renewable Systems (HRS) at KTH

- Combine what you already know and learn new things in process
- Biomass, solar, Wind (hydro and geothermal)
- Learn to use these technologies as stand alone or in combination
- Rescue container as a umbrella for

RENE students

- Biomass, solar, wind, hydro and geothermal
- Learn to use these technologies as stand alone or in combination
- Rescue container as a umbrella for



Fuel Cell

Fuel Cell at KTH

myFC

→ Spin-off from KTH

→ Founded in 2005

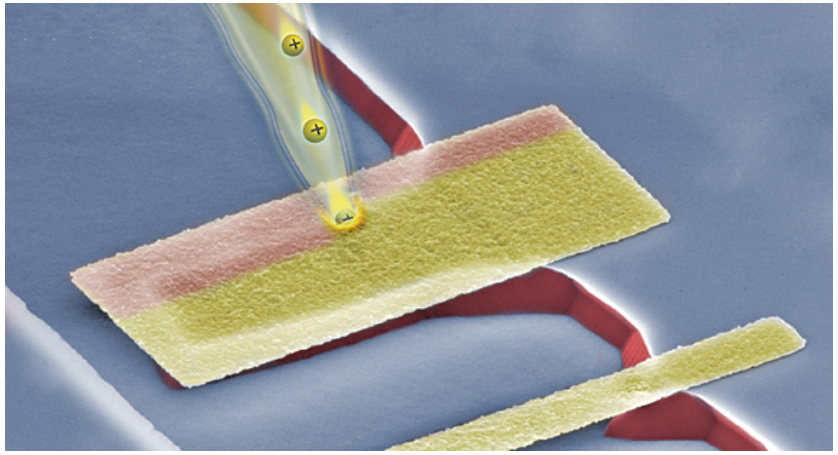
→ World leader in mirco-cell fue

PowerTrekk

→PEM Fuel cell charger

→Electricity from water and salt

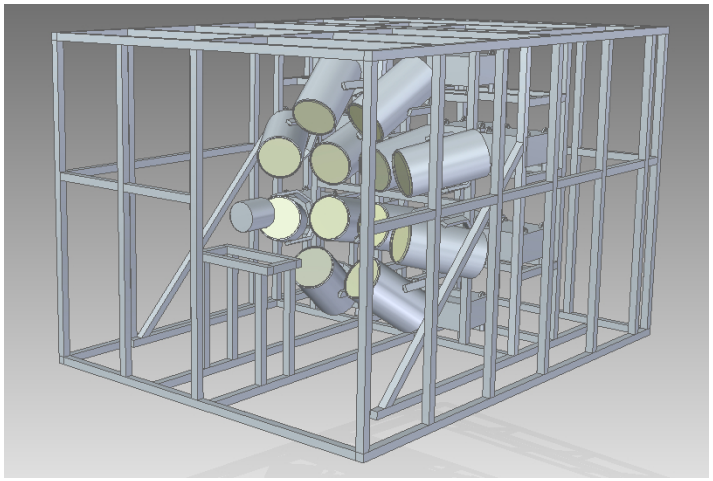
→Focus of Investigation



SOLAR Lab

- Solar Lab Inaugurated on 2105-01-27

SPLAR Lab Facility

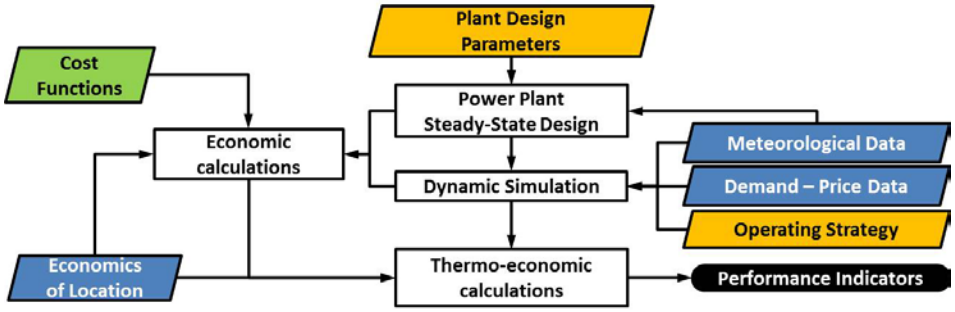


SOLAR Lab

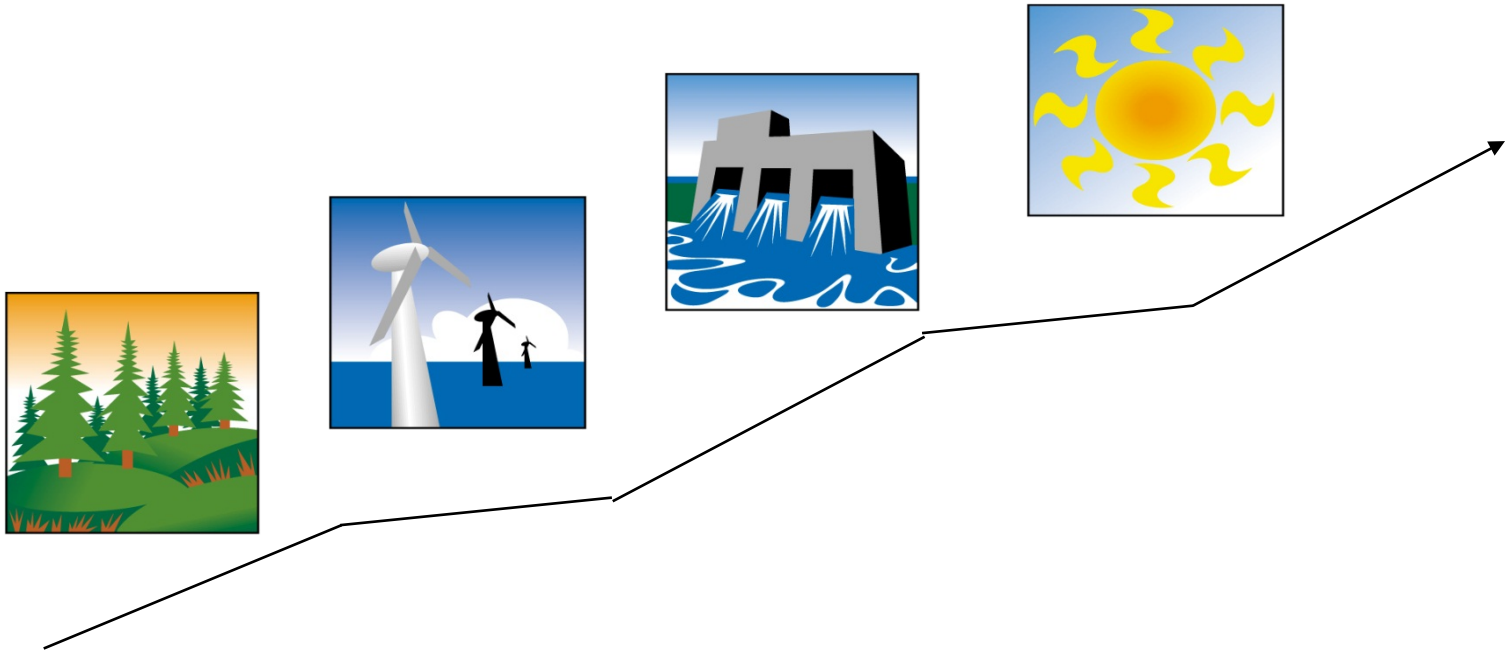
Activities within the CSP group are clustered on four key areas: **Read More**

- High-flux solar gas turbine design and testing,
- High-flux solar Stirling engine design and testing,
- Techno-economic analysis and market studies,
- Thermo-mechanical analysis of solar power plant components,
- Thermal energy storage integration strategies.

In order to learn more details about the CSP group, click on the tabs located at the left



RENE students will:



We address constraints and opportunities on the way to sustainability

- planning and patterns of energy generation and use
- resource competition and management
- development needs and preferences
- infrastructure and technology systems options
- policies and incentives to change and innovate
- financial sources and investment opportunities
- institutional challenges

RENE at KTH is focus on Hybrid Energy Systems

	ECTS	Sem. 1	Sem. 2
Specialization	**60**		
Compulsory courses	48	18	30
Elective courses			

Code	Courses	ECTS	Sem.	Type
MJ2494	Polygeneration	9	1	Mandatory
MJ2496	Innovation & Entrepreneurship in Sustainable Energy Engineering	6	1	Elective
MJ2409	Applied Energy Technology, Project Course	9	1	Mandatory
Elective courses				
MJ2495	Experimental Energy Technology	8	1	Elective
MJ2429	Turbomachinery	6	1	Elective
MJ2470	Climate Change Mitigation Tools	6	2	Elective
MJ2424	Computational Methods in Energy Technology	6	2	Elective
MJ2473	Energy Policies	6	1	Elective
Master Thesis		30		
	Master Thesis	30	2	Mandatory