



Conference Speakers

nulistice 2018
NATIONAL UNIVERSITY OF LESOTHO INTERNATIONAL SCIENCE & TECHNOLOGY INNOVATION CONFERENCE & EXPO

with
AFRICA-EU RENEWABLE ENERGY RESEARCH & INNOVATION SYMPOSIUM (RERIS)
2018

23rd - 26th JANUARY 2018 | LESOTHO NATIONAL CONVENTION CENTRE

of the

**2nd Africa-EU Symposium on Renewable Energy
Research & Innovation (RERIS) 2018**

Chair

**Dr. Moeketsi Mpholo, Chair of RERIS
Energy Research Centre (ERC)/National University of Lesotho (NUL),
Lesotho**

Moeketsi Mpholo is the leader of the Energy Research Centre (ERC) at the National University of Lesotho (NUL). He served in the executive management of NUL as a Director of ICT before leading the ERC. He obtained his PhD from Cavendish Laboratory at the University of Cambridge. He co-founded a Cambridge Lab on Chip start-up company based on PhD research in Cambridge, UK. He received a Third World Academy of Sciences (TWAS) Award in 2005 for being the best candidate in Lesotho in a Physics related discipline. He has been featured in Marquis Who's Who In Science and Engineering in America since 2011. He has organised a number of national workshops on energy and climate change related matters on behalf of both the academic institutions and the private sector. He has published widely on energy matters primarily on Solar and Wind Resources. He continuously works with a number of institutions, companies and development partners on energy projects. He is currently working in the Cost of Service Study in collaboration with MRC Group of Companies for the electricity and water regulator (Lesotho Electricity and Water Authority). Moreover, he collaborates on research projects and teaching programs with a number of regional universities (University of Botswana, Namibia University of Science and Technology, etc.) and a number of international universities (University of Pennsylvania (USA), Case Western Reserve University (USA), Hochschule Darmstadt – University of Applied Sciences Darmstadt (Germany), etc.). His current teaching load and passion address soft skills for scientists, such as, critical thinking, written & oral communication, and entrepreneurship in order to contribute to a decent standard of living for all.



Speakers

**Ranisha Basnet
Community & Energy Advisor, Energypedia UG Nonprofit**

Ranisha Basnet is currently working as a Community & Energy Advisor at energypedia UG Nonprofit. She is responsible for maintaining and continuously improving the web platform, www.energypedia.info, developing new knowledge products and launching new partnerships. She has an academic background in renewable energy and has almost 4 years of experience of working in the off-grid renewable energy sector. She is a passionate advocate of off-grid energy for reaching the last mile consumers in developing countries.



Irene Bonvissuto

Directorate General Research & Innovation, European Commission

Born in Milan (Italy), she graduated in Environmental Engineering at the Politecnico di Milano in 1997. In 1997 she joined the R & D Division of Procter and Gamble Italy as Process Engineer in the New Business Development group. After holding several positions within the same company, she moved to Bruxelles, Belgium, where she assumed the position of Section Head for Global Product Research for one of the biggest brand of the Company. In September 2011, she joined the European Commission as Administrator in the Research and Innovation Directorate General. In this capacity, she was initially responsible for the research programme in the area of Smart Grids and later assumed a broader responsibility related to the research policy for Renewable Energy Sources. In this role, she is particularly involved in European Union international cooperation activities related to the area of renewable energy sources and their integration in the energy system, such as Mission Innovation and a new Flagship for a joint European and African Research Programme funded under Horizon2020.



