

Plenary lectures

1 - Renewable energy perspectives for Europe - from champion to laggard?

Rainer Hinrichs-Rahlwes*

*speaking author at European Renewable Energies Federation, Brussels, Belgium



Rainer Hinrichs-Rahlwes

Rainer Hinrichs-Rahlwes is a renewable energy expert with more than 20 years of professional and honorary experience. He is actively working for and promoting enabling policy frameworks and fair market conditions for a fully Renewables based energy system.

At present, he is a Vice-President of the European Renewable Energies Federation (EREF), after having served as the associations President from 2010 to 2014. He is representing EREF as a Steering Committee Member of the Global Policy Network for the 21st Century (REN21).

Rainer is also a Board Member of the German Renewable Energy Federation (BEE) and the Chairman of BEE's European and international affairs Committee. He is representing both EREF and BEE at the Global100%Renewables platform.

Representing EREF or BEE, or as a senior expert, Rainer is closely working with international institutions or association, such as the International Renewable Energy Agency (IRENA), e.g. representing EREF in IRENA's Coalition for Action, or with the International Energy Agency (IEA).

Rainer has been working with the World Renewable Energy Network (WREN) for more than a decade, at present serving as the network's Head of the Policy, Finance, Education and Sustainability Committee. In 2016, he was appointed as a member of WREN's Advisory Council.

From 1998 to 2005, Rainer was a Director General in the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). On behalf of the Ministry, he was a co-chair of the International Steering Committee (ISC) preparing the 1st International Renewable Energy Conference (IREC), the renewables2004 conference in Bonn, Germany. The ISC was later transformed to become REN21.

2 - Electricity storage: The solutions, challenges and opportunities in Belgium

Patrick Hendrick*

*speaking author at Université Libre de Bruxelles, Brussels, Belgium

3 - Advanced characterization of unconventional biomass fuels for ash related issues

Hervé Jeanmart*

*speaking author at Université Catholique de Louvain, Louvain-la-Neuve, Belgium

Keynote lectures

1 - Suppressing dendritic Lithium formation in Lithium metal batteries

Bingqing Wei*

*speaking author at Delaware University, Newark, USA

2 - Selecting available geographical and economic areas for a solar photovoltaic plant

Inmaculada Guaita-Pradas*, Inmaculada Marques-Perez, Aurea Gallego, Baldomero Segura

*speaking author at Polytechnic University of Valencia, Valencia, Spain

3 - Upgrading biomass pyrolysis vapors to hydrocarbon fuels

Kim Magrini*, Mark Jarvis, Jess Olstad, Yves Parent, Steven Deutch, Kristiina Iisa

*speaking author at National Renewable Energy Laboratory, Golden, USA

4 - Microbial fuel cells as a platform technology for urine treatment: from single reactors to autonomous systems

Xavier Alexis Walter*, Iwona Gajda, Oluwatosin Obata, John Greenman, Ioannis Ieropoulos

*speaking author at University of the West of England, Bristol, UK

5 - Synthesis gas and hydrogen production from renewable resources through dry and steam reforming of methane with a newly patented catalyst derived from a negative value mining residue spinellized with nickel

Mostafa Chamoumi, Nicolas Abatzoglou*

*speaking author at Université de Sherbrooke, Sherbrooke, Canada

6 - A modular TLP-design for offshore wind turbines

Frank Adam*, Daniel Walia, Hauke Hartmann, Paul Schünemann, Uwe Ritschel

*speaking author at University of Rostock, Rostock, Germany

7 - Enhancement of the efficiency of the biogas process by the separation of during the process formed fatty acids

Thorsten Jänisch*

*speaking author at Fraunhofer ICT, Pfingsttal, Germany

8 - Achieving negative carbon emissions by using small- and large-scale gas turbines: bioenergy with carbon capture and sequestration

Simone Giorgetti*, Ward De Paepe, Laurent Bricteux, Francesco Contino, Alessandro Parente

