

# ZEE NEWSLETTER 03/2011



**UNI  
FREIBURG**

**ZEE** Zentrum für  
Erneuerbare Energien



**Dear Members and Friends of ZEE,**

**Right at the beginning of the winter term we would like to inform you about the newest developments of the ZEE and its activities with this newsletter.**

**The ZEE Team**

***Prof. Dr. Gerhard Oesten, Dr. Ramchandra Bhandari, Stefan Adler,  
Regine Nitz***

**07.11.2011**

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**ECOfit**

**Work Green**

**GREEN e.V.**

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## MSc Renewable Energy Management (REM)

We are looking forward to welcome 28 new REM students from 17 countries. The orientation days took place on 20th/21st October 2011, the new courses started on 24th October 2011. We selected our new REM students from 310 applications from 50 countries worldwide. The share of women (46%) will be higher than ever before.

**REM** M.Sc. Renewable  
Energy Management

[www.rem.uni-freiburg.de](http://www.rem.uni-freiburg.de)



## Master Online Photovoltaics

The Master Online Campus Phase took place from 26th – 29th October 2011 at Herderbau with workshops, experiments and exams for 8 Master Online students in 3<sup>rd</sup> Semester and opening lectures for 11 new Master Online students (1<sup>st</sup> semester).

Master  
Online   
Photovoltaics

[www.pv-master.com](http://www.pv-master.com)

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## GRADUATE SCHOOL KleE

The post graduate programme „Small scale renewable energy systems“, (abbr. KleE) with 14 postgraduate scholarships officially started on 1st July 2011. During a four day enclosure in black forest from 15th to 18th November 2011 all scientific issues will be discussed in detail within the PhD student group and then finally balanced with the professors.

The topics, supervisors and PhD students are listed below:

1. Acceptance of renewable energy in society, as well as an analysis and optimization of consumer behaviour (Prof. Spada) – Mr. Liridon Korcaj
2. Energy agents in user surroundings of smart homes (Prof. Weber) – Mr. Gregor Rohbogner
3. Gas sensors for safe operation of biogas plants (Prof. Wöllenstein) – Mr. Janosch Kneer
4. Energy generation and energy storage with fuel cells (Prof. Reinecke) – Mr. Florian Bükler
5. Nanostructuring of photovoltaic elements (Prof. Zacharias) - Mrs. Anastasia Zelenina
6. Thermo-hydraulic optimization of energy supply based on ambient energy as a heat source and sink (Dr. Henning) – Mr. Dominik Wystrcil
7. Market design and potentials for added value for decentralized small-scale energy systems based on renewable energy (Prof. Oesten, Dr. Ruppert-Winkel) – Mr. Simon Funcke
8. Economic requirements for technology development of small-scale energy systems (Prof. Bollin) – Mr. Jesus da Costa Fernandes
9. Signal theoretic system theory for optimization of distributed systems (Prof. Treffinger) - Mr. Satya Goppisetty
10. Wireless and energy autarkic sensor systems for control, regulation and optimization of renewable energy sources (Prof. Reindl) – Mr. Pascal Benoit

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11. Opto-Powered Microsystems: Development and Demonstration of Applications (Prof. Reindl) – Mr. Harshang Shah
12. Higher predictive regulation and control systems for automatic operation optimization of renewable energy (Prof. Bollin) - Mr. Martin Schmelas
13. Development of wireless ultra-low-power sensor systems for the analysis and optimisation of energy management (Prof. Jansen) – Mr. Mayukh Bhattacharyya
14. Development of an IT-based communication structures and system architecture for new types of energy supply networks (Prof. Christ) – Mr. Simon Fey

[www.klee.uni-freiburg.de](http://www.klee.uni-freiburg.de)

## **ECOfit**

ZEE and “Arbeitskreis Nachhaltige Uni” are taking part in the ECOfit project with the “Herderbau” building. ECOfit is a support programme for corporate environmental protection funded by the federal state government. The “Herderbau” building is typical for the old buildings amongst the 159 buildings of the University of Freiburg, results from this project will be the starting point for transfer of measures/actions suitable for all university buildings. The goal is to improve the environmental impact of an enterprise by assessing the actual situation and develop measures to e.g. save energy, reduce water consumption, reduce CO<sub>2</sub>-emissions etc. After successful completion of all steps of the ECOfit process a certificate is handed out finally.

