



# Sustainability

## International Summer School

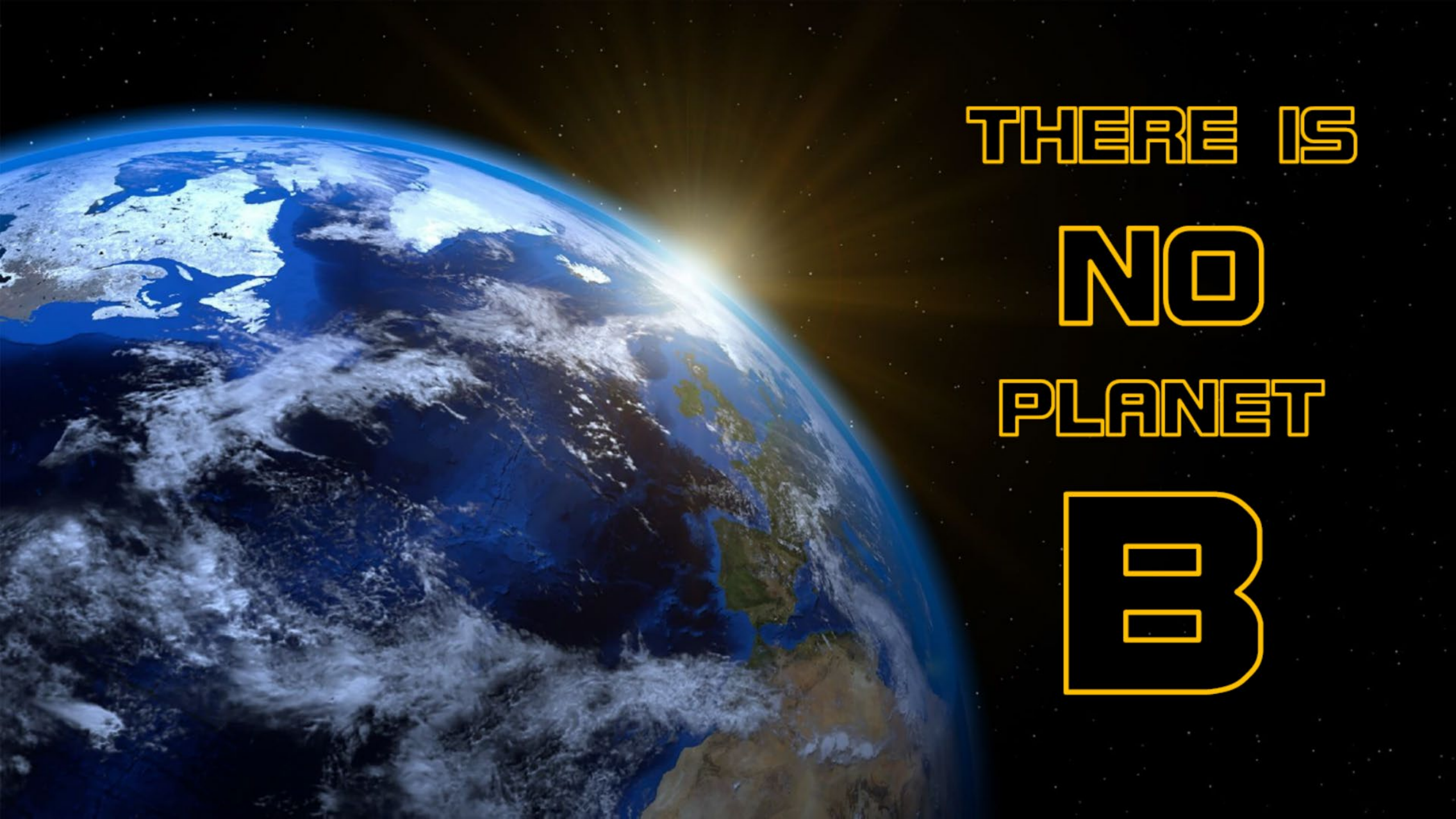
OST – Campus Rapperswil

### to the benefit of the environment

Prof. Dr.-Ing. habil. Michael Kauffeld

Institute of Refrigeration, Air Conditioning and Environmental Engineering

Karlsruhe University of Applied Sciences



THERE IS

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# Time Schedule – 25 to 29 July 2022 in Rapperswil at OST