*speaking author at Université Libre de Bruxelles, Brussels, Belgium

9 - Global solar PV technologies, markets and recycling

Gregory Neubourg*

*speaking author at APERE asbl, Brussels, Belgium

10 - Bioelectrochemical systems: The new paradigm for energy recovery and chemical production

Deepak Pant*

*speaking author at Flemish Institute for Technological Research (VITO), Mol, Belgium

11 - Wave energy, importance of control and power capture performance improvements

Hakan Yavuz*

*speaking author at Çukurova University, Adana, Turkey

Oral lectures and short communications are available in the Programme

Programme

Monday 18 June 2018	
08.00-09.00	Registration (Hall)
09.00-09.10	Opening session (Room A)
09.10-09.55	Plenary lecture 1 - Session Chair W. Budzianowski (Room A)

	Renewable energy perspectives for Europe - from champion to laggard? <i>Rainer Hinrichs-Rahlwes*</i> *speaking author at European Renewable Energies Federation, Brussels, Belgium
09.55-10.20	Coffee break (Hall)
10.20-10.50	Keynote lecture 1 - Session Chair Rainer Hinrichs-Rahlwes (Room A) Suppressing dendritic Lithium formation in Lithium metal batteries <i>Bingqing Wei*</i> *speaking author at Delaware University, Newark, USA
10.20-10.50	Keynote lecture 2 - Session Chair Andrzej Białowiec (Room B) Selecting available geographical and economic areas for a solar photovoltaic plant <i>Inmaculada Guaita-Pradas*, Inmaculada Marques-Perez, Aurea Gallego, Baldomero Segura</i> *speaking author at Polytechnic University of Valencia, Valencia, Spain
10.50-11.20	Keynote lecture 3 - Session Chair Rainer Hinrichs-Rahlwes (Room A) Upgrading biomass pyrolysis vapors to hydrocarbon fuels <i>Kim Magrini*, Mark Jarvis, Jess Olstad, Yves Parent, Steven Deutch, Kristiina Iisa</i> *speaking author at National Renewable Energy Laboratory, Golden, USA
10.50-11.20	Keynote lecture 4 - Session Chair Andrzej Białowiec (Room B) Microbial fuel cells as a platform technology for urine treatment: from single reactors to autonomous systems <i>Xavier Alexis Walter*, Iwona Gajda, Oluwatosin Obata, John Greenman, Ioannis Ieropoulos</i> *speaking author at University of the West of England, Bristol, UK
11.20-12.30	Lunch break (Restaurant)
12.30-14.30	Oral lecture session 1 - Session Chair Kim Magrini (Room A) Different organic waste torrefaction into high-quality solid fuels - the influence of temperature, and residence time <i>Andrzej Białowiec, Barbara Kałdun, Hanna Moskal, Jarosław Wróbel</i> The impact of extra long-term storage of harvesting residues on the fuel quality in Estonian conditions - a case study <i>Peeter Muiste, Linnar Pärn, Allar Padari</i> MILD combustion towards energy transition <i>M. Ferrarotti, W. de Paepe, A. Parente</i>
12.30-14.30	Oral lecture session 2 - Session Chair Xavier Alexis Walter (Room B) The business case for a utility scale solar CSP integration in the oil & gas industry for steam generation <i>Saqib Sajjad</i> Large area luminescent solar concentrators for flexible waveguiding photovoltaics <i>Sandra F. H. Correia, Ana R. Frias, Lianshe Fu, Edison Pecoraro, Sidney J. L. Ribeiro, Paulo S. André, Rute A. S. Ferreira, Luís D. Carlos</i> Renewable district heating is a significant factor for achieving national environmental and building energy performance targets <i>Arbo Reino, Arvi Hamburg</i>
14.30-15.00	Coffee break (Hall)
15.00-17.00	Oral lecture session 3 - Session Chair Saqib Sajjad (Room A) Energy generation and accumulation by fully integrated human motion energy harvester <i>Juris Blums, Ilgvars Gornevs, Vilnis Jurkans</i> Use of organic Phase Change Materials for heat storage applications - challenges and limitations <i>Mateusz Lisowski, Tadeusz Uhl</i>

