ANSOLE e-Magazine, Volume 6, 2020



Monicca Bhuda is convinced of African **Indigenous Knowledge Systems** (IKS)

ANSOLE e-Magazine Volume 6, 2020

Dear ANSOLERs, Friends and Network Partners,



Christmas 2019 in Limbe Cameroon with my senior sister and nieces

With the above beautiful and smiling faces of my sister and nieces, I wish all of us God´s special favor in this new (but already old) year 2020.

The World is going through a turbulent period, especially after the outbreak of the corona virus in China. It is now a pandemia and leads to a series of restrictions geared at slowing the spread of the infection. We are surprised, but at the same time grateful to God, that Africa, the continent with the least medical infrastructures to confront such an outbreak, has been so far least affected. We really thank God and hope that the situation will not change in the course of time. Apart from neccesary preventive hygienic measures from WHO, such as constantly washing of hands with soap, 3 Chinese scientists (through an article in *BioScience Trends*, which is online since 19 February 2020) proposed a treatment of infected persons through daily consumption of 500 mg of chloroquine for 10 days. This is a wonderful discovery! We hope that, under the present circumstances, chloroquine will remain *affordable and accessible* to all (*SDG 3: Ensure healthy lives and promote well-being for all at all ages*).

Our network is fast growing. We presently have approximately 1200 members worldwide in 45 African countries and 31 non-African countries. We are proud to welcome Karlsruhe Institute of Technology (KIT) as our new institutional member, thanks to Prof. Bryce Richards and his wife Prof. Andrea Schäfer who are strongly engaged in the education of African PhD students in renewable energy and water related topics. Our young student members at the University of Ngaoundere are taking things into their hands by creating the very first ANSOLE students´ association at a university (Club ANSOLE-UN or CANERUN) with the goal to create a healthy and clean environment for quality education and research (SDGs 3+4). It is great joy for me to know that all our ICTP-ANSOLE alumni are presently employed and serving their respective communities. You will read about some of them in this issue among other inputs such as the ***Jena Declaration*** (*The concept of race is a result of racism and not its prerequisite),* ***Service Learning***, Indigeneous Knowledge Systems by Monicca Bhuda (Front Cover)

I heartily invite you to visit **Dakar** and the Gore Island in **Senegal** by attending **ANSOLE DAYS 2020 & BALEWARE 2020** from 16th to 19th of October 2020. The same is true for **Sousse** in **Tunisia** to celebrate **ANSOLE´s 10th anniversary** on the 4th of February 2021 during **ANSOLE DAYS 2021** from 2nd to 5th of February 2021. *All depends on the CROWN!*

I am very grateful to all those who are putting an effort to promote our network in their surroundings. You are many! I am extremely thankful to the very few who pay their yearly contribution.

May God protect each one of us from being infected by the CROWN! Please don´t forget to submit an article for the next issue…

Stay blessed!



Daniel A. M. Egbe

Publishing date: 20.03.2020

In this issue:

About ANSOLE, 3

Publishing Information, 3

Reporting on…

-ANSOLE Activities in 2019, ***D.A.M. Egbe, C. Seiferth***, 4
-ANSOLE Scientific Meeting in Egypt (ASMEG 2019), ***S. A. M. Ahmed***, 14
-2nd ANSOLE Scientific Meeting in Côte d´Ivoire (ASMCI 2019), ***P. Ahouto, R. N. Kré***,16
-ANSOLE Scientfic Meeting in Democratic Republic of Congo (ASMCO 2019), ***J. Kamundala, A. B. Temgoua***,19
-ANSOLE DAYS 2019 & BALEWARE 2019, ***N. W. Hissendj, D. A. M. Egbe***, 21
-6e Conférence Nationale ANSOLE au Cameroun (ANSOLECAM 2019), ***M. Kamta***, 26
-Compte-rendu du lancement officiel du Club ANSOLE Energies Renouvelables et Environnement de l Université de Ngaoundéré (CANERUN**),** ***D. Pene, Y. Effa***, 31

Striving for a Just and Better World…

- The Jena declaration: "The concept of race is a result of racism and not its prerequisite", ***M. S. Fischer, U. Hoßfeld, J. Krause, S. Richter*** ,34
- Grand Ethiopian Renaissance Dam (GERD): A call for successful mediation to create full agreement by all involved on 28-29 January, 2020 in Washington D.C, ***M. Muchie,*** 37
- Greening Africa Together (GATo) Network and ANSOLE: A New Partnership for Social Responsibility of African Universities, ***L. Seidler***, 42
-Indigenous Knowledge Systems, ***M. Bhuda,*** 44

Innovation in Solar…
- Twenty Straight Hours of Solar Power, ***M. Mtongwe***, 46

Update of ICTP-ANSOLE Alumni…

-Safae AAZOU, 47
-Armel Duvalier PENE, 49
- Hervé Joël TCHOGNIA NKUISSI, 51
-Serge Izzedine Mohammed ADJIBADE, 52

Book Presentation…
-Errungenschaften Afrikas, die andere Seite einer Realität (Africa´s achievements, the other side of a reality), ***K. Hamaimbo***, 53

Food for Thought…
-Corona Virus, ***R. Morelli***, 54
- L'Humanité Ébranlée et la Société Effondrée par un Petit Machin, ***M. Dahleb***, 55

Events Calendar… 56

°*Statuts du Club ANSOLE Energies Renouvelables et Environnement de l' Université de Ngaoundéré (en abrégé CANERUN)*, 57

° *Réglement Intérieur du Club ANSOLE Energies Renouvelables et Environnement de l Université de Ngaoundéré (CANERUN)*, 61

About ANSOLE

The African Network for Solar Energy (ANSOLE) promotes research, education and training in the field of renewable energy among Africans as well as non-Africans with a special focus on - and relationships with - Africa.
As outlined in its by-laws, ANSOLE supports non-profit activities in the field of development aid and cultural exchange with the aim of strengthening the dialogue between the North and African countries (north-south) and among African countries (south-south) on renewable energy.
It endorses the use of renewable energy to the benefit of the social and economic development of Africa as well as environmental protection through:

- Education and training of African scientists, experts and students
- Exchange of students and visiting scientists
- Workshops, conferences and meetings in Africa
- Organising and implementing projects and programmes on renewable energy
- Promoting capacity building in the use of renewable energy in Africa for all

In addition, ANSOLE is involved in facilitating the integration and acceptance of migrants of African origin within the local German society in Jena through the AMAH project (*Anlaufstelle für Menschen afrikanischer Herkunft*).
ANSOLE members and those acting in the name of ANSOLE accept and act in accordance with the association's by-laws.
The by-laws of ANSOLE can be downloaded here:
https://www.ansole.org/download/2013-11-23-ANSOLE_Satzung_v02.pdf
Mention of conferences, companies, or products in this document does not automatically constitute an endorsement.

Donations to:
ANSOLE e.V: Bank: Sparkasse Jena,
IBAN: DE52830530300018025668,
BIC: HELADEF1JEN
ANSOLE e.V.: Register of Associations at the Local Court Jena N°: VR 231505

Publishing information

ANSOLE: African Network for Solar Energy
Wagnergasse 25, 07743 Jena, Germany
Websites: www.ansole.org /www.ansole.com/www.baleware.org/ www.amah-ansole.de
Emails: editorial@ansole.org, info@ansole.org
Editorial board of ANSOLE e-Magazine 6: Chris Seiferth & Daniel A. M. Egbe

Reporting on…

ANSOLE Activities in 2019

By ***Daniel A. M. Egbe*** & ***Chris Seiferth***

In 2019 ANSOLE has pursued the objectives laid down in its by-laws.

Just as in previous year, ANSOLE´s activities had both a local focus in Jena, Germany, where it is registered as a NGO and has its offices, and an international focus in Africa. The local activities were based on the AMAH project financed by the City of Jena and the State of Thuringia, while the international activities focussed on the organisation of 5 country-based scientific events (Cameroon, Democratic Republic of Congo, Egypt, Germany, Ivory Coast) and 1 international event in Kigali, Rwanda (ANSOLE DAYS 2019 & BALEWARE 2019).

AMAH Support Center for People of African Origin

Freistaat Thüringen Ministerium für Migration, Justiz und Verbraucherschutz

JENA LICHTSTADT.

A support team of 4 persons worked in the ANSOLE´s office in 2019 with funding from the AMAH-project. They were Ms Abishag Ngoci (Kenya), Ms Chancily Matinda (DRC/Angola/Germany), Mr Shewa Bekele (Ethiopia) and Mr Chris Seiferth (Germany). Ms Ngoci left us at the end of August to join her husband who had completed his PhD in Jena and got a research job in at Paul Ehrlich Institute in Langen close to Frankfurt. We thank Abishag for the fruitful time spent with us. We are also extremely grateful to Ms Rea Mauersberger from Brazil, our „mother“ at Wagnergasse 25, who has a solution to almost every problem. ANSOLE is proud to have Mr Jörg Betterman [Jörg Bettermann- proVUR- Büroservice (Buchhaltung und Controlling), Wartburgerstr. 2; 07743 Jena, Germany, Tel:+49-3641-541425, Fax: +49-3641-541426] as the person in charge of all financial issues.

On February 4th 2019, ANSOLE celebrated its 8th anniversary. Both the Thuringian State Commissioner for Migration, Ms Mirjam Kruppa and her team, and the Jena Commissioner for Migration, Dr. Dörte Thiele and her team visited our office that day, congratulated and shared with us the birthday cake…



ANSOLE e.V. Team in 2019: from left) Mr Shewa Bekele, Mr Daniel Egbe, Ms Chancily Matinda, Ms Abishag Ngoci and Mr Chris Seiferth



Celebrating the 8th anniversary of ANSOLE in our office at Wagnergasse 25, 07743 Jena, Germany

A- Membership

The number of personal members increased by 44 to currently about 1140, distributed among 45 African and 31 non-African countries. Through Professor Bryce Richards of Karlsruhe Insitute of Technology (KIT) we were able to gain KIT as an institutional member. DLR Institut für Vernetzte Energiesysteme decided to terminate its membership due to increase of yearly fees from 200 to 350 Eur. We thank the institute for the support received during the last 8 years.