Dr. Ed Brown

Senior Lecturer, Loughborough University, United Kingdom

National Coordinator, Low Carbon Energy for Development Network (LCEDN)

Dr. Ed Brown is Senior Lecturer in Geography at Loughborough University in the UK. He is a political geographer who has worked on a range of development issues over the past 20 years including questions of governance, transparency, corruption and equity. He is the Co-Chair of the UK Low Carbon Energy for Development Network (LCEDN) through which he and colleagues are attempting to develop innovative ways of working across disciplinary boundaries to develop new approaches to understanding energy transitions within different social, cultural and political contexts. Dr. Brown is currently Principal Investigator (PI) on three projects in this field funded via UK Research Councils and DFID/DECC. One involves working with DFID in integrating and networking the projects funded under the EPSRC/DFID/DECC Understanding Sustainable Energy Solutions Programme, whilst the other two are research projects funded through the same scheme. One explores the implications of political decentralisation for energy governance in Africa whilst the other concerns the applicability of the concept of solar nano-grids in the contrasting contexts of Kenya and Bangladesh. He was also PI on a recently completed one-year project designed to improve the interconnections between the LCEDN and the UK private sector and policy community working in low carbon energy markets in the Global South and has recently been working with colleagues on work for DFID exploring the social and cultural factors affecting the potential uptake of electric cooking concepts.



Dr Ben Campbell

**Degree Director MSc Sustainability, Culture and Development,
Department of Anthropology, University of Durham**

Dr. Ben Campbell is senior lecturer in Anthropology at Durham University. He has worked for three decades on transformations in indigenous agro-pastoralist communities in Nepal, researching the interactions of local knowledge practices with institutions of environmental protection and changing development paradigms. He joined the interdisciplinary Durham Energy Institute, integrating anthropological perspectives in research on sustainability issues, leading to implementation of a biogas energy system at a yak cheese factory in Nepal. He is a National Co-ordinator of the UK Low Carbon Energy for Development Network, and is Principle Investigator for 'Energy On the Move', which is a one-year project looking at energy practices of people relocated to peri-urban and informal settlements in Nigeria, South Sudan, Nepal and Bangladesh.



Dr Jon Cloke,

Loughborough University, United Kingdom

Jon works as National Network Manager for the UK Low Carbon Energy for Development Network (LCEDN) and was one of the founders in 2012. The LCEDN was set up as a network hosted by Loughborough University and the Durham Energy Institute to link the research expertise in the UK on energy and development and to improve research co-ordination and funding efficiency. Jon works at mapping the UK low carbon for development research landscape and at coordinating the projects funded by the UK Department for International Development (DfID) under the Understanding Sustainable Energy Solutions (USES) research programme and the Transforming Energy Access (TEA) programme. Jon is also researcher on 2 USES projects, the Renewable Energy and Decentralization (READ) project and Solar Nano-grids project (SONG); he has been a lecturer in human geography in the Geography Department at Loughborough in a wide range of modules from Level 1 to Post-graduate. Jon has also worked as an NGO Consultant to different non-government organizations including most recently the UK-based NGO Practical Action developing policy documents for guiding strategy..



Mariana Daykova

Project Manager, MicroEnergy International GmbH

Mariana is a consultant and project manager with MicroEnergy International GmbH, a Germany-based platform for innovation in the field of energy access in developing and transitional economies.

Mariana works on business development, project management, advisory, training and capacity building in the field of climate-compatible energy access. She focuses on methodology and design for clean-energy technology interventions and has experience in Eastern Africa, South-East and Central Asia, and Eastern Europe.

Mariana is a Certified Expert in Climate and Renewable Energy Finance (Frankfurt School - UNEP Collaborating Centre.), MSc in Carbon Management (University of Edinburgh), and a double Bachelors in International Business (CEU Business School and Universita Bocconi). She is a member of the Emerging Leaders in Environmental and Energy Policy (ELEEP) network of the Atlantic Council and the Microenergy Systems Association of TU Berlin.



Mr. Niklas Hayek

Project Manager, Africa-EU Renewable Energy Cooperation Programme (RECP) / EU Energy Initiative Partnership Dialogue Facility (EUEI PDF)

Mr. Niklas Hayek, Project Manager at the EU Energy Initiative Partnership Dialogue Facility (EUEI PDF), is responsible for the coordination of higher education and vocational training activities in the framework of the Africa-EU Renewable Energy Cooperation Programme (RECP) and several capacity building activities on rural electrification. Prior to joining the EUEI PDF, Mr. Hayek worked for various firms and organisations in the fields of environmental management and renewable energy in Austria, Tunisia, Bolivia and Jordan. Mr. Hayek holds a degree in Environmental Engineering from the Management Center Innsbruck, Austria and in Environment & Development from the University of Edinburgh. He was Lead Coordinator of the first Africa-EU Symposium on Renewable Energy Research and Innovation at the University of Tlemcen in Algeria in 2016 and also fulfils this role for RERIS 2018 at the National University of Lesotho.



