



**UNIVERSITÉ  
DE GENÈVE**

**INSTITUT DES SCIENCES  
DE L'ENVIRONNEMENT**

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CYCLE DE FORMATION ÉNERGIE – ENVIRONNEMENT

SÉMINAIRE 2017-2018

**« Power-to-Gas : Key of the Energy Transition ? »**

**Markus FRIEDL**

*HSR*

**Jeudi 3 mai 2018 à 17h15**

**Exceptionnellement en salle B002 !**

**Rez-de-chaussée – Uni Carl Vogt**

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## **L'orateur**

Markus Friedl obtained a degree in Mechanical Engineering in 1994 from ETH Zürich. He did experimental research in the domain of multiphase-flow at the Institute of Fluid Dynamics at ETH Zürich and received a Dr. in technical science in 1998. He joined the British industrial group IMI, where he spent time in England and the US and was part of the group's research team "IMI-Vision".

Between 2004 and 2011 he worked for awtec as development engineer, project manager, member of the board and later as partner and helped to grow the company from 5 to 21 employees.

Since 2011 he has been Professor for Thermodynamics and Fluid Dynamics at the IET Institute for Energy Technology at HSR University of Applied Science in Rapperswil. Since 2013 he has been the head of the institute. He has built up a competence centre in the practical application of power-to-gas systems.

## **La conférence**

Power-to-Gas is a new technology allowing to transform renewable electricity into gas, i.e. hydrogen or methane. Power-to-Gas has become a buzzword over the last years in relation to the transition to a renewable energy supply. The talk addresses what Power-to-Gas is, its state of the art and why it is important for the transition towards a renewable energy supply.

Renewable electricity from solar and wind has become very cheap in recent years. Because the electricity is not generated at the same time it is consumed, storage is considered the important task that still remains to be solved.

Furthermore, electricity is only one fourth of Switzerland's final energy consumption. The energy transition has to deal with the other 75 % of our energy need as well, which today mostly consists of fossil liquids and gases. Power-to-Gas can play an important role in this transition, since it is the only technology offering large amounts of seasonal storage capacities. It can help to stabilize the electricity grid and at the same time to produce sustainable gas which can replace fossil sources.