Logos of Institutional members in 2019

B- Activities

1.(Co)organisation of scientific events

In 2019 ANSOLE (co)organized the following scientific meetings:

- 1st ANSOLE Scientific Meeting in Egypt (ASMEG 2019), 30 January 2019, Zewail City of Science and Technology, Giza, Cairo, Egypt
- 2nd ANSOLE Scientific Meeting in Côte d´Ivoire (ASMCI 2019), 28 March 2019, Université Nangui Abrogoua, Abidjan Côte d'Ivoire
- 1st ANSOLE Scientific Meeting in Democratic Republic of Congo (ASMCO 2019), 22 April 2019, Faculté Polytechnique-Université de Kinshasa (UNIKIN), Kinshasa, DRC.



Left) ANSOLE Scientific Meeting in Egypt (ASMEG 2019). Right) ANSOLE Scientific Meeting in DRC (ASMCO 2019)

- AFRICA DAY 2019 in Jena, 25 May 2019: International Transdisciplinary Conference on Africa (ITCA 2019): Africa in a Post-Colonial Perspective, Rosensäle, Fürstengraben 27, 07743 Jena Germany. (in cooperation with the international office of the Friedrich-Schiller University Jena)
- ANSOLE DAYS 2019 & BALEWARE 2019 on "Sustainable Energetics and Water", 9-13 September 2019, ICTP-EAIFR, UR-CST, Kigali, Rwanda (in cooperation with Ifatizo Organisation, University of Rwanda, ICTP-East African Institute for Fundamental Research, African Centre of Excellence in Energy for Sustainable Development and Mobisol Rwanda Ltd)
- 6th ANSOLE National Conference in Cameroon (ANSOLECAM 2019) 14-15 October 2019, ENSAI, Ngaoundere, Cameroon (in Cooperation with the University of Ngaoundere und Cameroon Renewable Energies Network (CAMREN))



Group photos ANSOLE DAYS 2019, 9-13 Sept 2019, Kigali, Rwanda: Left) Together with Vice-Chancellor of UR, Prof. Philip Cotton, after the opening ceremony. Right) During practical training at Mobisol Rwanda Ltd

Similar to 2018, ANSOLE DAYS 2019 consisted of scientific lectures and practical training in photovoltaic systems. Mr. Arnaud Mbakouop from Centre Polyvalent de Formation (CPF) Mbouo-Bandjoun, Cameroon, was the instructor. The training consisted of a theoretical part (sizing of PV systems) and a practical part. The practical part took place at Mobisol Rwanda Ltd.

.



ANSOLE DAYS 2019: Participants in the theoretical training on sizing of PV systems at ICTP-EAIFR, UR (left) and in the practical training at Mobisol Rwanda Ltd (right).

..

2. Participation to other events

ANSOLE e.V. received invitations to various national and international events to present its activities. The focus was on scientific exchange and networking. This brought above all new members and necessary contacts for cooperation.

In the following the events and circumstances are listed where ANSOLE's activities were presented and/or ANSOLE was represented during the reporting period:

- Semaine des Energies et Energies Renouvelables en Afrique (SEERA 2019), 4-7 Avril 2019, Ouagadougou, Burkina Faso
- North West University Mahikeng South Africa, 22-27 April 2019
- Oxford Africa Conference 2019, 17-18 May 2019, Oxford, Britain
- The International Associations of Lions Clubs "WaSH Expert Meeting 2019" 03 June 2019, Bremen, Germany
- School of Physical Sciences Biennial International Conference, 24-28 June 2019, Federal University of Technology, Minna, Niger State, Nigeria
- Annual reception of die LINKE, 29 August 2019, Erfurt, Germany
- Joint Researcher's Symposium on Solar Energy, Lusaka, 18-20 Nov. 2019, Lusaka, Zambia
- The EU and Africa-important partners / European Information Centre Erfurt, 27 November 2019, Erfurt, Germany
- PAD (People of African Descent) Week Germany, 28-30 November 2019, Berlin, Germany

3. Support Office of People of African Origin (AMAH)

In order to enable ANSOLE e.V. to act as a bridge-builder between the Africans living in Jena and the German society, the AMAH project was initiated with the following objectives:

- Support of all people of African origin in Jena and its surroundings
- Assistance in discrimination cases
- Intercultural exchange and knowledge transfer
- Reduction of stereotypes, prejudices and afrophobia
- Transfer of expertise - consulting for companies/organisations in Germany that want to get involved in Africa
- Networking and cooperation with migrant and German organisations

For 2019, the project was allocated two half-time positions, which were first filled by Ms Abishag Ngoci (Kenya) and Mr Shewangzaw Bekele (Ethiopia). The employment relationship with Ms Ngoci ended on 31 August 2019, as she and her husband had to move to Langen. Her position was split into two and was given to Ms Chancily Matinda (Germany/Congo/

Angola) and Mr Chris Seifert (Germany). Financing of the AMAH project is secured until the end of 2020.
Following activities were offered:

I. Counseling and Support

About 700 people of African origin (students, scientists, refugees and migrants) live in Jena and its surroundings. Many of them, especially the new comers are confronted with a number of challenges and were able to take advantage of the counselling and assistance services of AMAH since 2018. The following Table summarises the type of counselling/help and the number of people supported during the reporting period.

Type of Counselling/Support	Number of counseling
Search for accomodation/accompanying to JenaWohnen	10
Support in filling and translating documents	120
Accompanying to authorities	20
Accompanying to medical services	90
Search for kindergarten	5
Telefon counselling	300
Social counselling and family counseling	100
Translation in every day´s situation	60
Support in the search of job	10
Organisation of events Africa Day Grill party Ethiopian evening Christmas party	 400 50 60 150

The AMAH office helped new students to find accommodation. Migrants and refugees were supported in filling out documents, accompanying and translating them at authorities and medical services as well as in finding of jobs. Social counselling and family counselling took place in cooperation with Rea Mausberger from Iberoamerica e. V. The telephone counsellings were not limited around Jena, but were attended by Amharic-speaking people (especially refugees from Eritrea) from all cities in Thuringia, as the AMAH staff member, Mr. Bekele from Ethiopia, speaks the Amharic language. The age of the people seeking help was between 17 and 52 years.

II. Intercultural Events

AFRICA DAY 2019

The event "AFRICA DAY 2019" took place on May 25, 2019. It consisted of a conference on Africa with a children's program, and a gala evening with an African market.

Part I- International Transdisciplinary Conference on Africa (ITCA 2019): Africa in a Post-Colonial Perspective

Co-organized by the International Office of the FSU Jena, the conference took place between 10 a.m. and 4 p.m. in the *Rosensäle* of the FSU Jena (Fürstengraben 27, 07743 Jena). About 60 people took part.
The conference started with welcoming words from Dr. Britta Salheiser of the International Office of FSU Jena, who co-organized the event and from Dr. Daniel Egbe, Chairman of ANSOLE e.V..The inaugural lecture was given by Ms. Vivian Ogechi on "The Africa We Want- A Review of the African Union's Development Agenda". This was followed by nine very educational lectures, half of which dealt with capacity building and research activities in Africa. The main message of the conference was that African governments should invest

more in education and research & development (R&D) by increasing the current average R&D contribution from 0.4% of GDP to over 1% to have an impact on the continent´s development. Parallel to the conference, a children's program was run by Ms. Abishag Ngoci.



Conference group photo during Africa Day 2019

Part 2- Evening Gala with African Market

This part of AFRICA DAY 2019 took place in the canteen Carl-Zeiss-Promenade at the University of Applied Sciences Jena (Carl-Zeiß-Promenade 6, 07745 Jena). Stalls with African goods for sale were set up in the hall.

The evening consisted of welcome speeches, live music, dinner, African fashion show and dance. The evening was moderated by Chancily Matinda and Damilola Akinyemi.



.

Welcome addresses (left) and participants (right) at the evening gala.

The opening speeches were given by Rea Mauersberger from MigraNetz Thuringia and Daniel Egbe from ANSOLE e.V. This was followed by live music performed by African students´ band led by Anthony Chukwubuikem, PhD student from Nigeria. Dishes from different regions of Africa were then served while live music was on. The dishes were prepared by the canteen under the supervision of selected African female students.



Live music performance (left) and African market (right)



African fashion show: from left) Performances from Egypt, Cameroon, Ghana, Gambia & Kenya

The highlight of the evening was the „dancing“ country-by-country fashion show under the coordination of Maryann Okoli from Nigeria. A brief powerpoint presentation of each country was made by the moderator prior to each show.



African fashion show: From left) Various regions of Nigeria, then combined group from Eritrea and Ethiopia

The official part of the evening ended with the awarding of signed thank-you art pictures to everyone who was actively involved in organizing AFRICA DAY 2019, followed by dancing until 1 a.m.

African Grill Party & Ethiopian Evening

ANSOLE e.V. organized a summer barbecue party on August 17, 2019 and an Ethiopian evening on November 2, 2019. Both events were very well attended and served the intercultural exchange among migrants and between Germans and migrants. The grill party offered the opportunity to say goodbye to Ms. Ngoci and family and to thank them for the past activities. The AMAH team used the opportunity to make new African contacts and to exchange ideas.



Grill party on the 17.08.2019



Ethiopian Evening on 02.11.2019

African Christmas Party

On December 7th, 2019 Ansole e.V. organized its annual Christmas party immediately after its 9th General Assembly.The party was held in the premises of ANSOLE e.V. and served the same purpose of intercultural exchange between people of African origin living in Jena and other nationalities. More than 100 visitors attended the evening gathering.

.



African Christmas party on the 7.12.2019

Dishes from Cameroon, DRCongo, Eritrea/Ethiopia, Germany and Nigeria were prepared by students and other people from Africa. In addition, a large collection of African music was played.

There was also a children's program in which the children had the opportunity to play, do handicrafts and get to know each other as well as receiving christmas gifts.



African Christmas Party on the 7.12.2019

Overall, it was a successful Christmas party on our part, many different people from different countries met in a relaxed atmosphere and exchanged views.