<http://www.um.baden-wuerttemberg.de/servlet/is/10046/>



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## WORK GREEN – Karriereforum Erneuerbare Energien“ -28<sup>th</sup> January 2012

The first job fair WORK GREEN organized by students of the 3<sup>rd</sup> semester as their “Student Organized Event” in January 2011 was a big success. Some of the students of the next REM generation decided to carry on and therefore founded a registered association called GREEN e.V.. The next WORK GREEN will take place at 28<sup>th</sup> January 2012 at Mensa I in the heart of the city. Ten companies already booked a stand. More information can be found under: [www.workgreen.eu](http://www.workgreen.eu)



## GREEN e.V.

G.R.E.E.N. e.V. - the Global Renewable Energy Education Network - supports the transition to an energy supply from 100% renewable sources, as well as the decentralization and democratization of energy markets. To help realize this goal, G.R.E.E.N. e.V. has set before itself the tasks of supporting, informing and connecting international students and interest groups in the field of renewable energy. Founded in August 2011 by students from the Albert Ludwig University of Freiburg’s Centre for Renewable Energy, G.R.E.E.N. e.V.’s primary focus lies currently on regional projects aimed at enhancing the interconnections between and the education of students. Already, G.R.E.E.N. e.V. has brought together members from North- and South America, Europe, and Asia. On January 28th, 2012, students, young professionals, and companies from the field of Renewable Energy will converge on Freiburg. The impetus is provided by WORK GREEN 2012, the Career Forum on Renewable Energy. Organized by G.R.E.E.N. e.V. in close partnership with the Centre for Renewable Energy and Studentenwerk Freiburg and true to the goals of G.R.E.E.N. e.V., WORK GREEN 2012 will



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bring together students and experts from the Renewable Energy sector. Further projects (such as workshops, excursions and panel discussions) will be organized in co-operation with representatives from relevant political and economic spheres. Already underway are the excursion "Renewable Roadtrip" and the periodic information and networking events "Green Beer".

[www.green-ev.org](http://www.green-ev.org)

## RESS Conference 14<sup>th</sup> – 16<sup>th</sup> September 2011

"We have to convince our citizens that renewable energy is crucial for our future. Any doubts that exist have to be taken seriously and conflicts that may arise must be resolved through mutual agreements." These were the words of Minister for Scientific Affairs of the State of Baden-Wuerttemberg in Germany, Theresia Bauer (see photo), as she opened the recent Conference in Freiburg "Changing the Energy System to Renewable Energy Self-Sufficiency – An inter- and transdisciplinary approach". The conference was organized by the project "Renewable Energy Regions" that is linked to the ZEE.



During the two-day event international scientist and experts of different specialisations presented their papers in five different sessions. The sessions focused on the role of actors, the economic impact of renewable energies, renewable energy self-sufficiency and integrated sustainable land use systems, the role of citizens and energy conservation and innovative technological approaches toward RESS.

The variety of themes gave all attendees the opportunity to learn from both the innovative work of their peers and the perspective based on different disciplines. The best papers presented at the RESS-Conference will be published in the online journal Sustainability at the beginning of 2012. For more information, visit: [www.ee-regionen.de](http://www.ee-regionen.de)

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## ECOfit certificate granting at ZEE

The district “Breisgau-Hochschwarzwald” has chosen ZEE as location for handing over the certificates of the ECOfit participants in the district. On 19<sup>th</sup> October 2011 the vice rector Prof. Schwengel welcomed the guests, the deputy land advice Mr. Unseld and the Assistant State Secretary of the Ministry of the Environment, Climate Protection and the Energy Sector of Baden-Württemberg Mr. Eggenstein opened the ceremony and handed over the certificates.



## Desertec University Network Expert Meeting

A delegation of 18 professors from Tunisia visited ZEE on 13<sup>th</sup> October 2011 under the guidance of GIZ to get an insight in educational programmes related to renewable energies in Germany to develop a national employment action plan. The feedback concerning our master programmes MSc REM and Master Online PV was very positive.

DAAD invited ZEE (Mr. Adler) to a “DESERTEC University Network Expert Meeting” on 17<sup>th</sup>/18<sup>th</sup> October 2011 in Bonn for a presentation of relevant master programs in the field of renewable energies and energy efficiency and how capacity building in the MENA region could be fostered. As a result a new DAAD programme “German Arab Transformation

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Partnership” related to the countries of the so called “Arab Spring” will offer funding for universities cooperation in Egypt and Tunisia ([www.daad.de/transformation](http://www.daad.de/transformation)).

Mr. Adler is also invited by DAAD and BMBF to a DAAD-Alumni conference at Birzeit University in Ramallah, Palestine with the title “Sustainable development – a global challenge” and to a BMBF-workshop on “German – Palestinian Cooperation” (both from 18<sup>th</sup> to 22<sup>nd</sup> November 2011).

### „Klinergie 2020 – energy efficiency and renewable energies in German hospitals“

The campaign has been running since 2009 and entered the market successfully with projects like “Klinergiefinanz”, a financing instrument for energetic measures in hospitals and “Klinergiecheck”, a neutral energetic potential analysis especially for hospitals, which was put into practice already in four hospitals. The conference “Next generation real estates for hospitals” on 19th/20th October 2011 with Klinergie 2020 as coorganizer was a suitable platform for about 300 visitors interested in this topic. The feedback showed that the campaign has taken the right road. Klinergie 2020 is actually producing the brochure “Renewable Energies in Hospitals” which is being sent to German hospitals in November.

[www.klinergie.de](http://www.klinergie.de)

**klinergie**  2020  
ENERGIEEFFIZIENZ IN DEUTSCHEN KLINIKEN

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