

ANSOLE DAYS 2012 (17-19 February 2012)

“Solar Energy for Sustainable Development”

Venue: Salle S01/02 du Bloc Pédagogique (Building in which DAAD Information Centre is located), University of Yaounde 1, Yaounde Cameroon

Final Program

	Thursday 16.2.2012
14.00-18.00	Registration
	Friday, 17.2.2012
8.00-9.00	Registration
9.00-10.00	Opening ceremony moderated by Prof. Dr. Jean Marie Ndjaka
	Section A: Chemistry and Physics of Organic Solar Cells
	<i>Chairman: Samir Romdhane</i>
10.00-10.40	<i>Keynote Lecture 1 Material design for organic solar cells</i> , Daniel A. M. Egbe, Johannes Kepler University Linz, Austria
10.40-11.00	Coffee Break
11.00-11.40	<i>Keynote Lecture 2 Issues related to efficiency and stability in polymer based solar cells</i> , Elizabeth von Hauff, University of Freiburg, Germany
11.40-12.00	O1: Dye-sensitized solar cell using natural dyes extracted from jiwene (<i>acalypha wilkesiana</i>) stem , Adenike Boyo O, Shitta , M.B.O, Oluwa K.O, Adeola O, Lagos State University, Ojo, Badagry Nigeria/ Federal university of Ado Ekiti, Osun, Nigeria
12.00-12.40	<i>Keynote Lecture 3 Imaging methods for quality control and degradation analysis of organic solar cells</i> , Harald Hoppe, Gerhard Gobsch, Marco Seeland, Roland Rösch, Burhan Muhsin, Maik Bärenklau, Ilmenau University of Technology, Ilmenau, Germany
12.40-13.00	CP1: Matrix Power, Douala Cameroun , Serge Henri Kelbe
13.00-14.00	Lunch Break
	Section B: Modelling and Design of Solar Systems
	<i>Chairman: Harald Hoppe</i>
14.00-14.40	<i>Keynote lecture:4 Computer simulation of structural and optical properties of a dye sensitized solar cell</i> , Ralph Gebauer, The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy
14.40-15.00	O2: Modelling with shrinkage of the Indirect solar drying kinetics of sheanut (<i>Vitellaria Paradoxa Gaertn.</i>) kernels , Divine Nde Pub, Charles Fon Abi, Dzudie Tenin, César Kapseu, Clergé Tchiengang, Zéphirin Mouloungui, Higher Institute of the Sahel, University of Maroua, Cameroon/ ENS, University of Yaounde 1, Cameroon/ ENSAI, University of Ngaoundere, Cameroon/ Université de Toulouse, France.
15.00-15.20	O3: Structural properties of CdS_xTe_{1-x} under high pressure from ab initio calculations , A. Bouzid, Z. Rouabah, N. Bouarissa , University centre of Bordj Bou Arréridj, Algeria
15.20-15.40	O4: Electronic structure and optical properties of Si_{1-x}Ge_x , Z.Rouabah, A. Bouzid, N. Bouarissa, Centre Universitaire de Bordj-Bou-Arreridj, El-Anasser, Bordj-Bou-Arreridj,

	Algeria
15.40-16.00	CP2: DAAD information centre in Cameroon , Katja Buchecker, University of Yaounde 1, Cameroon
16.00-16.20	Coffee Break
	Chairman: Ralph Gebauer
16.20-17.00	<i>Keynote Lecture 5: Concentrating Solar Power Technologies</i> , Bertrand.F. Tchance, Université de Lorraine, Nancy, France
17.00-17.40	<i>Keynote lecture 6: Solar cell quality control by both recombination and electrical parameters determination: Application to a vertical parallel multifunction silicon solar cell</i> , George Sissoko, University Cheik Anta Diop of Dakar, Senegal
17.40-18.00	O5: Methodology to design a food stuffs solar drier , Yacoub I. Halawlaw, University of Djamena, Chad
18.00-20.00	GENERAL ASSEMBLY OF ANSOLE
	Saturday, 18.2.2012
	Section C: Physics of semiconducting solar cells
	Chairman: Martin Kamta
9.00-9.40	<i>Keynote lecture 7: Charge transport in bulk-heterojunction solar cells</i> , Nadia Camaioni, Consiglio Nazionale delle Ricerche, Bologna Italy
9.40-10.00	O6: Qualitative, Optical and Structural Characterization of Titanium Oxide Thin Film Prepared by sol-gel Dip coating Method , <u>Aderemi B. Alabi</u> , Babalola Olayinka A University of Ilorin, Ilorin, Nigeria
10.00-10.30	Coffee Break
10.30-11.00	O7: EXAFS study of thermal expansion in Cadmium Selenide compound , Bridinette Fandio, University de Yaoundé 1 and Université des Montagnes, Bangangté, Cameroon
11.00-11.20	CP3: The Photovoltaic-Cluster Solarvalley Mitteldeutschland – Innovation by Co-operation <u>Daniel A. M. Egbé</u> , Peter Frey, Sabine Schmidt, Hubert Aulich ANSOLE Germany e.V, Jena, Germany./ SolarValley Mitteldeutschland GmbH, Erfurt, Germany.
11.20-11.40	CP4: Yandalux GmbH, Hamburg Germany , Alexander Sipua Ngnoubamdjum
11.40-12.00	CP5: Antaris Solar GmbH- Solair Afric Sarl, Yaounde Cameroon Noa Simeon
12.00-14.00	Lunch Break
	Section D: Solar Energy Technologies for Sustainable Development
	Chairman: Cesar Kapseu
14.00-14.40	<i>Keynote lecture 8: The Solar Bottle and Solar Fountain: An educational tool for creating awareness of energy management</i> , Mark Vervaart, CEA/INES R.D.I., Laboratory for Solar Systems (L2S), Le Bourget-du-lac, France
14.40-15.20	<i>Keynote Lecture 9: Quantification of aerosol requirements for forecasts of electricity production by concentrating solar systems</i> , Armel Oumbe, Total Gas & Power, R&D – Concentrated Solar Technologies, France
15.20-15.40	O8: Rural Electrification in Cameroon -Lessons learned from 4 years of projects ,