.

C- 9th General Assembly Meeting of ANSOLE e.V. on 07.12.2019

In the afternoon of 7.12.2018 the 9th general assembly (GA) meeting of ANSOLE e.V. with participation of seven people took place before the African Christmas party. The agenda consisted of the following items:

1. Welcome address and presentation of attendees

The chairperson Daniel A. M. Egbe welcomed those present and officially opened the GA. This was followed by a short introduction of each attending member providing information about one´s profession, function and how he/she came to know and join ANSOLE e.V..



Attendees of GA of ANSOLE e.V. from left to right: Eckhard Birckner, A. Thierry Amodi, Karin Hartwig, Jürgen Hartwig, Daniel A.M. Egbe, Harald Hoppe. Johnson Olowookere came later Chris Seiferth took the minutes & made the picture.

2. Approval of the agenda

The agenda was adopted unanimously. There were were no requests for changes / additions.

3. Reading and approval of the minutes of the 8th GA.

The protocol of the last GA was read and approved.

4. Reports and subsequent debate

a) Report of the Board

The chairperson Daniel Egbe gave a thorough report on the activities of 2019 as can be read above.

b) Financial report

The yearly contribution of a personal member residing in Europe is 50 Eur, while students and pensioners contribute 30 Eur. Members residing in Africa pay 20 Eur. African institutional members contribute 200 Eur while non- African contribute 350 Eur. Corporate members pay 1000 Eur.
29 personal members, 4 institutional members and a corporate member contributed in 2019. We are grateful to our members and other who donated to the network. A total amount of 12241 Eur was collected from fees and donations. The failure by the former treasurer of the network to do tax declaration for morethan 5 years forced us to spend almost 2000 Eur to fix things. In addition, we were obliged to return over 1000 Eur to the Thuringian state coffers due to a coworker´s mistake in managing the finances allocated to AFRICA DAY 2018.
More than 53,000 Euro were received from the City of Jena and the state of Thuringia to finance the AMAH project and contribute in the running costs of our office.

5. Quittance of the Board

The decision was made to only discharge the Board after the final financial report was sent to those who attended the GA by the 15th of January.

6. Election of a new Board (2020-2022)

The election of a new Board was carried out. The process was presided by Dr. Eckhard Birckner, co-founder of ANSOLE e.V. The attendees agreed on an open voting. The following persons were elected in the new Board for the next 3 years:
-Daniel Ayuk Mbi Egbe (Chairperson)
-Johnson Olowookere (Vice-Chairperson)
-Harald Hoppe (Treasurer)
-A. Thierry Amodi
-Jürgen Hartwig



New Board members of ANSOLE e.V.: Daniel A.M. Egbe (chairman), Johnson Olowookere (vice chairperson), Harald Hoppe (treasurer), A. Thierry Amodi and Jürgen Hartwig

7. Closing words of the Chairperson

The chaiperson thanked all present for sacrificing their time to attend the GA. Special thanks went to those who travelled long distance, Karin and Jürgen from Kassel and Thierry Amod from Ilmenau.

D-Publications and MoUs

ANSOLE e-Magazine 5/2019 was published online on 10 February. The event booklets of AFRICA DAY 2019 and ANSOLE DAYS 2019 are available online.
ANSOLE e.V. signed in 2019 three cooperation agreements with the following institutions:

- Rwanda Polytechnic, Integrated Polytechnic College Tumba, Rwanda
- Federal University of Technology Minna, Niger State, Nigeria
- University of Ngaoundere, Ngaoundere, Cameroon

Acknowledgments

We thank institutions and individuals who contributed in kind or financially to facilitate our various activities in 2019. God knows you and will reward you! Special thanks go to Mr Narcisse Ngada, our faithful website administrator.

ANSOLE Scientific Meeting in Egypt (ASMEG 2019)

By ***Shaimaa Ali Mohamed Ahmed***



Participants at ASMEG 2019

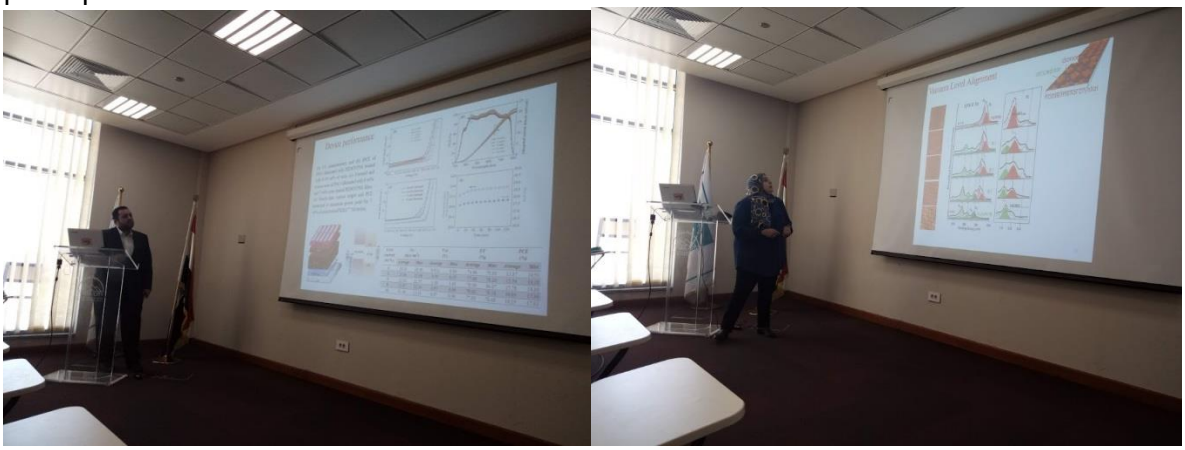
On the 30th of January 2019, Zewail City of Science and Technology, 6th of October City, Giza, Cairo, hosts the first ANSOLE Scientific Meeting in Egypt (ASMEG 2019), which is the second ANSOLE event in Egypt after ANSOLE DAYS 2016. ASMEG 2019 was a one day event bringing together researchers from different Egyptian Universities working in the field of solar energy. It witnessed the attendance of more than 50 participants (Ansolers and non-

Ansolers). The idea behind it is to promote Low-Cost National Scientific Networking Meetings on Sustainable Energetics and Water in Africa! Zewail City is the second institution to support this intiative by hosting ASMEG 2019. The event was organized under under the auspices of Egypt Knowledge and Technology Alliance (EG-KTAs) Project thanks to Prof. Salah Obayya, the Alliance leader who was willing the event to promote ANSOLE on the national level in Egypt.



ASMEG 2019: participants listening to lectures in Zewail´s seminar room

The event started by welcome speeches from Prof. Salah Obayya and Prof. Daniel Egbe, coordinator of ANSOLE, who did a brief presentation of the network to non-Ansolers. This was followed by 14 valuable scientific presentations covering various research areas related to solar energy. The coffee and lunch breaks offered opportunities of exchange of ideas and networking at the national level. The event ended with the award of certificates of participation.



Lecturing at ASMEG 2019: Dr. Afaf El Sayed (left) and Dr. Haytham Elbohy (right).

The participants promised to meet again in a regular basis. Thanks to Prof. Ahmed Abdel Moneim of the Egyptian-Japanese University of Science & Technology (E-JUST), Alexandria, the next ASMEG meeting was planned to be held at E-JUST in Alexandria.



ASMEG 2019: Lunch break and award of certificates of participation



Shaimaa Ali Mohamed Ahmed is an assistant professor at Zewail City of Science and technology and she is the National Representative of the African Network for Solar Energy (ANSOLE) in Egypt. Shaimaa obtained her BSc in Physics and Chemistry at Ain Shams University. She moved to Liquid Crystal Laboratory at Cairo University where she obtained her Master degree. She then joined the Arab Academy of Science, Technology and Maritime Transport as Physics Teaching Assistant (2009-2014). In 2012, Shaimaa was hired as a research assistant at Zewail City of Science & Technology. She at the same time started her PhD at Banha University and was awarded ANSOLE/ICTP fellowship in the frame of the Africa-North Exchange Program (ANEX) for six and three months, respectively. With this fund, Shaimaa joined the Linz Institute for Organic Solar Cells (LIOS) of the Johannes Kepler University Linz, Austria under the leadership of Prof. Serdar Sariciftci. During her PhD she had the opportunity to visit many African countries and to present her work at different international conferences and won a series of prizes. Her PhD work has been published in high impact factor journals and was defended in Solid State Physics at Benha University in 2015. She was immediately appointed a full-time postdoctoral researcher at Zewail City. She was the main organizer of the 1st International Conference in Renewable Energy (INCORE 2016) in celebration of the 5th anniversary of ANSOLE. Her main research interest is organic optoelectronics. *Skype contact: shaimaa0206*. *Email: Smohamed@zewailcity.edu.eg*

2nd ANSOLE Scientific Meeting in Côte d´Ivoire (ASMCI 2019), 28 March 2019,Université Nangui Abrogoua, Abidjan

By ***Paul Ahoutou[1] & Raymond N´guessan Kre[2]***

Dans le cadre de ses activités, ANSOLE Côte d'Ivoire a organisé la deuxième journée scientifique à l'Université NANGUI ABROGOUA après celle organisée à Félix Houphouët-Boigny en 2018. La journée a débuté par la mise en place à 14 h par l'annonce du programme de la journée scientifique par Dr AHOUTOU Paul, MA en qualité de Maitre de cérémonie.

L'allocution d'ouverture fut prononcée par Dr KRE N'guessan Raymond, Directeur de l'UFR-SFA et Représentant le Président de l'Université NANGUI ABROGOUA (UNA). Il a souhaité la bienvenue à tous les participants, situé le contexte de cette rencontre et déclaré l'ouverture du séminaire.