Saleem Ismail, Managing Director, Enigma Inc.

Saleem Ismail is the Managing Director of Enigma Incorporated. He received a B.Sc. degree in Computer Science and Statistics from the National University of Lesotho. He is passionate about shaping up the software development sector in Lesotho and has a keen interest in entrepreneurship.



Ms. Eva Kagiri-Kalanzi

Senior Planning Officer - FinCEAL Africa Finnish University Partnership for International Development (UniPID), Finland

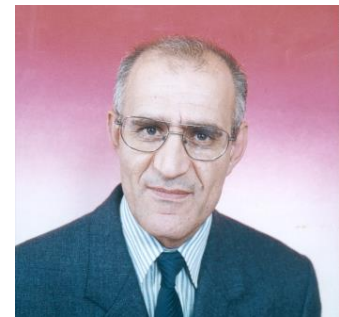
Ms. Eva Kagiri is Senior Planning Officer in UniPID, a network of Finnish Universities. She deals with science, technology and innovation cooperation between Finland, Europe and Africa. Strategic to her role is the support of research cooperation in Renewable Energy between Finnish and African institutions, bridging research and policy, especially in the Joint Africa-EU Strategy. Prior to joining UniPID, Ms. Kagiri worked in the Information and communication technologies for development (ICT4D) sector and continues to be involved in ICT4D projects addressing societal challenges. She is also an entrepreneur with established companies on Renewable Energy and eLearning. Ms. Kagiri serves as a board member in different organisations focusing on Environmental and Social Sustainability and she is a visiting lecturer at Aalto University. She studied Environmental Engineering and holds a Master of Environmental Science, International Development and Cooperation.



Dr. Abdellah Khellaf

Head of Division and Senior Scientist, Centre de Développement des Energies Renouvelables, Algeria

Dr. Abdellah Khellaf holds a PhD degree from Arizona University (USA). After teaching at the University of Annaba (Algeria), the University of Arizona and Chapman College (USA), he moved on to research at the Max Planck Institute (Stuttgart, Germany) and CDSE (Algeria). Currently, he is Head of Division and Senior Scientist at the Renewable Energy Development Center (Algiers, Algeria) and member of MESO Doctoral Committee at the University of Boumerdes (Algeria). Also, he is member of the Academic Profession Board of Ethics at the Ministry of Higher Education and Scientific Research and member of the Interim Board of PAUWES Institute (Tlemcen, Algeria).



His main areas of research interest are renewable energy potential evaluation and site characterisation, renewable hydrogen production, concentrating solar power technology and instrumentation and measurement in energy systems.

Dr. Khellaf has been member of the Permanent Researchers Evaluation Commission and of the Permanent Sectoral Committee at the Ministry of Higher Education and Scientific Research. He has been acting as reviewer for several international journals and as evaluation expert for national (PNR, cooperation programs) and international (UE-FP6-INCO-MED, ERANETMED) projects. He is a member of the Algerian Committee for Energy and a founding member of the Algerian Association for the Transfer of Technology.

Ms Mantopi Martina Lebofa

Director, technologies for Economic Development (TED), Lesotho

Mantopi Martina Lebofa is co-founder and director of an NGO, Technologies for Economic Development (TED) working for Environmental Protection focusing on the broader education for sustainable development (ESD) that includes technology development, environmental education and policy advocacy in the fields of Renewable Energy, Water, Sanitation & Hygiene (WASH) and Biodiversity Conservation. She is a Maths and Science teacher by profession, pursuing her Masters in Development Studies with the University of the Free State (UFS). She is guided at all times by the Catholic Social Teaching Principles as: Dignity, Solidarity, The common good, the option for the poor, Peace, Care for Creation and the dignity of work and participation.