	Paul Ngwe Mbeleg, Tobias Klaus, <i>International Solar Energy Research Center Konstanz e.V., Konstanz, Germany. Email</i>
15.40-16.00	O9: Thermal efficiency and durability of Box Type Solar Cookers in India: An Experimental study , Rajkumar Sekaran, M. Rajesh Kumar, R. V. Jeba Rajasekhar, A. Sundaram, Tennyson Daniel, , Madurai Kamaraj University, India/, Government Arts College, Melur, India
16.00-16.20	O10: Investigation of the solar energy technology in South Africa , <u>Silas K Mulaudzi</u> , Mammo Muchie, Energy and Electricity Division, City of Tshwane, Pretoria, South Africa/ Tshwane University of Technology, Pretoria, South Africa
16.20-16.40	O11: Solar energy sustainability in Central Africa: Cameroon case study , <u>Joseph Kenfack</u> , Antoine Amie Assouh, Oumarou Hamandjoda, , Dieudonné Kidmo Kaga, , Blaise Biniom, Médard Fogue., National Advanced School of Engineering, Yaounde, Cameroon/University of Douala , Cameroon/ Electricity Sector Regulatory Agency (ARSEL) Yaounde, Cameroon/Institut du Supérieur du Sahel, University of Maroua Cameroon/IUT Bandjoun, Cameroon/University of Dschang, Cameroon
16.40-17.00	Coffee Break
	Posters Session
	Poster award committee: Mark Vervaart, Harald Hoppe, Nadia Camaioni, Elizabeth von Hauff
17.00-18.00	<p>P1. Improvement of the yield of a photovoltaic system by the approach based on the electrical load parameters, A. Dandoussou, M. Kamta, E. T. Houdji, B. Late, University of Ngaoundéré , Cameroon/University of Maroua, Cameroon</p> <p>P2. Mobility and Photovoltaic Performance Studies on Polymer Blends: Effects of Side Chains Volume Fraction. G. Adam, A. Pivrikas, A. Montaigne, S.Tadesse, T. Yohannes, N. S. Sariciftci, D. A. M. Egbe Johannes Kepler University Linz, Austria. /University of Addis Ababa, Ethiopia.</p> <p>P3. Vanadium Dioxide based nanophotonics, A. Simo, R. Madjoe J. M. B. Ndjaka, S. Zekeng, M. Maaza, Nanosciences African Network, Nanoscience Laboratories, Materials Research, Somerset West 7129, South Africa/ University of Yaounde 1/University of Western Cape, Belleville, South Africa.</p> <p>P4. Experimental investigation of CPC with flat one-sided absorber: Energy and Exergy analyses, C.V. Aloyem Kaze, R. Tchinda, E. Mbaka Nfah. University of Dschang, Cameroon/ IUT-FV Bandjoun, Cameroon.</p> <p>P5. Optical properties of catechol and Alizarin dye TiO₂ nanowires from time-dependent density functional theory, B. M'Passi-Mabiala, H.D. Douma, R. Gebauer <i>Université Marien</i> Ngouabi, Brazzaville, Congo/UR-MATER, DGRST, Brazzaville, Congo/Centre de Physique atomique et d'Optique quantique, Douala, Cameroon/The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy/ CNR-IOM DEMOCRITOS Simulation Center, Trieste, Italy.</p> <p>P6. Comparative study of power supply systems for Relay stations of</p>

telecommunications in the northern area of Cameroon: case of the photovoltaic system and the generator group, Bello P. Ngoussandou, University of Maroua, Cameroon.