Par la suite, Prof. ZOUEU Jérémie (Président d'ANSOLE-CI) a également situé le contexte de la journée et a souhaité la passation de flambeau de la Présidence de ANSOLE-CI à Dr YAO N'goran. Cette motion a été approuvée par acclamation de tous les participants. Ainsi, Dr YAO N'goran a été officiellement déclaré et intronisé nouveau Président de ANSOLE-CI sous les acclamations de l'assistance. Le nouveau Président a pris la parole pour remercier l'assistance du choix porté sur sa personne et demander la collaboration de tous.

Apre cette cérémonie et avant la présentation des travaux scientifiques, une photo de famille fut faite.



Photo de famille d´ ASMCI 2019

Cette rencontre scientifique a enregistré deux communications. « ***Réalisation d'électrodes pour les cellules solaires organiques*** » présentée par Dr Souleymane TUO Concernant les présentations scientifiques, elles ont débuté par la communication 1 du de l'Université de MAN dont le thème est « **réalisation d'électrodes transparentes conductrices exemptes d'indium** » avec pour résumé :

La recherche sur l'efficacité des cellules photovoltaïques concerne tous les aspects de la cellule : le type de matériau actif, la disposition des couches actives, la nature des électrodes de collection et transport des charges électriques... Cette présentation concerne particulièrement la réalisation d'électrodes transparentes conductrices exemptes d'indium. L'oxyde d'indium dopé étain (ITO) est très utilisé comme électrode dans les dispositifs optoélectroniques. Cependant la rareté et la cherté de l'indium impose de trouver d'autres structures sans indium comme électrode. Dans cette optique, nous présentons une structure originale de type Diélectrique/Métal/Diélectrique (D/M/D), exempte d'indium, le WO_3/Cu:Ni/WO_3. Cette structure a une transparence d'au moins 80% et une résistance carrée 7,3 Ω/sq. Elle est flexible mécaniquement. La structure ainsi réalisée pourrait donc convenir comme électrode dans des cellules solaires organiques.

La seconde communication fut présentée par le Doctorant Abou Bakary du Laboratoire de Physique Fondamentale et Appliquée de l'Université NANGUI ABROGOUA sur le thème « ***Etude comparatives de diverses cellules solaires Pérovskites à l'aide du simulateur solaire SCAPS -1D »*** avec pour résumé:

Les changements climatiques et leurs conséquences constituent l'un des plus importants défis auxquels nos sociétés sont confrontées. Nos modes de consommation et de production ainsi que notre modèle énergétique basé sur les énergies fossiles en sont les

principales causes. La solution est d'adopter le plus urgemment une transition énergétique. La recherche des énergies vertes propres et renouvelables et moins chères est un impératif qui s'impose tous. Dans cette vision des choses l'énergie solaire photovoltaïque se présente comme le potentiel candidat pour la bonne réussite de cette transition énergétique. Mais cette énergie solaire bien qu'elle soit la plus abondante des énergies surtout en Afrique reste toujours plus chère que les autres énergies. Cette énergie est presque inaccessible à la majorité de la population. La cherté de cette énergie est principalement due au matériau semi-conducteur utilisé pour la conversion de l'énergie solaire en énergie électrique. Ce semiconducteur convertisseur de l'énergie solaire est le silicium. Il est abondant sur la terre mais sa purification demande une technologie de pointe et un apport important d'important d'énergie. Des recherches se sont orientées vers d'autres matériaux pouvant remplacer le silicium traditionnel. Ainsi en 2009 la pérovskite s'est révélée être un semi-conducteur. Cette pérovskite est de formule $CH_3NH_3PbI_3$ Les chercheurs ont accentué des améliorations à ce nouveau matériau qui peut être le remplaçant du silicium car sa synthèse est aisée et peut être fait par n'importe quel laboratoire et il est nettement moins cher. Cependant quelques obstacles doivent être surmontés avant sa commercialisation Il s'agit de la présence du plomb jugé toxique à l'environnement ; du manque de stabilité à longue durée (10 ans or silicium 25 ans) et du matériau transporteur de trous (le spiro ometad) qui est associé mais trop cher. Notre avons remplacé le plomb par l'étain et nous avons utilisé d'autres matériaux transporteurs de trous dans notre cellule de pérovskite. Dans nos simulations nous avons trouvé des rendements proches à celui de la pérovskite à plomb associée à la spiro ometad trop cher. Ainsi nous pensons pour résoudre deux problèmes majeurs à savoir le remplacement du plomb et du sprio ometad

Les deux communications ont été suivies de de nombreuses questions et réponses. Aux termes des communications, des échanges fructueux entre les participants ont meublé le reste du temps. Par la suite, le Président Dr YAO N'goran a prononcé l'allocution de clôture de cette journée scientifique.

La journée prit fin à 17 h par un cocktail.

Liste de Présence

	NOM et Prénoms	Université d'origine
1	Prof. ZOUEU Thouakesseh Jérémie	INPHB
2	Prof. MEGNASSAN Eugene	UNA
3	Prof. AKA Boko	UNA
4	Dr KRE N'guessan Raymond	UFHB
5	Dr N'GORAN Yao	UFHB
6	Dr ABE Simon	UNA
7	Dr TUO Souleymane	U-Man
8	Dr OYEDELE Sampson O.	UNA
9	Dr KOUAME Amenan Marguerite	UNA
10	Dr AHOUTOU Kouakou	UNA
11	Doctorant ABOU Bakary Coulibaly	UNA
12	Doctorant GOH Bi Neantien Jean Baptiste	UNA
13	Doctorant SIDIBE Karim	UNA

[1]Secretaire du comité d´organisation, [2]President du comité d´organisation

ANSOLE Scientific Meeting in Democratic Republic of Congo (ASMCO 2019), 22 April 2019, University of Kinshasa (UNIKIN)

By ***Janvier Kamundala & Alain Bertrand Temgoua***

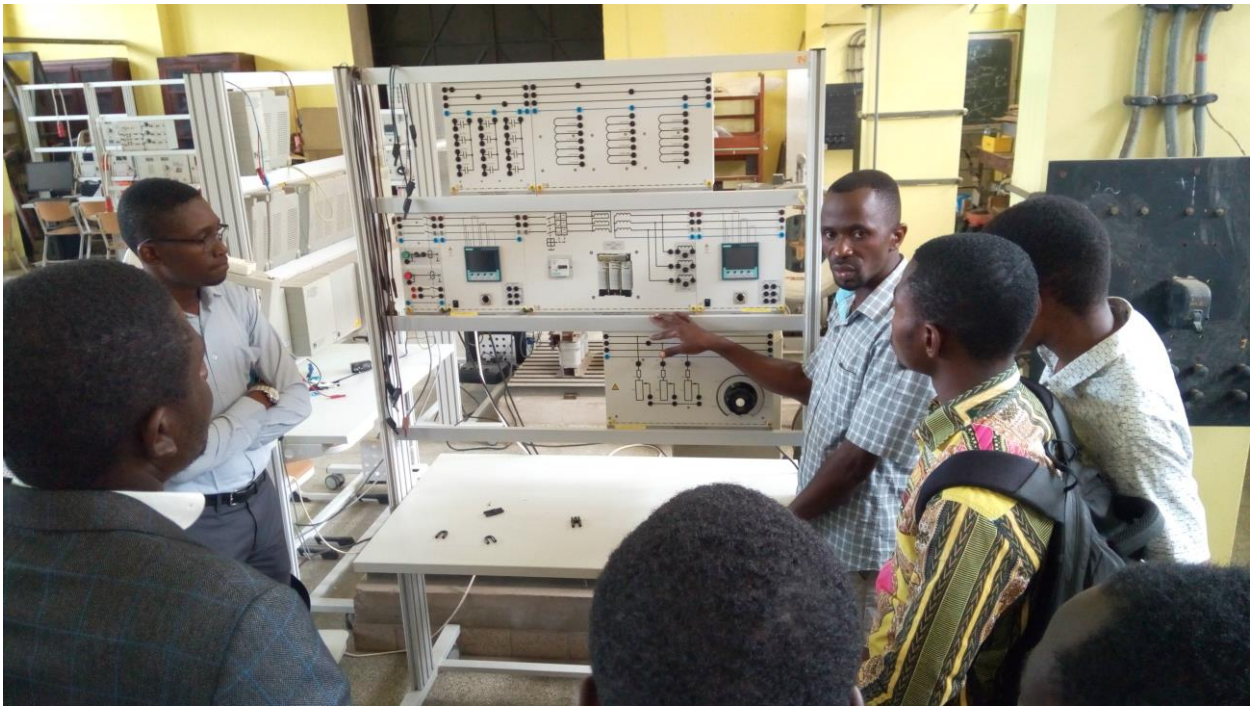


Participants of ASMCO 2019 at University of Kinshasa (UNIKIN)

On 22nd April 2019, ANSOLE members from DRC and students of the University of Kinshasa (UNIKIN) were united for the first time in the conference room J at the polytechnic faculty of UNIKIN. A total of 95 participants (Professors, Lecturers, Teaching Assistant and students, Representatives of NGOs, Entrepreneurs, etc.) were present. The ASMCO was inaugurated by Prof. **Virima Mudogo,** the Vice President of the *Förderverein Uni Kinshasa* (*f*UNIKIN), ANSOLE´s partner and NGO that supports more than 195 excellent students from DRCongo with scholarships in DRCongo and abroad.

The ASMCO was initiated by the coordinator of ANSOLE, Prof. **Daniel Egbe** and co-organized by the National Representative, **Kamundala Janvier** and his Vice-Representative **Alain Bertrand Temgoua** under the theme: "*l'énergie solaire en RDC, quelle est sa place dans le mixte énergétique et quel est son avenir*?" presented by Prof. Louis **Efale Efoto** of the Faculty of Sciences of UNIKIN. After a presentation on ANSOLE by Janvier, the participants were clarified on the following points: What is ANSOLE? What are the objectives of ANSOLE in DRCongo? What is the vision of their founders and its history?

Afterward, we had some presentations about water resource and pumping system by **Jonathan Kasembo**, student in Renewable Energy. **Alain Bertrand** explained the similarities between "ANSOLE" and "Greening Africa Together" encouraging students to join both networks which are promoting quality education in African universities through service learning. **Janvier** explained how he came into contact with ANSOLE and therefore shared his experience while he was doing his Master studies at the Pan African University in Algeria (PAUWES). This was followed family pictures of the event.



