

Renewable Energy

Personnel:

Dr. MER J. van Herle, ME A2 392, jan.vanherle@epfl.ch Prof. S. Haussener: ME D0 2926, sophia.haussener@epfl.ch Assistants: Part Haussener: Sangram Savant: <u>sangram.savant@epfl.ch</u> Shuo Liu: <u>shuo.liu@epfl.ch</u> Part van Herle: Philippe Aubin: <u>philippe.aubin@epfl.ch</u> Hossein Pourrahmani: <u>hossein.pourrahmani@epfl.ch</u>

Language:

English

References:

- David McKay, Sustainable Energy without the hot air, UIT Cambridge (available on web)
- Kreith and Goswami, editors, Handbook of energy efficiency and renewable energy, Taylor and Francis Group, 2007.

Time and location:

- Lecture Tuesday, 10:15-12:00, INJ218
- Exercise lecture Tuesday, 12:15-13:00, INJ218

Exam:

Written exam in exam period; closed books, only calculator and 10 A4 pages (single sided, or 5 pages double sided) personal summary can be used

Course:

- Material online: moodle.epfl.ch
- Syllabus:

	Lecture Wednesday (10:15-12:00)	Lecturer	Exercise Tuesday (12:15-13:00)
Week 1 (18. 2)	Introduction	SH	Exercise 1
Week 2 (25.2)	Power cycles, ORC, co-generation	SH	Exercise 2
Week 3 (3.3)	Ocean, tidal and wave	JvH	Exercise 3
Week 4 (10.3)	Solar thermal	SH	Exercise 4
Week 5 (17.3)	Solar electricity	SH	Exercise 5
Week 6 (24.3)	Hydrogen	JvH	Exercise 6
Week 7 (31.3)	Storage	SH	Exercise 7
Week 8 (7.4)	Solar fuels	SH	Exercise 8
Week 9 (21.4)	Electrochemical and thermo- electrical conversion	JvH	Exercise 9
Week 10 (28.4)	Geothermal	SH	Exercise 10
Week 11 (5.5)	Wind	JvH	Exercise 11
Week 12 (12.5)	Wind	JvH	Exercise 12
Week 13 (19.5)	Biomass	JvH	Exercise 13
Week 14 (25.5)	Biomass	JvH	Exercise 14