P7. Thermomechanical characteristic Briquettes and chemical energy based plant household waste, Y. Jiokap, I. Samonssa, K. Richard, University of Ngaoundéré, Cameroon.

P8. Transient study of silicon solar cell under pulsed electric excitation: Determination of recombination parameters, I. Zerbo, R. Sam, M. Zoungrana, A. D. Seré, A. T. Kam, F. Zougmore, University of Ouagadougou, Burkina Faso/ Polytechnic University of Bobo Dioulasso, Burkina Faso

P9. Alimentation des sites isolés en Energie Solaire : cas des campements et des hôtels de tourisme au Cameroun, C. Kapseu, C. A. Koueni Toko, M. Kombi, A. Ahmed, Ecole Nationale Supérieure des Sciences Agro-industrielles, Université de Ngaoundéré - Cameroun / Ministère du Tourisme Yaoundé, Cameroun / Institut Universitaire de Technologie, Université de Ngaoundéré, Cameroun

P10. Software tool support for simulation of a photovoltaic system running on a hot and dry climate, B. Laté, A. Dandoussou, M. Kamta, R. Tchinda, Université de Dschang, Dschang, Cameroun/ Université de Ngaoundéré, Ngaoundéré, Cameroun.

P11. Thermal characterization of a sensor solar plane low temperature, E. Mbou Tiaya, A. Kemajou, University of Douala, Cameroon

P12. Effect of moisture content of canarium fruit (*Canarium schweinfurthii*) on texture pulp: Application to pulp dehydration, G. B. Nkouam, C. Kapseu, D. Barth, M. Dirand, The Higher Institute of the Sahel, University of Maroua, Cameroon/, ENSAI-University of Ngaoundere, Cameroon/ UPR CNRS 3349 ENSIC-INPL, Nancy Cedex, France.

P13. Solar technologies for buildings, N. Djongyang, R. Tchinda, C. Kapseu, Faculty of Science, University of Ngaoundere, Cameroon/IUT Fotso Victor, Bandjoun, Cameroon/ University of Dschang, Cameroon/ ENSAI, University of Ngaoundere, Cameroon

P14. Sesamum indicum L: A potential source for the production of biodiesel, S. N. Nouadjep, C. Kapseu, E. Nso, University of Ngaoundere, Ngaoundere, Cameroon.

P15. Three dimensional approach of spectral response for polycrystalline vertical junction silicon solar cell, G. Sissoko, Z. Nouhou Bako, Université Cheikh Anta Diop, Dakar, Sénégal/ Université de Maradi, Niger.

P16. Biogas Production by co-digestion of banana peelings and Pig Manure, E. J. Nso, D. C. Feudjio, C. Kapseu, Université de Ngaoundéré, Cameroun.

P17. Optical properties of MEH-PPV and MEH-PPV/ [6,6]-Phenyl C61-butyric Acid 3-ethylthiophene Ester thin films, B. M. Omer, A. K. Mohamed, Omdurman Ahlia University, Omdurman, Sudan.

P18. Design, simulation and realization of an intelligent charge controller for accumulators in renewable energy power stations, P. D. Dongo, C. T. Tchito, R.