ASMCO 2019: Visit of the renewable energy labs at UNIKIN

The Vice Dean of the Polytechnic Faculty, Prof. **Jean-Marie Beya** represented by **Renny Saddala** made it possible for the ASMCO attendees to visit the renewable energy and electrotechnics laboratories of the faculty. Under the guide and explanation of lab technician **Papy Pili Pili**, attendees were updated about RE equipments at UNIKIN. The ASMCO was closed by a friendly share of coffee and soft drink. Recommendation of filling the form to join ANSOLE Network and WhatsApp group was given to the participants. The next ASMCO 2020 will be communicated on ANSOLE website shortly.



Janvier Kamundala is a Teaching Assistant and Researcher at the Université Libre des Pays des Grands Lacs-Goma, ULPGL (www.ulpgl.net), where he graduated in Electrical Engineering in 2017. He holds also a Master degree in energy engineering of the Pan African university Institute of Water and Energy Sciences (PAUWES) in Algeria. He is actively dedicated to ANSOLE as National Representative of DRC since January 2019. He is also a Tutor of the BEBUC (Bourse d'Excellence Bringmann aux Universités Congolaises) scholars in Goma and an active member of STEM DRC initiative. His research interests are: Solar and hydro mini-grids, energy planning for rural electrification, electromagnetism, energy storage and marine technologies. Email: kamujanv@gmail.com



Alain Bertrand Temgoua is a visiting lecturer at UNIKIN, Kinshasa (DRC) in the Department of Renewable Energy, a scientific expert for Greening Africa Together (GATo), ANSOLE´s Vice National Representative in DRC and associate PhD researcher at TU Berlin since October 2017.
Co-founder of EGECO Renewable Energy Ets, Alain was born on July 20 1978 at Nwametaw - Cameroon, and obtained his Bachelor

and Master degrees of Engineering in Renewable Energy at the American Christian Liberal Arts University in Congo (UCI).
After the 2015 Kick-off meeting of Greening Africa Together (GATo) at TU Berlin, Alain has been committed in accompanying and guiding students from DRCongo universities through different organized workshops for Service Learning in renewable energies, waste management, agroforestry, agribusiness and energy efficiency.
He has been working for many years as engineer, versatile in several companies with multidisciplinary options in the field: Solar PV projects, Heineken breweries, solar water pumping system for drinking water and irrigation, Texere Italia farming project…

WhatsApp: +243 997643072, Email : abtemgoua@yahoo.fr , Skype: alain.bertrand13

ANSOLE DAYS 2019 & BALEWARE 2019

By ***Nancy Wendy Hissendj & Daniel A. M. Egbe***

ANSOLE DAYS 2019 & BALEWARE 2019 on the theme „Sustainable Energetics and Water“ took place from the 9th to the 13th of September 2019 at the College of Science and Technology of the University of Rwanda. All foreign participants arrivied between the 5th and the 10th and were lodged at the St. Etienne Guesthouse of the Anglican Church of Rwanda, where breakfast and lunch were offered.

Partners to ANSOLE & BALEWARE in the organisation were:
-University of Rwanda (https://ur.ac.rw)
-ICTP-East African Institute for Fundamental Research (ICTP-EAIFR), UR, Kigali, Rwanda (eaifr.org)
-African Centre of Excellence in Energy for Sustainable Development, UR-CST (aceesd.ur.ac.rw)
-Ifatizo Organization
-Mobisol Rwanda Ltd (mobisol.rw)
Sponsors were:
-International Science Programme (ISP), University of Uppsala, Uppsala, Sweden (uu.se)
-Institute of Polymeric Materials and Testing, Johannes Kepler University Linz, Austria (jku.at)
Conference venue: Main lecture room at ICTP-EAIFR,UR-CST

It all started on the 10th of September with the registration and payment of conference fees from 8:30-9:15am. Each registered participant was given a badge and a conference bag containing an event booklet, a pen and a notebook.
. Dr. Omulolu Akin-Ojo, Interim Director of ICTP-EAIFR, moderated the opeining ceremony. The ceremony consisted of welcome speeches from representatives of the organizing institutions starting with Professor Daniel A. M. Egbe, the international coordinator of ANSOLE and event´s main organizer. This was followed by a welcome address by Prof. Philip Cotton, Vice-Chancellor, of the University of Rwanda (UR) who took the opportunity to give a brief presentation of UR: UR is only 6 years old resulting from the merging of 14 public institutions. UR has 30 000 students disturbed in 10 campuses with 3 campuses in Kigali. Representatives of Ifatizo and Mobisol Rwanda Ltd completed the welcome speeches. The conference was finally declared open by Prof. Cotton after few words of appreciation from Professor Johnson Oyero speaking on behalf of the delegation from the Federal University of Technology Minna (FUTMinna), Niger State, Nigeria. The delegation from FUTMinna were in Kigali to discuss cooperation agreement with ANSOLE e.V. The cooperation is in the field of professional training and equipping the FUTMinna with photovoltaic installations with the long term goal to offer low-cost off-grid electricity to the community.



Opening ceremony moderated by Dr. Omulolu Akin-Ojo (left). Prof. Daniel A. M. Egbe, ANSOLE Coordinator, and Prof. Philip Cotton, Vice-Chancellor of UR, addresses the audience.

Prior to the official lectures, Dr. Akin-Ojo did a 10 minutes presentation on the activities of ICTP-EAIFR.



The first conference lecture was held by *Dipl.Psych El Hadj Samuel B.D Som, Som Praxis, Bonn, Germany lecturing on "in Africa we trust. Why do we trust Africa"?*
Signs without awareness is a sign of destruction. The project of mankind and whole civilization is in Africa. There was a time we were not so aware of all this. It is now time for the young generation in Africa to know about the African contribution in the advancement of sciences (mathematics, medicine, etc) in particular and in the development of the World in general. This should be taught in African schools and universities.



Prof. Umaru Garbi Wali, UR-CST, Kigali, Rwanda lecturing on *"Water in Sustainable Development".*
"*Water is extremely important to our lives. Water is life. Water is prosperity! when you have water, you have everything you want for your development, you just need to manage it appropriately.*
About 12 million people were affected by flood between 2005 and 2015. Generally, among all the natural disasters, flood is one of the most serious ones causing damages in our societies. About 8 million people use water resources that are contaminated or not having the quality required for human consumption which consequently affects their health. If you need 100 m^3 for usage you need to produce 200 m^3 while the 100 m^3 will get lose and the other 100 m^3 will reach the end-user. About 40% gap between water demand and water availability would occur in 2030 meaning that time is coming when the water that is available would not be sufficient to satisfy our demands. So, we need to take strategies to ensure that we close the gap between availability and demand."



Prof.Collins Ateba, North west University, Mafikeng, South Africa lecturing on "*Characterisation of Vibrio species from surface and drinking water sources and assessment of the bio-control potentials of their species-specific bacteriophages''*

"*We all know that we need water and food. There is something about zero hunger and if you want to look at food sustainability and safety then they must be water. We talked about food safety. What is food safety? It is a scientific discipline where you look at how food is prepared, handled and stocked before consumption such that there is prevention of food borne diseases. Food contamination can result in 3 main ways either physical, chemical or biological. More interest is put on biological contamination with pathogens or bacteria. While we want to ensure that there is no food contamination, we must understand too that there is what we call food security and that is what the SDGs want to achieve: availability and accessability of food. This is a big problem in Africa. Even in the Western World, when you walk around you see people looking for food. Isn't it? But I want to indicate that South Africa has 3 departments that are given the mandate to ensure that there is food safety and food quality because consumers will always want food that is of high quality. So, these departments conduct routine health inspection and this is what should happen in other African countries*"



Mr. Didace Bizumuremyi, Ifatizo Organization, Kigali, Rwanda lecturing on *''Effective strategies by Rwanda Government to improve Waste Management in Kigali city''.*

"Establishing a cooperation intersectors programs to promote household's sanitation and behavior change. This is a national policy. To note that Ministry of infrastructure, Ministry of Environment, Ministry of Health and other local authorities work cooperatively so that they can make Kigali great and clean. Every person living in Rwanda must partake in community work. Those who attend sit down together and set a fine for those who didn't attend, the fine must not be above USD5."



Prof. Kasim Uthman Isah, Federal University of Technology Minna, Niger state, Nigeria lecturing on*'' Synthesis and characterization of carbon nanotubes-silver nanoparticles composites for the absorption of Cu, Pb, Fe and Zn from mine water''.*

"When you go into mining and use water, for instance, this water goes back into our drinking water. If you don't treat this water, it definitely affects our health. There are some heavy metals that should be removed from our water. Heavy metal oxides could bring infertility, anxiety and depression deteriorating our health."

These lectures were followed by those of:
- Mr Arnaud Mbakouop (CPF, Mbouo-Bandjoun, Cameroon): *Method of converting a standard mobile phone chargers into rechargeable solar-powered LED*
-Mr Alain Bertrand Temgoua (UNIKIN, DRC): *Service Learning and energy efficiency in renewable energy*

-Dr. Sadou Dalhatou (University of Maroua, Cameroon): *Process intensification in the removal of bacterial pathogens slaughterhouse wastewater using innovative solar photocatalysis*
-Dr. Benjamin Victor Odari (University of Nairobi, Kenya): *Enhanced performance of Sb_2S_3 mesoscopic sensitized solar cells employing TiO_2:Nb compact layer*



Other lecturers during ANSOLE DAYS 2019: Arnaud Mbakouop (Centre Polyvalent de Formation, Mbouo-Bandjoun, Cameroon), Alain Bertrand Temgoua (Université de Kinshasa, DRCongo), Dr. Sadou Dalhatou (University of Maroua, Cameroon, Monicca Thulisile Bhuda (North-West University, South Africa), Dr. Benjamin Victor Odari (University of Nairobi, Kenya) and Dr. George Manyali (Masinde Muliro University of Science and Technology, Kenya)

-Dr. George Simiyu Manyali (Masinde Muliro University of Science and Technology, Kenya): *DFT study of structural stabilityand related properties of nickel phosphide.*
-Ms Monicca Thulisile Bhuda (North-West university, Mafikeng, South Africa*): Indigenous knowledge and sustainable development in the African continent*
- Mr. Katundu Imasiku, University of Rwanda (ACE-ESD, UR): *Unraveling green information technology systems as a global greenhouse gas emission game-changer*



Second day of ANSOLE DAYS 2019: Group photo and participants receiving practical training on PV sizing conducted by Mr Arnaud Mbakouop

The second day of the conference started with group pictures and registration of participants, followed by a training session conducted by Mr Arnaud Mbakouop. Mr Mbakouop gave a general lecture on PV systems and sizing of a stand-alone PV installation. A practical exercise based on the lecture consisting of 100 questions giving to the students, treated and discussed.



