



What is SWEET?

NEWS

EVENTS

OPPORTUNITIES

FEATURED ARTICLE

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What is SWEET?



Over Innosuisse **SCCER** the years, program has contributed to achievement of the Swiss energy strategy 2050 (ES2050), through capacity building at the academia as well as transfer of knowledge and technology to the market. Indeed, according to the Innosuisse Programme report, in 2019 there were 1386 researchers involved in SCCER activities. Moreover, 139 new partnerships were initiated with the private and public sector. The maintenance and further enhancement

of the SCCER program's momentum is essential for the ES2050 achievement and, therefore, the aim of new initiatives, put together by federal offices, such as the Swiss Federal office of Energy (SFOE) and the Innosuisse. On February 26th, 2020, the Federal

Council approved a new instrument

prorposed by SFOE for the promotion of energy research, the **SWEET** (Swiss Energy be needed. research for the Energy Transition). SWEET aims to accelerate innovation by supporting porfolios of interrelated, trandisciplinary addressing specific research projects topics. **NEWS**

of different technology readiness levels, and the most promising of them should reach the market after 6-8 years. The close collaboration of research institutes with the swiss private and public sector is essential. SWEET program will last 12 years (2021-2032) with competitive calls over the first 6 years. For more information, please visit the SFOE <u>SWEET webpage</u>. For further funding opportunities, such as the upcomng Innosuisse funding instrument Flagship, have a look on the related section below and stay tuned on our LinkedIn group. We encourage SCCER-FURIES partners to reach out to the responsible offices of

Such projects portfolios will include solutions

energy funding agencies in order to ensure seamless continuity of their activities. The SCCER-FURIES Management office remains available for any support that might

Contact SCCER-FURIES

SNSF NRP70 and NRP 71 summary report on energy networks "Switzerland's energy grids are reliable and stable but they are

facing new challenges." This is the key outcome of the energy network activities under the NRP 70 and 71 programmes of the Swiss National Science Foundation (SNSF). Between 2012 and 2019 in the frame of these programmes,

16 FURIES' partners were involved in 17 projects related to any aspect of power grid, from components, including both power electronics and renewable integration, to grid control and electricity market scenarios. **Projects' summary**



Grid impact from EVs in a 100% decarbonized world of 2050

What is the impact of the EVs on the power

infrastructure of the future? This is the research question that the BFH-PVLab

New Quasi-2-Level Operated Flying Capacitor Converter



address through a series of activities, including: (a) the study "SimZukunft" 2050 at the City of (b) active involvement in the IEA Task 17 "PV in transportation"; (c) inauguration of a New PV research-, test- and

demonstration plant in Burgdorf; and (d) development of a Winter electricity PV test facility in Adelboden.

Contact BFH-PVLab

2-Level

120

100

80

performing better than the conventional solution. Indeed, compared to a conventional 2-Level implementation with direct series-connected and ≥ simultaneously switched power transistors, Q2L-FCC has output voltage spectrum with lower harmonic energies at HF. Enables reduced partial discharge amplitudes, dielectric loses and EMI emissions, and mitigates the transformer/ inductor/ cable/ load resonances impacts.

BFH-PVLab's recent activities

ETHZ-PES lab developed a 40kV / 300kVA Quasi-

2-Level Flying Capacitor Converter (Q2L-FCC)

On the February 12th, U.S. Department of Energy has announced the leaders of the Grid Optimization Competition. Our colleague from Prof. Schenk's team in USI, PhD student Juraj

Access Summary

60 63 W 40 Q2L 20 $2 \cdot 10^{7}$ 2.10^{6} 2.10^{4} 2.10^{5} f(Hz)**Contact ETHZ-PES USI** partner wins 1st position in international competition

(c) Dielectric Losses

109 W

Kardos is member of the winning team. Winners will share a total of \$ 3.4 million, to be used in further development of their approaches and technology adoption to the changing industry



equilibrium of PhD students.

cancelation.

FUNDING

requirements. Kudos to M. Kardos! **Contact USI-ICS** Female scientists Over the years, the number of SCCER-FURIES female scientists has been almost doubled with 3

thank our 37 female colleagues for all their contribution and commitment to the project, on the way to meet established goals. **EVENTS** Considering current situation of COVID-19, most

of our partners, namely EPFL-DESL, EPFL-PEL and ETHZ-PSL, reaching almost a 50/50 gender

For the International Women Day, celebrated worldwide on 8th of March, we would like to

For more and up to date 7th SCCER Mobility Annual Conferencel, information, please follow 30 June 2020; @ ETH Zurich (ML E-floor) PHD Summer School Mont-Soleil, us on our LinkedIn page. 10-15 August 2020; organized by BFH & EPFL 4th International Workshop DynPower

7 September 2020; @ Casinotheater in Winterthur SCCER BIOSWEET Annual Conference 10 September 2020 **OPPORTUNITIES**

below, but please stay aware of some potential

Mark Your Calendar of the events, in the near future, has been **FURRIES** suspended. Some later events are enlisted



(MSCA) Research and Innovation Staff Exchange (RISE) 2020

Deadline 28.04.2020 (SNSF) Sinergia – interdisciplinary, collaborative

Deadline 1.06.2020 (SNSF) Practice-to-Science

(SNSF) Call for PRIMA grants (women researchers) Deadline 1.11.2020

Deadline: 15.07.2020

and breakthrough

(SFOE) SWEET - SWiss Energy research for the **Energy Transition**

Deadline: to be defined in 2020

(Innosuisse) Flagship projects

SCCER-FURIES LinkedIn

Deadline: first call in summer 2020

Don't forget to follow us on our SCCER-FURIES LinkedIn account.

PhD Position: Silicon Carbide Power **Electronics**

Optoelectronic Devices

Dozent/in und Projektleiter/in für

intelligente Energiesysteme 80-

Ingénieur d'Exploitation 100% (F/H) @RomandeEnergie

CAREER

@EPFL

<u>100%</u>

@HSLU

@ETHZ Dozierende/-r für dezentrale

@ZHAW

thermische Energiesysteme (100 %)

Knowledge Hub Would you like to have more information

about the SCCER-FURIES?

and Projects' Outcomes on our Knowledge

You will find more about FURIES' Partners, Projects

You will find there news and info about new projects and partners, job & funding opportunities, as well as events worth attending. Follow us

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