## Basic concept:

Teaching in the morning from 08:00 to 13:00

Activities at and on the water in the afternoon from 14:00 to 17:30

Keynote lectures in the evening from 19:00 to 20:30 – open to the general public

Monday 25.07.2022 Sustainability						
Time	Responsible	No.	Theme	Subject	Room	Remarks
08:00 - 08:45	Alex Simeon + Michael Kauffeld	L1	Lecture	Opening and welcome	OST	
08:45 - 09:30	Michael Kauffeld	L2	Lecture	InspirING@	OST	
09:30 - 09:50				Coffee Break	OST	
09:50 - 10:35	Doris Hauser, forma futura (HSR graduate)	L5	Lecture	Financing Sustainability	OST	Doris was the first female electrical engineering student at OST
10:35 - 11:20	Doris Hauser, forma futura (HSR graduate)	L6	Workshop	Financing Sustainability	OST	
11:20 - 11:30				Break	OST	
11:30 - 12:15	Steffen Kinkel, HKA	L3	Lecture	Sustainable Supply Chains	OST	supported by Astrid Hügli --> Jeans production with strings
12:15 - 13:00	Steffen Kinkel, HKA	L4	Lecture	Sustainable Supply Chains	OST	
13:00 - 14:00	Mensa			Lunch break	Mensa	
14:00 - 14:45	Lars Handschin	A1	Activity	Shiatsu - The Art of Touch	Lakeshore	In case of rain, in the Aula
14:45 - 15:30	Lars Handschin	A2	Activity	Renewable Energy for body and soul	Lakeshore	In case of rain, in the Aula
15:30 - 16:00				Coffee break	Shore	
16:00 - 16:45	Lars Handschin	A2	Activity	Renewable Energy for body and soul	Lakeshore	In case of rain, in the Aula
16:45 - 17:30	Lars Handschin	A2	Activity	Renewable Energy for body and soul	Lakeshore	In case of rain, in the Aula
17:30 - 19:00	all		Relax	Break + Dinner		
19:00 - 19:45	EU Commissioner Mariya Gabriel	KL1	Keynote Lecture	the New European Bauhaus	OST	
19:45 - 20:30	Robby Lange, Peep Vain or c/o Hans-Peter Voss or Patr	KL2	Keynote Lecture	The power of believing	OST	