Lab tour at the African Excellence of Energy for Sustainable Development (ACE-ESD), of the University of Rwanda conducted by Mr Geofrrey Gasore.

In the evening of Wednesday the 11th, all foreign participants were invited to celebrate the birthday of El Hadj Samuel Som in a halal restaurant situated at a walking distance to the Guesthouse. We thank El Hadj Som for offering us this wonderful time together full of delicious dishes, speeches and laughters!



Birthday party of El Hadj Samuel Som on the 11th of September 2019 in a halal restaurant in Kigali

The third day started with the visit of the African Centre of Excellence of Energy for Sustainable Development of UR. Participants were welcomed by the director of the centre, Prof. Etienne Ntagwirumugara, who gave a brief presentation of the ACE. A lab tour of ACE-ESD conducted by Mr Geoffrey Gasore was next on the program, before the participants moved to the conference room at ICTP-EAIFR to do the final theoretical part of the practical training led by Mr Mbakouop.



Hand-on practical training at Mobisol Rwanda Ltd

After lunch break at St. Etienne Guesthouse the participants were transported by bus to the facilities of Mobisol Rwanda Ltd, where the group was received by a representative of the company who gave us an overview of the services offered by the different Mobisol branches in Rwanda and elsewhere. They provide the right solar systems for your needs and budget. Their services include free installation, remote monitoring maintenance, free maintenance for a 3 and 4 years´ warranty. Their products consist of PV panels, batteries, DC appliances and solar home systems. Thereafter, Mr. Mbakouop showed the group how to wire PV systems.

The last act of the event, the closing ceremony, consisted of a conference dinner followed by an award of certificates of participation and special gifts of appreciation offered by the Coordinator. This took place in the evening of the 12th in the conference hall of the St. Etienne Guesthouse. Three closing speeches were held, that of Dr Akin-Ojo, representing the Principal of the College of Science and Technology of UR, that of Prof. Johnson Oyero, expressing words of thanks on behalf of the participants, and finally of Professor of Prof. Daniel A. M. Egbe, who invited all to meet again during ANSOLE DAYS 2020…



Closing ceremony: Conference dinner and award of gifts of appreciation and certificates of participation.

Few foreign participants returned to their home countries on the 13th, while others used that free day to do shopping and/or visit the genocide museum. The Nigerian delegation accompanied by the coordinator and the interim director of ICTP-EAIFR was received by the Vice-Chancellor of UR to discuss areas of cooperation between FUTMinna and UR.
The rest of the foreign participants returned between the 14th and 16th. ANSOLE DAYS 2019 will remain in the memory as a family gathering characterized by intensive joyful and fruitful interactions among participants, which made it difficult to say farewell to each other… The participants have kept contact by creating a WhatsApp group.



Ms Nancy Wendy Hissendj is a Cameroonian born in 1996. She received her Bachelor of Science in Economics at the University of Buea in 2018. She is interested in the field of renewable energies especially the conversion of solar energy. She is an active member of the ''African Network for Solar Energy'' (ANSOLE) and assisted the Coordinator in the day to day running of ANSOLE DAYS 2019.

E-mail address: wendyhissendj@gmail.com

6è Conférence Nationale ANSOLE au Cameroun (ANSOLECAM 2019)

By ***Martin Kamta***



Entrée principale de l'Ecole Nationale Supérieure des Sciences Agro-Industrielles (ENSAI)

Les locaux de l'Ecole Nationale Supérieure des Sciences Agro-Industrielles (ENSAI) et du Campus Numérique de la Francophonie (CNF) ont abrité la 6è Conférence d'ANSOLE au Cameroun (ANSOLECAM 2019) du 14 au 15 octobre 2019 à l'Université de Ngaoundéré.



Table d'honneur à l'ouverture d'ANSOLECAM2019 dans l'Amphi 150 de l'ENSAI

La cérénomonie d'ouverture a été présidée par Madame le Recteur de l'Université de Ngaoundéré, Prof. Uphie Chinje Melo, (gauche vers la droite: Directeur de l'ENSAI, Maire de la commune de Ngaoundéré 3è, Vice-Recteur/PDTIC, Recteur, Vice-Recteur/CIE, Secrétaire Général, Conseiller Technique)



Discours d'ouverture de Madame le Recteur de l'Université de Ngaoundéré

Dans son discours, Mme le Recteur a fait la déclaration suivante: *"As scientists, we are determined to conduct research that has immediate practical applications by opening and broadening the energy agenda and by systematically incorporating renewable energies"*.



Présentation de la conférence plénière *"Capacity Building and Research in Renewable Energy in Africa: Measures Necessary to Attain International Standards"* par Pr. Daniel Ayuk Mbi Egbe



Madame le Recteur, Prof. Uphie Chinje Melo face à la presse télévisisée et écrite

La Conférence a été placée sous le thème **"Energies Renouvelables pour la Sûreté Energétique en Afrique"**. **Objectif:** Contribuer au renforcement de la capacité des jeunes scientifiques africains à s'investir dans les projets innovants d'énergies renouvelables. **Retombés:** Réduction des factures d'électricité et accroissement de l'efficacité énergétique dans les secteurs industriels et résidentiels.



Photo de famille suite à la cérémonie d'ouverture d'ANSOLECAM 2019

Plus de 60 participants ont été présents. Les participants nationaux et étrangers non résidants à Ngaoundéré ont été logés dans les plus beaux hotels de la ville, à 15 km du Campus de Dang.
Plus de 40 résumés des communications et de CV des participants ont été enregistrés en ligne. 40 résumés des communications ont été acceptés par la commission scientifique. 30 communications ont été présentées en session orale et 10 posters ont été affichés.



Photo de famille au Campus Numérique de la Francophonie (AUF)

Après différentes présentations dans la matinée du 15 Octobre surtout la présentation sur la technologie de prétraitement de la biomasse, les participants ont visité la mini-centrale photovoltaïque de l'Institut Universitaire de Technologie (IUT) et la centrale de production du biogaz.



Intérieur de la mini-centrale photovoltaique de l Institut Universitaire de Technologie de l Université de Ngaoundéré.



Visite de la centrale de biogaz

Le discours de clôture d'ANSOLECAM 2019 a été fait par le Vice-Recteur/PDTIC, Prof. Béda Tibi, représentant Mme le Recteur empêchée. La qualité des communications a été une preuve indéniable que le niveau actuel de la recherche scientifique dans le secteur des énergies renouvelables est élevé au Cameroun et dans la sous région Afrique centrale. Le Vice-Recteur PDTIC a saisi cette occasion pour féliciter tous les participants à savoir: étudiants, chercheurs, opérateurs économiques, professionnels dans le secteur des énergies renouvelables, représentants des ONG. Un déjeuner de conférence a été partagé en action de grâce dans les Gourmandises du Bois de Mardock. Les cadeaux et certificats de participation ont été décernés aux participants par Pr. Daniel Ayuk Mbi Egbe.



Cadeau pour l'organisation d'ansolcam2019 attribué à Pr. Martin Kamta, organisateur principal d'ANSOLECAM 2019 (gauche) et Prix du meilleur poster décerné à Mlle Moma Dago Dora Judith sur le thème: Study of the thermal performance of a variable (droite)

La journée du 16 Octobre était marquée par la signature de l accord de cooperation entre ANSOLE e.V. et l´Université de Ngaoundéré (UN). La cérémonie a eu lieu dans le rectorat de l´UN.




Left) Exchange of Memorandum of Understanding between the Rector of the University of Ngaoundere and the coordinator of African Network for Solar Energy. Droite) Photo de famille suite à la signateur du MoU (de la gauche vers la droite: Point focal ansole de l'UN; Représentant sous regional d'ansole; Coordonateur international d'ansole; Recteur; Vice-Recteur PDTIC; Directeur ENSAI)



Prof. Martin Kamta obtained his PhD in physics of semiconducting materials 1998 at the University Louis Pasteur of Strasbourg, France. He is currently an Associate Professor at the University of Ngaoundere, Cameroon. His current research interests are physics of solar cells and the photovoltaic systems. He is author of several scientific papers related to solar cells and photovoltaic systems. He teaches courses on electronics, sensors, solar energy and photovoltaic systems. He is the Head of the thematic section of "Solar Energy" of the Cameroon Physical Society located in the University of Yaounde 1, Cameroon. He has been appointed the National Representative of ANSOLE in Cameroon. Email: martinkamta@gmail.com

Compte-Rendu du Lancement Officiel du Club ANSOLE Energies Renouvelables et Environnement de l'Université de Ngaoundéré, Cameroun (CLUB ANSOLE – UN ou CANERUN)

By **Duvalier Pene** & **Yves Effa**

Le lundi 03 février 2020, s'est tenue dans la salle 200 B de la Faculté des Sciences, la conférence de lancement du Club ANSOLE – UN, tenant aussi lieu d'Assemblée Générale. Neuf points étaient inscrits à l'ordre du jour:

1- Discours d'ouverture par le Point Focal d'ANSOLE – UN;

2- Hymne nationale;
3- Présentation d'ANSOLE;
4-Partage d'expériences par les Alumni ANSOLE;
5- Intervention des représentants du Centre d'Excellence et de l'Innovation de l'Université de Ngaoundéré (UNICE);
6- Election du Bureau Exécutif du Club ANSOLE – UN;
7- Adoption des statuts et règlement intérieur du Club ANSOLE – UN;
8- Adoption du plan d'action du Club ANSOLE – UN 2020;
9- Divers;




Participants during launching of CANERUN (Club ANSOLE Energies Renouvelables et Environnement de l Université de Ngaoundéré) on 3 February 2020

Photo de famille du lancement du Club ANSOLE-UN (CANERUN)

La conférence a débuté à 11h30 dans la salle 200 B de la Faculté des Sciences; elle a été supervisée par les Professeurs EFFA et KAPSEU et rapportée par le Dr PENE.

