

# Solar Technology is famo(u)s



the **mobile Solar- and Project Trailer** from **f.a.s.t.** is equipped with basic material and media for lessons and school-projects, which are related to topics of “renewable energy”. The activities can be adopted according to the class level.

Slides, Videos, OHP foils and experiments support the individual needs of the students. A balance between theory and praxis enables the students to learn through practical experience and integrate their knowledge supported by appropriate media.



**Förderverein für Angewandte Solar-technologie e.V.**

Rolf Behringer, Haierweg 27, 79114 Freiburg

**Tel./Fax.: 0761-1373680**

**e-mail: [sun@robeh.de](mailto:sun@robeh.de)**

## Why the mobile Solar Workshop **famos**?

The use of Solar Technology has increased tremendously during the last two decades. Solar Technology has created its own industrial branch. Therefore it is important to prepare the young generation to become users as well as professional workers and scientists in the future.

In the sense of

„**Think Global – Act Local**“ we want to provide knowledge and alternatives to act towards a sustainable energy management.

We have to understand the global context of energy consumption and energy distribution, to assure an energy supply, which can take the global needs into consideration.

To keep our living standards and to increase the living conditions of the disadvantaged societies without destroying our natural resources is a possible strategy for a peaceful and sustainable future.

### Projects from Grade 5 on:

**famos** can enrich the renewable energy related subjects from Grade 5 on.

**famos** can take the actual knowledge of a class into consideration and offer an appropriate programme.

The concept of **famos** is balanced between theory and praxis.

There is no previous knowledge needed to implement a **famos** project into a curriculum.

**famos** projects can mean short sequences during a day or a class project of several days.

## Equipment of **famos**

### Components

- different Stirling models
- Parabolic Mirrors
- Parabolic Cookers
  
- Solar Stoves
- Flat plate Collectors
- PV Modules
- Pyranometer
- Measuring Equipment
- Solar cells, Motors, Resistors
- Different Consumers

### System Components

- Solar Home System ( 400Wp)
- Grid integrated PV-System (ca. 400Wp)
- Hotwater-Kollektor (incl.80 Liter Tank)
  - with PC-Data logger
- Solar set for experiments
- Solar stove assembly sets
- Solar dryer
- Parabolic cooker with tracking system
- Flat plate collector-models
- Models/experiments to hydrogen technology
- Solar-hydrogen technology car (toy)
- Polaroid camera/Digital camera

### **Solar thermal Devices:**

Absorption, measuring of Temperature, Heat Transfer, Expansion through Heat and optical Appearance.

Assembly of a Solar Stove and preparing food by the means of the sun.



Mirrors, Lenses, Stirling Engine



Assembly Set of a Solar Stove

### **Experiments with Photovoltaic:**

- Solar Cells connected in rows and parallel
- direct- and alternating current,
- basics of electric circuits,
- Solar Cells connected to consumers
- Solar Toys for kids
- Solar Home System