# Time Schedule – 25 to 29 July 2022 in Rapperswil at OST



Tuesday		26.07.2022		HVAC&R + Solar		
Time	Responsible	No.	Theme	Subject	Room	Remarks
08:00 - 08:45	Michael Kauffeld	L7	Lecture	Sustainable Refrigeration and Heat Pump Technology	OST	
08:45 - 09:30	Michael Kauffeld	L8	Lecture	Sustainable Refrigeration and Heat Pump Technology	OST	
09:30 - 09:50				Coffee Break	OST	
09:50 - 10:35	SPF	L9	Lecture	SophiA: Solar Energy	OST	
10:35 - 11:20	Oliver Schmid	L10	Lecture	SophiA: Solar refrigeration	OST	
11:20 - 11:30				Break	OST	
11:30 - 12:15	Dani Carbonel	L11	Lecture	TRI-HP: Heat pumps with natural refrigerants	OST	
12:15 - 13:00	Daniel Philippen	L12	Lecture	TRI-HP: Heat pumps with natural refrigerants	OST	
13:00 - 14:00	Mensa			Lunch break	Mensa	
14:00 - 14:45	Pfadfinder / Scouts - to be confirmed	A5	Activity	Sustainability & education: Build wooden rafts	Lakeshore	
14:45 - 15:30	Pfadfinder / Scouts - to be confirmed	A6	Activity	Sustainability & education: Build wooden rafts	Lakeshore	
15:30 - 16:00				Coffee break	Shore	
16:00 - 16:45	Pfadfinder / Scouts - to be confirmed	A7	Activity	Raft race	Obersee	
16:45 - 17:30	Pfadfinder / Scouts - to be confirmed	A8	Activity	Raft race	Obersee	
17:30 - 19:00	all		Relax	Break + Dinner		
19:00 - 19:45	My Climate - to be confirmed	KL3	Keynote Lecture	Financing sustainable projects	OST	
19:45 - 20:30	My Climate - to be confirmed	KL4	Keynote Lecture	some swiss examples	OST	
Wednesday		27.07.2022		Sustainable Water		
Time	Responsible	No.	Theme	Subject	Room	Remarks
08:00 - 08:45	Jan Hoinkis	L13	Lecture	SophiA Water purification	OST	
08:45 - 09:30	Jan Hoinkis	L14	Lecture	SophiA Water purification	OST	
09:30 - 09:50				Coffee Break	OST	
09:50 - 10:35	Heike Hödt	L15	Lecture	SophiA steam production	OST	
10:35 - 11:20	Heike Hödt	L16	Lecture	SophiA steam production	OST	
11:20 - 11:30				Break	OST	
11:30 - 12:15		L17	Lecture		OST	
12:15 - 13:00		L18	Lecture		OST	
13:00 - 14:00	Mensa			Lunch break	Mensa	
14:00 - 14:45	Susanne Schellenberger, OST + Elke Petersson, HKA to be determined	W1	Workshop	Water engineering workshop	Lakeshore	Renaturing creeks and rivers
14:45 - 15:30	Susanne Schellenberger, OST + Elke Petersson, HKA to be determined	W2	Workshop	Water engineering workshop	Lakeshore	Renaturing creeks and rivers
15:30 - 16:00				Coffee break	Shore	
16:00 - 16:45	Susanne Schellenberger, OST + Elke Petersson, HKA to be determined	W3	Workshop	Water engineering workshop	Lakeshore	Renaturing creeks and rivers
16:45 - 17:30	Susanne Schellenberger, OST + Elke Petersson, HKA to be determined	W4	Workshop	Water engineering workshop	Lakeshore	Renaturing creeks and rivers
17:30 - 19:00	all		Relax	Break + Dinner		
19:00 - 19:45	Felix Keller - to be confirmed	KL5	Keynote Lecture	Galciers in times of climate change	OST	
19:45 - 20:30	Felix Keller - to be confirmed	KL6	Keynote Lecture	Galciers in times of climate change	OST	

# Time Schedule – 25 to 29 July 2022 in Rapperswil at OST



Thursday		28.07.2022		Hydro Power + energy storage		
Time	Responsible	No.	Theme	Subject	Room	Remarks
08:00 - 08:45		L19	Lecture	pumped hydro	OST	
08:45 - 09:30		L20	Lecture		OST	
09:30 - 09:50				Coffee Break	OST	
09:50 - 10:35	IET Institute for Energy Technology, OST	SV1	Site visit	Power to X	OST	
10:35 - 11:20	IET Institute for Energy Technology, OST	SV2	Site visit	Power to X	OST	
11:20 - 11:30				Break	OST	
11:30 - 12:15	SPF Michel Haller, OST	L23	Laboratory	aluminium hydroxide	OST	
12:15 - 13:00	SPF Michel Haller, OST	L24	Laboratory	other energy storage at OST	OST	
13:00 - 14:00				Lunch break	Mensa	
14:00 - 14:45	Michael Kauffeld + sponsors	M1	Meeting	Speed Dating with Sponsors	OST	
14:45 - 15:30	Michael Kauffeld + sponsors	M2	Meeting	Speed Dating with Sponsors	OST	
15:30 - 16:00				Coffee break	Shore	
16:00 - 16:45	Kanu Club RJ - to be confirmed	A15	Activity	Dragon boats	Lake	Sail with dragon boats to Ufenau; return with Hensa ship
16:45 - 17:30	Kanu Club RJ - to be confirmed	A16	Activity	Dragon boats	Lake	Sail with dragon boats to Ufenau; return with Hensa ship
17:30 - 19:00	all		Sail to Ufenau	Break + Boat tour	Lake	
19:00 - 19:45	all	D1	Dinner	Have fun, enjoy delicious food, healthy food and	Lützelau	Music from Funkaroo
19:45 - 20:30	all	D2	Dinner	inspiring music	Lützelau	Return with Dragon boats or Lützelau shuttle
Friday		29.07.2022		Wind Energy		
Time	Responsible	No.	Theme	Subject	Room	Remarks
08:00 - 08:45	IET Institute for Energy Technology, OST	L25	Lecture	Wind Energy	OST	
08:45 - 09:30	IET Institute for Energy Technology, OST	L26	Lecture	Wind Energy	OST	
09:30 - 09:50				Coffee Break	OST	
09:50 - 10:35	Matthias Stripf, HKA + TU Delft (to be confirmed)	L27	Lecture	Kite Power	OST	
10:35 - 11:20	Matthias Stripf, HKA + TU Delft (to be confirmed)	L28	Lecture	Kite Power	OST	
11:20 - 11:30				Break	OST	
11:30 - 12:15	NN	L29	Lecture	Kite sailing for freight ships	OST	alternative Honduras freight sailer organisation
12:15 - 13:00	NN	L30	Lecture	Kite sailing for freight ships	OST	alternative Honduras freight sailer organisation
13:00 - 14:00				Lunch break	Mensa	
14:00 - 14:45	Astrid Huegli MSc ETH EEIT	W5	Workshop	Build up the Climate Fresk in a team	OST	4-8 participants per team (Astrid was one of the first female mechanical engineering students at OST)
14:45 - 15:30	Astrid Huegli MSc ETH EEIT	W6	Workshop	Build up the Climate Fresk in a team	OST	4-8 participants per team
15:30 - 16:00				Coffee break	Shore	
16:00 - 16:45	Astrid Huegli MSc ETH EEIT	W7	Workshop	Summarize what you have learned and choose a title for your fresk	OST	4-8 participants per team
16:45 - 17:30	Astrid Huegli MSc ETH EEIT	W8	Workshop	See where we stand and share feelings, thoughts, ideas and actions to create a better future	OST	4-8 participants per team
17:30 - 19:00	all		Relax	Break + Dinner		
19:00 - 19:45	all	S1	Summary		OST	
19:45 - 20:30	all	S2	Summary		OST	