	<p>Tchitnga, A. R. Tchamda, J. T. Kewir, A. Fomethe, University of Dschang, Cameroon.</p> <p>P19. Renewable energy production from algae: <i>Spirulina</i>, Y. Jiokap, P. Kouteu, C. Kapseu, University of Ngaoundéré, Cameroon.</p> <p>P20. Determination of criteria for the choice of photovoltaic cells, A. D. Pene, C. Kapseu, L. Bitjoka, G. E. Nkeng, D. A. M. Egbe, University of Ngaoundere, Cameroon/ Ecole Nationale Supérieure des Travaux Publics, Yaounde, Cameroon/ Johannes Kepler University Linz, Austria.</p> <p>P21. Correlation between emission spectrum and diffusion rate using Franck-Condon analysis in Solar Cell Polymers, M. A. Saidani, Ö. Usluer, Z. Ben Hamed, A. Ben Fredj, F. Kouki, S. Romdhane, D. A.M. Egbe, H. Bouchriha, University of Tunis, Tunisia/ Johannes Kepler University Linz, Austria/ University of Bizerte, Tunisia</p> <p>P22. Eigen modes of a wind turbine wooden blade, S. Touré, R. Kalou, B. Troh, University of Cocody, Abidjan, Côte d'Ivoire.</p> <p>P23. Synthesis of functional organic materials based on tetrafulvalene (TTF) for optoelectronic devices, L. Boudiba, S. Boudiba, H. Douib, A. Gouasmia, University of Tebessa, Algeria</p> <p>P24. Reducing Energy Bills of Higher Education Institutions with Solar Energy. César Kapseu ; Dr Noel Djongyang ; Teukam Dabou ; Tientcheu Maxwell ; Njukouyou Ibrahim ; Eyono Fabrice . -Université de Ngaoundéré</p> <p>P25. Design of an Electronics Power and Charge Controller for Hybrid Energy Systems (EPCCHES), <u>André Rodrigue Tchamda</u>, Robert Tchitnga, Christian Tchapga Tchito, Martin Kom, University of Dschang, Cameroon / Université de Yaoundé I, Cameroon</p>
19.00-22.00	<p>Conference Dinner</p> <p><i>DAAD-sponsored cultural event: “No bills with the Sun”</i></p> <p><i>coordinated by Emelda Ngufor Samba</i></p>
	<p>Sunday, 19.2.2012</p>
	<p>Section D: Solar Energy Technologies for Sustainable Development</p> <p>Section E: Assessment of Promoting Factors for Solar Applications</p> <p>Chairman: Bertrand Tchanche</p>
8.30-9.00	<p>Keynote lecture 10: Converting Research Results in Solar Energy into Innovation: Ideas and Experiments in Strengthening the African Solar Energy Network, Mammo Muchie, Tshawne University of Technology, Pretoria, South Africa</p>
9.00-9.40	<p>Keynote lecture 11: Assessment of solar radiation over Africa: present and future, Lucien Wald, MINES ParisTech, Centre Energétique et Procédés, Sophia Antipolis cedex, France</p>
9.40-10.00	<p>O12: Estimating hourly global solar radiation from satellite images, N. E. Erusiafe Michael Chendo, University of Lagos, Akoka, Lagos Nigeria</p>
10.00-10.20	<p>O13: The Status of Solar Photovoltaic and Solar Thermal Applications in Malawi, Chifundo Tenthani, T. Senganimalunje, E. Phiri, The Malawi Polytechnic, Blantyre,</p>

	Malawi/ The University of Malawi, Zomba, Malawi.
10.20-10.40	O14: <i>Design and preliminary test results of three wind turbine battery chargers in Côte d'Ivoire</i> , Siaka Touré, Diakaridja Traoré, Laboratoire d'Energie Solaire Université de Cocody, Abidjan, Côte d'Ivoire
10.40-11.00	O15: <i>Situation of renewable energies in the Central Africa region: the case of solar energy</i> , <u>Cesar Kapseu</u> , Noël Djongyang , Mathurin Petsoko, University of Ngaoundéré, Cameroon
11.00-11.20	Coffee Break
	Chairman: Joseph Kenfack
11.20-11.40	O16: Study of the relation between banks and producers of renewable energies goods , Aliou Dewa Bassirou, University of Ngaoundere, Cameroon
11.40-12.00	O17: <i>Sustainable energies for rural development in sub-shahara africa: Interdisciplinary approach and organisational challenge</i> , Marthe Njuikom, Forum des Energies Renouvelables pour le Développement Durable et la Solidarité Internationale (FERDEDSI), KR Alkmaar, The Netherlands
12.00-12.20	O18: <i>Country experiences: Solar radiation climatology in Côte d'Ivoire Technique of implementing a station of solar radiation and meteorological parameters measure for establishing a West African Solar Radiation Atlas</i> , <u>Yao N'Goran</u> , Kouakou Konan Université de Cocody, Abidjan, Côte d'Ivoire/ <i>Institut National Polytechnique Félix Houphouet-Boigny (INP-HB)</i> , Yamoussoukro, Côte d'Ivoire,
12.20-12.40	O19: <i>Solar drying of sludge</i> , Thomas Nyanga, Université de Toulouse, France
12.40-13.00	O20: <i>Electricity storage for PV energy: technological evolutions in stand-alone and grid-connected systems</i> , Mark Vervaart, <u>Marion Perrin</u> , CEA/INES R.D.I., Laboratory for Solar Systems (L2S) Le Bourget-du-lac, France
13.00-13.20	O21: <i>Wind energy potential in Sahel</i> , <u>Saïdou Madougou</u> , Frederique Said, Bernard Campistron, Université Abdou Moumouni de Niamey Niger/Université de Toulouse, France
13.20-14.00	Closing Ceremony (Awards!)
14.00-16.00	DAAD-Alumni meeting