On a d'abord assisté au discours d'ouverture de Monsieur le Professeur EFFA, Point Focal ANSOLE – UN, par ailleurs Chef de Département de Physique à la Faculté des Sciences.

Ensuite, s'en est suivie l'exécution du refrain de l'hymne nationale entonné par Monsieur NOUEMSI Alex Gabin.

Après l'hymne nationale, il a été question de la Présentation d´ ANSOLE. Cette présentation a été faite par Monsieur MBOUENDEU Ange Roussel.

Pour le partage d'expérience, chaque conférencier s'est présenté en donnant le bien fondé d'ANSOLE. Ils ont par la suite encouragé les étudiants à devenir membre d'ANSOLE. Comme conférenciers, nous étions au nombre de cinq à savoir: Pr KAPSEU, Pr EFFA, Dr PENE, M. MBOUENDEU Russell Ange, Gabin NOUEMSSI et Alix DOUNTIO TCHIOFFO. Ensuite il y a eu l'intervention d'un étudiant entrepreneur de la Faculté des Sciences Economique et de Gestion, AKAWI Mario Evrard Etienne. Il a dit faire dans la fabrication des biofertilisants: la fabrication des engrais organique à partir des déchets ménagers. Ensuite l'intervention de GASSAM Tatiana Péroline de l'ENSAI porteuse de 02 projets.

En ce qui concerne l'intervention des représentantes de UNICE, elle a été faite par Mesdames Helene GAYAP et DAYANG qui on surtout encouragé les étudiants à œuvrer pour la protection de l'environnement et les ont invité de se rapprocher de leurs services.



Launching of Club ANSOLE-UN (CANERUN), 3 Feb 2020, University of Ngaoundere (UN), election of the executive board: Left) participants asking questions to candidates. Right) the 8 elected executive board members

LECTURE DU STATUT ET REGLEMENT INTERIEUR

Le Pr EFFA a d'abord pris la parole pour encourager les étudiants à prendre les initiatives et à s'impliquer au développement local et les a surtout encouragé à adhérer au CLUB ANSOLE-UN. Il les a par la suite exhorté à être des étudiants dynamiques. Il a conclu son propos en disant que le CLUB ANSOLE-UN est ouvert à toute personne qui adhère à sa vision et qui peut apporter sa contribution pour son développement.

ELECTION DU BUREAU EXECUTIF

Cette phase a été animée par Monsieur BISANE et Monsieur ADAMOU BELLO de la Radio Communautaire de l'Université de Ngaoundéré et NOUEMSI Alex Gabin de L'ENSAI.
On a d'abord commencé par l'élection du Président; il y a eu 03 candidatures à savoir: N°1 M. MBOUENDEU Ange Roussel, N°2 M. GUETCHO MOMENI et N°3 M. SOULEYMANE ISSA. A la suite du vote et après dépouillement, a été déclaré vainqueur, le candidat N°1 avec 24 voix sur 31 votants. Le vice-président à de ce fait été le candidat N°3 avec 5 voix sur 31 votants.
Ensuite il y a eu l'élection du Secrétaire Générale; il y a également eu 03 candidatures à savoir: N°1 M. FOTSO Henri, N°2 M. Alix DOUNTIO TCHIOFFO Alix et N°3 M. HAMADOU AMINOU. A la suite du vote et après dépouillement, a été déclaré vainqueur, le candidat N°2 avec 19 voix sur 31 votants et son adjoint a été de ce fait le candidat N°3 avec 9 voix sur 31 votants.
Suivit de l'élection du trésorier il y a eu une seule candidate DIDJATOU OUMAROU qui a été votée par acclamation.



*Launching of Club ANSOLE-UN (CANERUN), 3 Feb 2020, University of Ngaoundere (UN), Facing the press (Equinoxe TV**):** from left) Prof. Yves EFFA (ANSOLE Focal Point at UN), Prof. César Kapseu (ANSOLE Regional Representative in Central Africa) and Mr Ange Roussel Mbouendeu (newly elected President of CANERUN).*

Et ensuite nous avons procédé à l'élection des rapporteurs. Trois (03) candidatures se sont signalées: N°1 AKAWI Mario Evrard Etienne, N°2 M. MAMADOU KOUROUMA et N°3

BONGANDZEM Basile. Ont été déclarés vainqueurs: premier rapporteur, candidat N°3 avec 15 voix sur 31 votants et deuxième rapporteur, candidat N°1 avec 9 voix sur 31 votants.
Enfin, il a été question de l'élection de l'émissaire permanent. Deux (02) candidatures ont été enregistrées: le candidat N°1 M. KENDEG Clément Junior et la candidate N°2 Mlle Gassam Tatiana Peroline. Le vainqueur a été le candidat N°1 avec 17 voix sur 31 votants et la deuxième émissaire a naturellement été la candidate N°2 avec 14 voix sur 31 votants.
Ce fut ainsi la fin des élections des membres du bureau. Le bureau ainsi constitué a été présenté à l'assemblée et félicité par l'ensemble des conférenciers.

La parole a par la suite été donnée au président élu afin qu'il présente son plan d'action.

Dans son mot de clôture, Monsieur le Pr KAPSEU César a pris la parole pour encourager tous les étudiants à choisir les sujets qui sont sous forme de projet et qui tendent à promouvoir les Energies Renouvelables et surtout, il leur a suggéré de chercher des financements.

A la clôture de la conférence, s'en est suivi une photo de famille et les interviews par EQUINOX TV et la Radio Communautaire de l'Université de Ngaoundéré, du représentant ANSOLE Afrique Centrale en la personne du Pr KAPSEU, du point focale ANSOLE de l'UN, le Pr EFFA et du Président élu.
La cérémonie s'est achevée vers 15h.

Striving for a Just and Better World…

Jena Declaration: The Concept of Race is a Result of Racism and not its Prerequisite

To mark the 112th Annual Meeting of the German Zoological Society in Jena, the Institute for Zoology and Evolutionary Research of Friedrich Schiller University Jena organized an evening event on the subject of 'Jena, Haeckel and the question of human races, or racism creates races'. The joint declaration below provides information on this topic and was approved by the German Zoological Society and the President of Friedrich Schiller University Jena, who support the authors in their effort to act against scientific legitimations of racism

***Prof. Martin S. Fischer**, Institute for Zoology and Evolutionary Research of Friedrich Schiller University Jena,*
***Extraordinary Professor Uwe Hoßfeld**, Institute for Zoology and Evolutionary Research, Research Group for Biology Education, Friedrich Schiller University Jena,*
***Prof. Johannes Krause**, Director at the Max Planck Institute for the Science of Human History / Friedrich Schiller University Jena,*
***Prof. Stefan Richter**, General and Systematic Zoology, Institute of Biosciences, University of Rostock*

From the beginning, the idea of human races and their existence has been linked to an evaluation of these supposed races. Indeed, the notion that different groups of people differ in value preceded supposedly scientific work on the subject. The primarily biological justification for defining groups of humans as races – for example based on the colour of their skin or eyes, or the shape of their skulls – has led to the persecution, enslavement and slaughter of millions of people. Even today, the term 'race' is still frequently used in connection with human groups. However, there is no biological basis for races, and there has never been one. The concept of race is the result of racism, not its prerequisite.

On 9 August 2019, we marked the 100th anniversary of the death of Ernst Haeckel, former professor in Jena, dubbed the 'German Darwin' and probably the best-known German zoologist and evolutionary biologist. With his supposedly scientific classification of human 'races' into a 'family tree', Ernst Haeckel, the founder of phylogenetics, made a fateful contribution to a form of racism that was seemingly based on science. The position of human groups in his tree of life was based on arbitrarily selected characteristics such as skin colour or hair structure, presented from a phylogenetic point of view. This resulted in these people being viewed in a particular sequence, which implied that some groups had higher or lower status on biological grounds than others.

Karl Astel, a leading researcher on race, member of the National Socialist party and president of the Thuringian State Office for Racial Science in Weimar, was a university professor from 1933 and, from 1939, wartime rector of Friedrich Schiller University in Jena. He was convinced "that since the departure of Ernst Haeckel, zoology – and thus also biology – in Jena has no longer been pursued at the University in the same spirit and with the same intensity that Haeckel established and that was of great importance for National Socialism".

During the period of National Socialism, the University of Jena was to be expanded "into an SS university with a uniform racial orientation". The 'racial development work' and appointment policy repeatedly emphasised by Astel had produced a unique academic and political science-related configuration with four successive professorships in racial studies. In addition, Jena's Phyletic Museum, founded by Ernst Haeckel in 1907, was to become, with reference to its founder, the 'Thuringian State and National Museum for Life Science, Race and Phylogeny'. For this reason, too, Friedrich Schiller University has a particular responsibility to address the issue of defining human races based on biological data.

Despite, or maybe precisely because of the close connection between racism and the supposed existence of races, it is the duty of science and thus also of a scientific society such as the German Zoological Society to evaluate the possibility of human races being a reality. The question is whether races in general, and races of humans in particular, are a biological reality, or whether they are pure constructs of the human mind. For the influential taxonomist Ernst Mayr, the existence of human races was a 'biological fact' (Mayr 2002), at least before the colonial age. The justification for his view is still reflected in the common concept that human races correspond to 'geographical types' that we also find in other species and that are based on many criteria. An alternative to geographical types of humans that correspond to races did not seem possible to Mayr, although he came out clearly against any kind of racism.