Mantopi's work and the decision to move out of the classroom teaching to NGO work was inspired by a burning desire to contribute to Lesotho's development through:

- The Implementation of Section 36 of the Constitution of Lesotho on Environmental Protection
- Putting into practice the Lesotho Motto: "Khotso Pula, Nala" translated "Peace, Rain, Prosperity", through which she sees the Sustainable Development Goals, and
- Inspiration to care for Lesotho's natural environment, to maintain its beauty and to sustainably use its resources as chanted in the Lesotho National Anthem "Lesotho, land of our Fathers, You are the most beautiful country of all You give us birth, in you we are reared and you are dear to us. Lord, we ask you to protect Lesotho. Keep us free from conflict and tribulation Oh, land of mine, Land of our Fathers, May you have peace".

Readlay Makaliki

SADC Centre for Renewable Energy and Energy Efficiency (SACREE), Namibia

Readlay Makaliki was born in 1967 in Kabwe, Zambia. He obtained his Bachelor of Engineering Degree (BEng) in Electrical from the University of Zambia (UNZA) in 1992 and his Master of Science (MSc) in Electrical Power Engineering from Chalmers University of Technology in Gothenburg, Sweden in 1996.



He has since graduation from UNZA worked for ZESCO, a national power utility in Zambia involved in generation, transmission, distribution and supply of electricity. He worked for this vertically integrated utility for 25 years (1991 to 2016) and held various portfolios most of it at senior management level including Protection Engineer, Chief Protection Engineer, Technical Services Manager, Divisional Manager and Senior Manager Demand Side Management (DSM). He is a member of the Engineering Institute of Zambia (EIZ), Institute of Electrical and Electronic Engineers (IEEE).

Currently he is the Renewable Energy Expert at the SADC Centre for Renewable Energy and Energy Efficiency (SACREE), Windhoek, Namibia.

His interests include Renewable Energy, Energy Efficiency and power quality.

**Prof Sampson Mamphweli,
Stellenbosch University**

Professor Sampson Mamphweli holds a Master's degree from the University of Venda and a PhD from the University of Fort Hare. He worked as a Senior Researcher and Associate Professor at the University of Fort Hare where he started working as a Researcher while conducting his PhD in 2005. Prof Mamphweli also possesses a number of certificates in Renewable Energy and a Mini-MBA certificate in Green Energy from the Green Power Academy in Britain. He has published more than 45 research articles in peer reviewed journals including three book chapters, he has presented more than 36 research articles in national and international conferences including 8 invited presentations and keynote addresses. He has supervised 18 Masters and PhD students to completion. Prof Mamphweli previously raised funding and implemented a considerable number of renewable energy projects in the Eastern Cape during his time at the University of Fort Hare. His primary area of specialization is biomass gasification and biogas digesters. He also managed a number of renewable energy projects on behalf of the Faculty of Science and Agriculture at the University of Fort Hare. Prof Mamphweli is a member of the South African Institute of Physics. He is also a member of a number of committees that deal with renewable energy issues at national government level. Prof Mamphweli started off his career at the South African National Parks before moving to the University of Cape Town where he worked as a Research Technician before joining the University of Fort Hare as an Eskom Research Fellow in 2005. He is a recipient of the prestigious University of Fort Hare Vice Chancellor's Emerging Researcher medal for the year 2012. Prof Mamphweli joined Stellenbosch University in July 2017 as Director for the Centre for Renewable and Sustainable Energy Studies.



**Prof. Martin Meyer-Renschhausen,
Hochschule Darmstadt, Germany**

Martin Meyer-Renschhausen is energy economist with Master degree in Sociology, a PhD in economics and a Habilitation (post doctoral lecture qualification) in energy policy. Since 1980 he consulted to a variety of industry and public sectors in Germany in the field of energy efficiency and energy management. From 1999 until 2005 he was part time lecturer in the Renewable Energy Programme (REP) at the Faculty of Electrical Engineering at University of Harare (Zimbabwe).



