

Summer PhD School Mont-Soleil

12/13th - 17th August 2018

“Field-Based Insights into the Implementation of Renewable Energies”

Program summary

Sunday 12.08 Welcome day

From 16:00 Arrival of participants, registration, accommodation
18:00 Reception and welcome dinner
Dr. Martin Pfisterer, President Société Mont-Soleil, Switzerland

Monday 13.08 Solar energy and its grid integration

09:00 Introduction
Prof. hon. Alfred Rufer, EPFL, Lausanne, Switzerland

09:30 Planning and control of Active Power Distribution Networks
Prof. Mario Paolone, Distributed Electric Systems Laboratory, EPFL, Lausanne, Switzerland

12:30 Lunch

14:00 Swiss Energypark
Michel Hausmann, Managing Director Société Mont-Soleil, Switzerland

15:00 Mont-Soleil PV plant, airborne measuring techniques and life-cycle analysis
Dr. Rudolf Minder, R&D Société Mont-Soleil, Switzerland
Manuel Lanz, Bern University of Applied Sciences, Burgdorf, Switzerland

17:00 Country-style dinner with regional products
21:00 Visit to the Mont-Soleil observatory
Michel Hausmann, Managing Director Société Mont-Soleil, Switzerland

Tuesday 14.08 Components for the grid integration of renewable energies

09:00 Introduction
Michel Hausmann, Managing Director Société Mont-Soleil, Switzerland

09:15 Modular converters for Renewable Energy Sources and Electric Vehicles
Prof. Remus Teodorescu, Aalborg University, Denmark

12:30 Lunch

14:00 Exercises and simulations on modular converters for RES and EV
Prof. Remus Teodorescu, Aalborg University, Denmark

17:00 Excursion and visit to Camille Bloch (chocolate factory), Efficiency in industrial use of energy, Business dinner

Wednesday 15.08 Wind energy and hydropower

09:00 Introduction to wind energy in Switzerland
Dr. Jakob Vollenweider, R&D Société Mont-Soleil, Switzerland

10:00 Advanced techniques to facilitate the development and operation of wind power plants
Dr. Ndaona Chokani, Laboratory for Energy Conversion, ETH Zurich, Switzerland

11:30 Wind assessment in complex terrain
Dr. Saskia Bourgeois, Meteotest, Bern, Switzerland

12:30 Lunch

14:00 Visit to JUVENT windfarm
Dr. Jakob Vollenweider, R&D Société Mont-Soleil, Switzerland

15:30 Introduction to small hydropower in Switzerland
Martin Bölli, Swiss Small Hydro Association, Switzerland

17:00 Excursion and visit to a hydropower plant at the Doubs river, Countryside dinner

Thursday 16.08 Energy storage and advanced technologies for RES

- 09:00 Introduction**
Dr. Rudolf Minder, R&D Société Mont-Soleil, Switzerland
- 09:15 Energy storage – systems and components**
Prof. hon. Alfred Rufer, EPFL, Lausanne, Switzerland
- 12:30 Lunch
- 14:00 Advanced technologies for High Efficiency PV Generators**
Dr. Mathieu Boccard, CSEM / EPFL, Neuchâtel, Switzerland
- 17:00 Visit to Longines (watchmaking company) and Fromagerie Spielhofer (cheese factory) in Saint-Imier, Wind energy and fondue party

Friday 17.08 (Morning) Future perspectives of renewable energies

- 09:00 Introduction and official addresses**
Dr. Martin Pfisterer, President Société Mont-Soleil, Switzerland
Christoph Neuhaus, President of the Government of the Canton of Bern
Patrick Tanner, Mayor of Saint-Imier
- 10:00 Analysis of future power stations in Switzerland**
Prof. Anton Gunzinger, Supercomputing Systems AG, Zurich, Switzerland
- 11:00 Coping with volatility: Meeting the challenges of a disrupted energy world**
Dr. Suzanne Thoma, CEO BKW, Bern, Switzerland
- 12:00 Summary and results of the summer school (with diploma ceremony)**
Prof. hon. Alfred Rufer, EPFL, Lausanne, Switzerland
- 13:00 Lunch
- 14:00 End of the summer school

Post-conference program (optional)

Friday 17.08 (Afternoon) Post-conference program Part I

- 14:30 Transfer to Nidau
- 15:30 Electric aviation**
Prof. Andrea Vezzini, Bern University of Applied Sciences, Biel/Bienne, Switzerland
Steven Dünki, Evolaris Aviation, Nidau, Switzerland
- 17:00 Transfer to Grindelwald
- 19:00 Alpine dinner

Saturday 18.08 Post-conference program Part II

- 09:00 Departure from Grindelwald to Jungfrauoch
- 10:00 Visit to High Altitude Research Station Jungfrauoch and high altitude PV plants**
Prof. Markus Leuenberger, University of Bern, Switzerland
Thomas Schott, Bern University of Applied Sciences, Burgdorf, Switzerland
- Around 12:00 End of post-conference program