	Renewable energy consumption, poverty alleviation and economic growth nexus in South Africa: ARDL bounds test approach <i>Hlalefang Khobai, Pierre Le Roux</i>
17.00-17.45	ISC and SAB meeting (Room A)
17.45-18.00	Editorial Board of Journal of Renewable Energy Sources - Technology, Business and Policy meeting (Room A)
Tuesday 19 June 2018	
09.00-09.10	Registration (Hall)
09.10-09.55	Plenary lecture 2 - Session Chair Francesco Contino (Room A) Electricity storage: the solutions, challenges and opportunities in Belgium <i>Patrick Hendrick*</i> <small>*speaking author at Université Libre de Bruxelles, Brussels, Belgium</small>
09.55-10.20	Coffee break (Hall)
10.20-10.50	Keynote lecture 5 - Session Chair Patrick Hendrick (Room A) Synthesis gas and hydrogen production from renewable resources through dry and steam reforming of methane with a newly patented catalyst derived from a negative value mining residue spinellized with nickel <i>Mostafa Chamoumi, Nicolas Abatzoglou*</i> <small>*speaking author at Université de Sherbrooke, Sherbrooke, Canada</small>
10.20-10.50	Keynote lecture 6 - Session Chair Lydia Rachbauer (Room B) A modular TLP-design for offshore wind turbines <i>Frank Adam*, Daniel Walia, Hauke Hartmann, Paul Schünemann, Uwe Ritschel</i> <small>*speaking author at University of Rostock, Rostock, Germany</small>
10.50-11.20	Keynote lecture 7 - Session Chair Patrick Hendrick (Room A) Enhancement of the efficiency of the biogas process by the separation of during the process formed fatty acids <i>Thorsten Jänisch*</i> <small>*speaking author at Fraunhofer ICT, Pfinztal, Germany</small>
10.50-11.20	Keynote lecture 8 - Session Chair Lydia Rachbauer (Room B) Achieving negative carbon emissions by using small- and large-scale gas turbines: bioenergy with carbon capture and sequestration <i>Simone Giorgetti*, Ward De Paepe, Laurent Bricteux, Francesco Contino, Alessandro Parente</i> <small>*speaking author at Université Libre de Bruxelles, Brussels, Belgium</small>
11.20-12.30	Lunch break (Restaurant)
12.30-14.30	Oral lecture session 5 - Session Chair Simone Giorgetti (Room A) Turning an energy consumer into an energy producer by using own organic waste <i>Ioana Ionel, Mihai R. Wächter, Adrian E. Cioabla, Adriana R. Wächter</i> A review on the mechanised harvesting of short-rotation coppice <i>Stefan P.P. Vanbeveren, Raffaele Spinelli, Mark Eisenbies, Janine Schweier, Blas Mola-Yudego, Natascia Magagnotti, Mauricio Acuna, Ioannis Dimitriou, Reinhart Ceulemans</i> Possibilities for introduction of Bioenergy Village concept - a case study of Serbia <i>Dejan Ivezic, Miodrag Glušević, Slobodan Jerotic</i> Power-to-X - gas fermentation as powerful tool to flexibilise the renewable energy sector <i>Lydia Rachbauer, Martin Lesniak, Werner Fuchs, Bernhard Drosig</i>
12.30-14.30	Oral lecture session 6 - Session Chair Thorsten Jänisch (Room B) Integration of Floating PV plants to hydroelectric basins <i>Marco Rosa-Clot</i>