Since 1990 he is professor in the Energy Management Program of the Faculty of Economics and Business Administration of Hochschule Darmstadt – University of Applied Sciences, where he was also dean of the faculty. He is also appointed as part-time lecturer at the Postgraduate Programme Renewable Energy (PPRE) at Faculty of Physics at University of Oldenburg.

Prof. Dieter Meissner

Prof. for Sustainable Energetics, TUT, Estonia

Founder and Chief Researcher, Crystalsol GmbH

Main research activities: photoelectrochemistry, photovoltaics, materials research and development

Specialties: Solar cell development, microtubular SOFCs, renewables education.

Published more than 170 papers in refereed scientific journals and books, about 150 additional papers in proceedings volumes, about 300 lectures and posters, editor/co-editor of 2 books, Inventor on more than 150 patents belonging to 37 patent families, 7968 citations.

Developed 2 University curricula ("Eco-energy engineering" in Wels, Austria and "Sustainable Energetics", Int. Master course of both Estonian Universities, Tartu University and Tallinn University of Technology), taught in Univ. of Hamburg, Germany, Osaka University, Japan, University Buenos Aires, Argentina, Technion Haifa, Israel, Linz University, Austria, and Tallinn University of Technology, Estonia.



Dr. Joseph Mutale

Reader, University of Manchester, United Kingdom

Dr. Joseph Mutale is a Reader (Equivalent to Associate Professor) in Electrical Energy and Power Systems at the University of Manchester. He has a BEng degree in Electrical Machines and Power Systems from the University of Zambia and also holds a postgraduate diploma in Electric Power Distribution Systems from the Norwegian Institute of Technology, an MSc in Electric Power Transmission and Distribution and a PhD in Power System Economics from UMIST, University of Manchester. Prior to joining the University of Manchester in 2002, Dr. Mutale spent over 15 years in the electric utility industry. His industrial experience includes a wide range of technical posts at Copperbelt Power Company, now Copperbelt Energy Corporation and ZESCO, the Zambian National Utility. His last position at ZESCO was that of Director of Engineering Development, which included responsibilities for rural electrification in Zambia. He co-founded and currently chairs the IEEE Working Group on Sustainable Energy Systems for Developing Communities and serves on the CIGRE Advisory Board on Rural Electrification. He is a Chartered Engineer, a Fellow of the IET and Senior Member of IEEE.



**Prof. Wikus van Niekerk,
Stellenbosch University, South Africa**

Prof Wikus van Niekerk is the Dean of Engineering at Stellenbosch University. He holds a PhD from the University of California at Berkeley and an Executive MBA from the Graduate School of Business at the University of Cape Town. Prof van Niekerk was the founding Director of the Centre for Renewable and Sustainable Energy Studies established in 2006. He is a registered professional engineer with the Engineering Council of South Africa and currently the President of the South African Institution for Mechanical Engineering. He is a fellow of the SAIMEchE, SAAE, SAAI.

He has published more than 35 articles in refereed international journals and presented a number of papers at international conferences. In 2014 Prof Van Niekerk received the SANE Energy Award.



**Dr Pulane Nkhabutlane,
Lecturer, Department of Agricultural Economics and Extension-Consumer
Science,
Head SanBio-Fisa Incubation Unit, National University of Lesotho**

Dr. Pulane Nkhabutlane is a lecturer in the Faculty of Agriculture, Department of Agricultural Economics and Extension-Consumer Science Unit at the National University of Lesotho. Her research is based on indigenous and traditional foods and beverages. Dr. Pulane realized a great need to empower the community with innovative and entrepreneurial skills and knowledge of value addition in Food.

In her teaching she encourages the students to develop marketable food products from ingredients that are highly underutilized. Her Food Product development passion led to the award of a SANBio/BIOFISA II grant in collaboration with the University of Pretoria (UP) and Botswana University of Agriculture and Natural Resources (BUAN). She graduated cum laude from the University of Stellenbosch in 2005 with MSc. in Consumer Science Food Management. She was awarded Academic Honorary Colours for academic excellence in Doctor of Philosophy when she graduated in 2014 by the University of Pretoria.



