Dear Swiss electrical infrastructure actors,

This 1st newsletter for 2018 hosts as feature article a FAQ session on the recently created ResearchGate page of the SCCER-FURIES. This internationally recognised tool for sharing knowledge and publications is expected to further increase the international visibility of our center.

On the highlights section, you can find a new rapid optimal power flow solver for AC power systems solvers, the recent process in the areas of grid integration of pumped hydro storage and PV plants, and an account of the 2nd PV industrial days of BFH-PVLab.

Furthermore, the Swiss industry increases its involvement into SCCER-FURIES. Our community welcomes two new partners, Hive power and DEPSys. These new partners increase to 18 the number of companies contributing to FURIES at a corporate level.

On the sidebar, a selection of events to be held in Switzerland or a neighbour country is included along with important career opportunities.

Best regards and enjoy the reading

Your SCCER-FURIES Management team

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1. Featured article: SCCER-FURIES ResearchGate page

A ResearchGate page has been created following recommendations of FURIES partners and the Executive committee. For any further questions, please do not hesitate to contact the Management office.

Why shall I participate to the SCCER-FURIES ResearchGate page? Are there any benefits for my activities?

ResearchGate (RG) is the academics’ social network with the highest number of active members, including several SCCER-FURIES partners. Partners have pointed out the following benefits for our community:

- **Increase awareness**: By following SCCER-FURIES and other related initiatives, you can stay informed about ongoing activities and trends on your field in Switzerland and abroad respectively.
- **Develop new project**: Research activities and results can reach a wider audience, resulting to new contacts with potential project partners.
- **Increase number of citations**: As a collaborator, you can share the full text of your publications with the above-mentioned extended community of peers (See question 2 for clarifications).
- **Unblocks your research**: You can ask questions on your specific research topic and get feedbacks for your ongoing work and publications.

**Am I allowed to share my publication?**

According to the publishing agreements conditions of journals such as Elsevier and IEEE, authors of publication withhold the rights to publish the preprint version without the need of permission. Moreover, you are allowed to share a copy of an advanced version of your paper privately with a peer by e-mail. For further details, and before you upload it to your profile, please check the specific agreement of your journal.

**How can I become member of the ResearchGate page of FURIES and contribute?**

Participants can be Collaborators or Followers. The former includes those that contribute to the SCCER-FURIES’ work plan and in RG will have editing rights while the later includes the extended SCCER-FURIES community that will be informed on the progress of...
centre’s activities. Those collaborators that are interested in being included as such in the FURIES RG page should accept the related invitation that will receive in the coming days. Once you publish a new publication please consider of assigning under the FURIES project. Other Swiss power grid stakeholders are most welcome to follow our page by going to our ResearchGate project and click “Follow”.

2. Annual Conference: The future of the Swiss electrical infrastructure

5th SCCER-FURIES Annual Conference
22 October 2018 - SwissTech Center, EPFL, Lausanne
This event will bring together 180 experts working on power grids from the academic, private and public sector in Switzerland. Participants will have the opportunity to get insights on the research on smart grids in Switzerland; meet the experts behind innovation products/solutions and explore potentials for new collaborations. Register here, book the date and further information will come in due time.

3. New partners
SCCER-FURIES is pleased to announce that 2 companies joined the centre as new Strategic partners including:

- **Hive power** - a FURIES - derived start-up focused on the use of blockchain technology in the field of electricity.
- **DEPSys** - a well - known to FURIES community start-up focused on the development and deployment of grid monitoring solutions.

The Board and the Management team welcome the new members and is looking forward to a fruitful partnership.