# Partners involved – so far



Hochschule Karlsruhe  
University of Applied Sciences  
Fakultät für Maschinenbau und Mechatronik

## ecosail Karlsruhe Projekt Kick-Off 2021/2022



ecosail Karlsruhe




# SOPHIA

Sustainable Off-grid solutions for Pharmacies and Hospitals In Africa

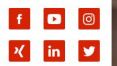
Hochschule Karlsruhe  
University of Applied Sciences

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## Green Technology Management




100 Jahre YCR

Startseite Verein Aktuelles Jubiläum Regatten Galerie Kontakt Für Mitglieder




### AKTUELLES



### YCR TRAINING

JUNIORENTRAINING
STUDENTENTRAINING
JAHRESANLAGE
...


### 100 JAHRE YCR



Yacht Club Rapperswil  
1922 - 2022

Suche

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OST  
Ostschweizer  
Hochschule

Campus Rapperswil-Jona

Sponsors are welcome



# Meet your future green tech employees

40 international students enthusiastic about sustainability



# Sponsors so far



## Germany

- EU Erasmus c/o HKA
- Kälte Eckert
- Thermofin
- Verbund der Stifter an der HKA



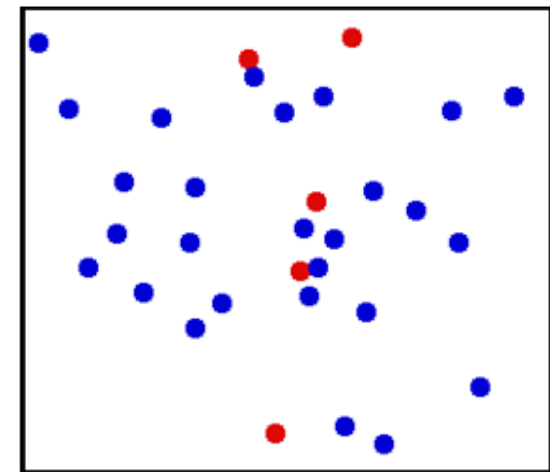
# The Future needs YOU



No greenhouse gas emissions,  
no other impact on environment,  
high energy efficiency,  
high reliability,  
inherent safety,  
high product quality.

→ Creative engineers with courage for  
implementing new ideas

**Vision: reversed micro wave oven**



# Questions?



**Prof. Dr.-Ing. habil. Michael Kauffeld**

Institute of Refrigeration, Air Conditioning and  
Environmental Engineering

**HIKA**

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