	Electric cars compared to ultra-light electric vehicles and global warming <i>Alex Van den Bossche</i> Structural and optical studies on Li-doped ZnO thin films <i>Mohamed Salah, Samir Azizi, Chokri Khaldi, Jilani Lamloumi</i>
14.30-15.00	Coffee break (Hall)
15.00-17.00	Panel discussion: Commercialisation of innovative renewable energy technologies (Room A)
Wednesday 20 June 2018	
09.00-09.10	Registration (Hall)
09.10-09.55	Plenary lecture 3 - Session Chair Alessandro Parente (Room A) Advanced characterization of unconventional biomass fuels for ash related issues <i>Hervé Jeanmart*</i> <small>*speaking author at Université Catholique de Louvain, Louvain-la-Neuve, Belgium</small>
09.55-10.20	Coffee break (Hall)
10.20-10.50	Keynote lecture 9 - Session Chair Hervé Jeanmart (Room A) Global solar PV technologies, markets and recycling <i>Gregory Neubourg*</i> <small>*speaking author at APERE asbl, Brussels, Belgium</small>
10.50-11.20	Keynote lecture 10 - Session Chair Hervé Jeanmart (Room A) Bioelectrochemical systems: the new paradigm for energy recovery and chemical production <i>Deepak Pant*</i> <small>*speaking author at Flemish Institute for Technological Research (VITO), Mol, Belgium</small>
10.50-11.20	Keynote lecture 11 - Session Chair Wojciech Budzianowski (Room B) Wave energy, importance of control and power capture performance improvements <i>Hakan Yavuz*</i> <small>*speaking author at Çukurova University, Adana, Turkey</small>
11.20-12.30	Lunch break (Restaurant)
12.30-14.00	Oral lecture session 7 - Session Chair Gregory Neubourg (Room A) A new approach to motion control of flexible and lightweight systems for Low electricity consumption applications <i>Caglar Conker, Hakan Yavuz</i> Operation of DFIG as reactive power source for voltage control of SEIG during varying wind speeds and its effect on stability of distribution system <i>K. Kalyan Raj, R. Srinivasa Rao</i> Combustion performance and compatibility assessment of various residual fuels in microturbine engine <i>Tine Seljak, Tomaž Katrašnik</i> An extended diffusion model applied to competition between renewables and alternative energies <i>Claudia Furlan, Cinzia Mortarino, Mohammad Salim Zahangir</i>
12.30-14.00	Oral lecture session 8 - Session Chair Deepak Pant (Room B) Closer look on the barriers to large-scale renewables in Tanzania <i>Ahmed Aly</i> Some factors affecting the electrochemical performances on the high temperature of the perovskite-type oxide LaGaO ₃ for application as a novel anode material for Ni-MH secondary batteries. <i>Abbes Kaabi, Mohamed Tliha, Abdessalam Dhahri, Chokri Khaldi, Jilani Lamloumi</i>

	<p>Experimental approach of diffusion coefficient and activation energy by convective solar drying in thin layers of sardine fillets <i>Hamza Lamsyehe, Mounir Kouhila, Hind Mouhani, Ali Idlimam, Abdelkader Lamharrar</i></p>
14.00-14.30	Coffee break (Hall)
14.30-16.00	<p>Short communication session 1 - Session Chair W. Budzianowski (Room A)</p> <p>Active tuning based fuzzy logic control of a heaving wave energy converter in irregular seas <i>Hakan Yavuz, Alper Burgac, Hurrem Akbiyik</i></p> <p>Wind turbine installation in Southern Thailand: How safe for locals? <i>Sunisa Kongprasit, Jompob Waewsak</i></p> <p>Opportunities and challenges of renewable energy business in developing countries <i>Wojciech Budzianowski</i></p> <p>Spatial-energy tool for the insertion of renewable-based energy systems within urban areas <i>Alberto Fichera, Rosaria Volpe</i></p>
16.00-16.15	<p>Closing session (Room A)</p> <p>- Award ceremony</p> <p>(1) Best conference oral lecture (2) Best conference lecture by student (3) Best conference lecture related to an innovative solution with commercial potential</p>