**Prof. Marco Rupprich
Head of Department of Environmental, Process & Energy Engineering, MCI -
The Entrepreneurial School®, Austria**

Prof. Marco Rupprich holds a PhD in Radiochemistry from Medical University of Innsbruck and a Diploma in Chemistry from the University of Innsbruck. Since 2011, he is Head of Department of Environmental, Process & Energy Engineering at the MCI-The Entrepreneurial School. Furthermore, he is CEO and Founder of ionOXess GmbH, an enterprise specialised in wastewater treatment with non-thermal plasma. His research areas are water treatment with membrane technologies and non-thermal plasma and he puts a strong focus on the water and energy nexus. Additionally, Prof. Rupprich has broad experience in the development of (international) technical study programs.



Dr Dirk Steuerwald,

Swiss Academy for Development, Switzerland

Dirk Steuerwald holds a PhD from ETH Zurich and did his Diploma in Biochemistry at Massachusetts Institute of Technology, USA, as well as at Universität Tübingen, Germany. He is working in development cooperation on higher education as well as on science teaching at schools in Southern Africa. He furthermore has work experience with entrepreneurship projects in Northern Africa as well as in Papua New



Guinea and as a (science) journalist and editor. He currently works for the Swiss Academy for Development and as a consultant for the Africa-EU Renewable Energy Cooperation Programme.

Erick Tambo

**Pan African University Institute of Water and Energy Sciences
(including Climate Change)**

Erick Tambo originally from Cameroon graduated in computer science at the Technical University of Dortmund and holds a PhD in computer science from the FernUniversität in Hagen-Germany. He is an associate Academic Officer at the United Nations University – Institute for Environment and Human Security (UNU-EHS) seconded as research coordinator at the Pan African University Institute for Water, Energy Science (incl. Climate Change) (PAUWES) in Tlemcen, Algeria and leading the program on Pan African Cooperation and Educational Technologies (PACET) at the Vice Rectorate of the United Nations University in Europe.



Prior to joining UNU-EHS, he was researcher at the FernUniversität in Hagen and led the working group on Information and Communication Technologies for development (ICT4D) at the chair of cooperative systems. The working group designed and developed socio-technical systems to support the development processes of southern countries. He has a broad expertise in educational technologies and computer supported teaching/learning systems for developing countries, research management and North-South-South Knowledge and technology Exchange/transfer, socio-technical systems to support the North-South knowledge transfer, endogenous/appropriated technologies and local innovation, migration, diaspora and ICT (brain-drain-brain-gain), knowledge and innovation management in distributed organization and social software, Open Educational Resources.

Erick is lecturer at the WASCAL (West African Science Service Center on Climate Change and Adapted Land Use) graduate school on climate change and Education at the university of Gambia and guest lecturer at the department for Mathematics and computer science/Cooperative system, FernUniversität in Hagen, Germany

Dr Leboli Zak Thamae

National University of Lesotho (NUL), Lesotho

Dr Leboli Zak Thamae is a Senior Lecturer in Electronic Engineering in the Department of Physics and Electronics at the National University of Lesotho (NUL) and a member of the Communications Research Group and the Energy Research Centre (ERC). He was the Head of Department from 2010 to 2016 where he oversaw the development of Sustainable Energy short courses at NUL, establishment of the ERC and is now a coordinator of M.Sc. in Sustainable Energy programme. He serves as a Board Member and Chairman of the national electricity regulator, Lesotho Electricity and Water Authority (LEWA). His research interests include wireless communications (antennas, RF network planning), regulation of infrastructure systems (telecoms, broadcasting, electricity) and energy/electricity capacity expansion modelling based on renewable energy technologies.



Mr Markus Theobald

Head of Cooperation, Delegation of the European Union to the Kingdom of Lesotho

Markus Theobald has been an official of the European Union Directorate General for International Cooperation and Development since 1992. He worked at the EU Headquarters in Brussels and in several EU Delegations abroad, including Guyana, Papua New Guinea, Namibia, Ethiopia and since September 2017, he is Head of Cooperation at the delegation to Lesotho.