4. Highlights

4.1 New Project: MV emulation platform for pumped hydro storage plants
The EPFL-Power Electronics Laboratory (WP3 contributor) started a SFOE-funded project on the

7. Open Positions

Senior researcher position in Energy Informatics, Idiap Research Institute. Martigny (Valais/Switzerland)

SB - Postdoctoral Fellow in Energy Systems. Energypolis Buildings of EPFL Valais/Wallis in Sion
establishment of a MV emulation platform for pumped hydro storage plants (PHSP). This platform will allow testing the interaction of the PHSP with the grids under various operating modes. It will be realized at medium voltage of 6kV and with rating of 0.5MVA.

4.2 Project results: Multi-period optimal power flow solver for AC power systems with storages
The USI-Institute of Computational Science and the ETHZ-Research Center for Energy Networks (both WP2 contributors) developed BELTISTOS solver, a multi-period optimal power flow solver for AC power systems with storages. Compared to standard AC-OPF methods, BELTISTOS dramatically reduces the solution time and memory requirements.

4.3 Project results: PV Hosting Capacity (PVHC) Estimator plugin for PowerFactory
CSEM developed an open-source and freely available tool for the estimation of the PV hosting capacity of power grids under specific solar configurations and user-defined control algorithms. Based on the PVHC tool, CSEM also demonstrated that optimized inverter control can significantly increase the hosting capacity.

4.4 Thematic Workshop: 2nd PV industrial day
More than 120 representatives from the Swiss PV industry followed the 19 technical presentations given by PV LAB staff & Prof. Urs Muntwyler (head of PV LAB) during the 2nd PV Industry Day on 24 January 2018. The annual event aimed at industry is an official SCCER-FURIES knowledge & technology transfer and capacity building activity and is organized by BFH / PV LAB in Burgdorf. The 3rd PV Industry Day is scheduled for 23 January 2019. Participation for SCCER-FURIES Partners is free of charge.

4.5 Recent progress @ BFH-PVLab
Accreditation
- BFH PV LAB is now an accredited “PV Inverter Test Laboratory”
- Test protocol for PV battery systems (Effizienzleitfaden) now published!
- Automatic measurement system of PV battery systems 24 hours / 7 days test procedure was developed
- High voltage test site is ready for industry collaboration

For further information about accreditation activities

8. Social Media
Stay tuned. Follow FURIES' progress via our social media pages.
@ BFH-PVLab please follow the link and/or contact Prof. Urs Muntwyler.

Research activities

- Studies on the SCCER Demonstrator Mont-Soleil prove that the impact of rapid changes in solar irradiance is much lower on a large PV area than an individual PV module.
- BFH / PV-Lab entered in a partnership with the city of Burgdorf (and companies Adaptricity and Localnet) in order to develop scenarios for the planning of the power grid of the city of Burgdorf until 2050; the research will incorporate SCCER-FURIES results from both WP1 and WP4.

For further information about research activities
@ BFH-PVLab please follow the link and/or contact Prof. Urs Muntwyler.

5. Funding Opportunities

5.1 European

- **InnoEnergy**  
  Deadline: 07.05.2018

5.2 Swiss National Science Foundation (SNSF)

- **Doc.Mobility**  
  Deadline: 01.03.2018
- **Early Postdoc.Mobility**  
  Deadline: 01.03.2018
- **Project funding**  
  Deadline: 01.04.2018
- **Second call for proposals for BRIDGE Discovery (Letter of Intent)**  
  Deadline: 16.04.2018
- **Indo-Swiss Joint Research Programme: Call for Joint Research Projects**  
  Deadline: 16.04.2018
- **Postdoc.Mobility**  
  Deadline: 01.08.2018

5.3 Swiss Federal Office of Energy (SFOE)

- **Grids R&D Programme**  
  Deadline: Open deadline

SFOE Guide for fundings:
• Opportunities for innovation support

5.4 Innosuisse R&D projects

• With implementation partners
  Deadline: Open deadline
• Without implementation partners
  Deadline: Open deadline

If you need any support in preparing the proposal such as finding the appropriate partner for the implementation of your idea, filling the form and pointing out links with ongoing activities in FURIES, please do not hesitate to contact the Management office.