For geographical races (or subspecies), Mayr generally emphasised the necessary 'taxonomic difference' between geographically separated populations of a species. This places the concept of 'race' somewhere between the concept of population (which due to its existence as a reproductive community, actually corresponds to an individual in the philosophy of science) and that of species. Today, this taxonomic difference is predominantly determined through genetic distances. However, determining which taxonomic difference or genetic differentiation would be sufficient to distinguish races or subspecies is completely arbitrary and thus also makes the concept of races/subspecies in biology purely a construct of the human mind. This does not mean that there is no genetic differentiation along a geographical gradient. However, the taxonomic evaluation of this differentiation (as race or subspecies, or not) is arbitrary. This is even more strongly the case for humans, where the greatest genetic differences are found within a population and not between populations.

'Races' of domestic animals are a totally different case, as can be seen from the lack of a geographical structure among them. Domestic animals are exclusively the result of breeding by humans, rather than of a natural, biological process. Only in the case of domestic animals is the genetic similarity (homogeneity) within a 'race' actually greater than that between

'races'. The English language does not use the term 'race' here, but rather 'breed', which is much closer to the actual situation. In German, the term 'Züchtung' would be more appropriate.

Thought patterns of biologically based racism, such as the analogy to domestic animal breeds, have tempted people to assume that we have the same right to speak of 'human races'. This was often associated with the assumption that the similarity within a supposed human race was significantly greater than that between races, which made segregation possible – a regrettable fallacy in the case of human beings.

The division of people into races was and is first and foremost a social and political classification, followed and supported by an anthropological construct based on arbitrarily chosen characteristics such as hair and skin colour. This construct served – and still serves – to justify open and latent racism using supposed natural circumstances and thus to create a moral justification.

It was mostly through scientific research on genetic variation among and between human populations that the concept of race was finally exposed as a typological construct. Among humans, by far the largest share of genetic differences exists not between geographical populations, but within such groups. The greatest genetic variation is still in people on the African continent, where the roots and most of the branches of the human family tree are located. The people of East Africa and all non-Africans are gathered together on one of its branches. Therefore, people outside Africa are more closely related to people from East Africa, such as the Hadza, than the Hadza or non-Africans are to people from South Africa, for example the Khoisan. From a phylogenetic point of view, all people are therefore Africans. In consequence, it is positively paradoxical to talk of 'the Africans' or 'the black Africans'. This is a relic of colonial ways of speaking and thinking, and, once again, it is a case of racism creating races. The skin colour of a Khoisan from South Africa is lighter than that of people who live in South-East Asia or South America along the Equator. Skin colour mainly reflects a biological adaptation to the level of solar radiation and consequently varies continuously in line with the intensity of UV-radiation on Earth.

The supposed human races also do not go back to separate evolutionary lines (in line with another concept of the reality of races – the so-called cladistic races). Modern humans originated in Africa more than 250,000 years ago. From there, humans spread in small groups over the rest of the globe. The non-Africans split off from the people of East Africa around 60,000 years ago and populated a large part of the world.

Non-Africans differ from people who live south of the Sahara mainly in genetic traces left by genetic admixture with Neanderthals and Denisovans. Interestingly, it is precisely this genetic contribution from our nearest extinct relatives, who not so long ago were characterised as dim-witted, club-wielding cousins, that 'White Supremacists' in the United States use to define a superior white race, separate from others. However, the proportion of Neanderthal and Denisovan genes in East Asian people and groups in Oceania and Australia is measurably higher than in Europeans. In consequence, this feature is extremely unsuitable for defining some 'superior white race' on the basis of Neanderthal genes. Moreover, numerous and recurrent human migrations have always led to links between geographically distant populations, long before the great voyages of discovery and conquest by Europeans.

Instead of definable boundaries, genetic gradients run between human groups. Among the 3.2 billion base pairs in the human genome, there is no fixed difference that separates, for example, Africans from non-Africans. To be explicit, not only is there no single gene that underpins 'racial' differences, but there is not even a single base pair.

External features such as skin colour, which are used to classify types of people, are an extremely superficial and changeable biological adaptation to existing local conditions. Skin colour alone has frequently changed in the course of human migrations and has become darker and lighter according to local solar radiation or diet.

For example, up to 8000 years ago, the inhabitants of Central Europe were strongly pigmented and it was only with the beginnings of agriculture that people with lighter skin arrived, bringing this new phenotype from Anatolia. The primarily plant-based diet of early farmers favoured individuals with paler skin, which made it easier to produce sufficient vitamin D in the skin during Europe's dark winters. The light skin colour of modern-day northern Europeans goes back less than 5000 years.

The linking of features such as skin colour with characteristics or even supposedly genetically fixed personality traits and behaviours, as was done in the heyday of anthropological racism, has now been soundly refuted. To use such arguments today as seemingly scientific is both wrong and malicious. There is also no scientifically proven connection between intelligence and geographical origin, but there is a clear connection with social background. Here too, racism in the form of exclusion and discrimination creates supposed races.

However, racism continues to exist among people. In the 20th century, racial research, racial science and racial hygiene or eugenics, as seemingly scientific disciplines, were only some of the excesses of racist thinking and action.

Simply removing the word 'race' from our daily language will not prevent racism and intolerance. A feature of current forms of racism is precisely the tendency in far-right and xenophobic circles to avoid the term 'race'. Racist thinking is perpetuated through terms such as selection, maintaining purity or ethnopluralism. However, the term ethnopluralism is nothing more than a new formulation of the ideas of apartheid. Designating 'the Africans' as a supposed threat to Europe and attributing certain biological characteristics are also in the direct tradition of the worst racism of our past. So, let us ensure that people are never again discriminated against on specious biological grounds and remind ourselves and others that it is racism that has created races and that zoology/anthropology has played an inglorious part in producing supposedly biological justifications. Today and in the future, not using the term race should be part of scientific decency.

Grand Ethiopian Renaissance Dam (GERD): A Call for Successful Mediation to Create Full Agreement by All Involved On 28-29 January, 2020 in Washington D.C.

By ***Mammo Muchie***

I. Background

Ethiopia has not received the much needed and full support to complete the GERD on time until now. The GERD should have been completed three years ago in 2017. It is remarkable because of the lack of support mainly from the Government of Egypt and its close allies; the completion of GERD unfortunately has been far too much delayed. The Government of Egypt should refrain from continuing to delay the GERD and come fully on board knowing truly that the GERD is not just only for Ethiopia; it is a real treasure and asset for all in the River Nile region, Africa and the rest of the world.

Ethiopia and Sudan will surely welcome Egypt and they know GERD is beneficial to all and not just to Ethiopia, despite the fact Ethiopia is the principal driver of the GERD initiative. What benefits Ethiopia also benefits Egypt and conversely what benefits Egypt can benefit Ethiopia too. The win-win and mutually beneficial high way should prevail for all in the region rather than overloading it with the unnecessary selfish political consumption and traffic entirely free from any external interference. The recognition and acknowledgment by all in

the region is much needed, that Ethiopia has the right to compensation to the Nile River water and the soil that cascades to Sudan and Egypt. The proper handling to stop the opposition to GERD in order to bring justice where all can gain can come when the Ethiopia that has been losing for years and years is compensated for both the water and soil. Let all share and not take advantage and use unnecessary political moves to promote ethnic fracturing to divide Ethiopia. It is worrisome to read currently the media coverages that in 2020 the ethnic division that is also promoted with external actors in Ethiopia has been reported to become the biggest threat to the country.

Egypt and Ethiopia can draw lessons from Lesotho and South Africa. It is truly an exemplary model to witness the mutual beneficial relation between Lesotho and South Africa. South Africa annually pays to Lesotho for the river water that flows from Lesotho to South Africa. Egypt should learn from South Africa and must agree to compensate Ethiopia for both the Nile River water and the cascading soil. This offer should have come from Egypt a long time ago. It is not late. Egypt needs to make a mind-set and paradigm shift to go from opposition and conflict by choosing to become a true and regular partner in supporting the construction of GERD without fail.

The South African President is going to become the chair of the Africa Union in February 2020. The Prime Minister of Ethiopia has asked the president of South Africa in his role as chair of the Africa Union to assist in making sure there is collaboration to complete the GERD between Egypt and Ethiopia and both with Sudan. Ethiopia should consider its right of obtaining due compensation for its investment in the GERD project which is of benefit not only to Ethiopia but also to the Sudan and Egypt.

Although international conventions regarding riparian water rights accord benefits for all concerned adjacent countries, the specific applications depend on the extent to which each country exerts rights. Unfortunately, current and recent regimes in Ethiopia have not exerted the required influence to make sure Ethiopia also benefits. It is time that such an action is taken now with full agreement so the GERD can be completed mainly with full support from all Governments in the Nile River region. The Africa Union should facilitate and make sure the GERD construction is fully achieved by all in the region by avoiding external divisive influences.

There is now a mediation-taking place in Washington DC managed by the US Government Treasury involving Ethiopia with Egypt, Sudan, the U.S. Government and the World Bank to produce an agreement with a declaration to come out a a Communique by 28-29 January 2020 signed by all the partners.

How it would have been truly, right if only the Nile River Regions could have taken time and solve any issues. If the Nile River regions wish to involve others, it is strongly recommended that they request the Africa Union to join them and resolve any issues by taking all the time they need.

Let us hope that the mediation in Washington DC will recommend ways for the Nile River region countries to address the GERD construction time and learn to agree. The agreement must be fair, mutually beneficial, tangible, measurable, actionable and sustainable where all join to make sure the GERD can be completed fully as soon as possible.

We expect all those who will produce the communique in a week's time to take the following recommendations that are now being shared to all involved to draft the communique in order to open the opportunity for GERD to be fast-tracked and completed very soon free from all the conflicting politics.

II: Recommendation for a Successful Mediation on GERD

1. GERD should not have been subjected to conflict. That was truly a big mistake. Those who made the mistake should acknowledge and come back to support the earliest possible completion of the GERD. There should have been engagement of all in the Nile region how best to generate hydroelectricity without any loss of water. In fact, there should have been applied research to make sure that more hydroelectric power can be generated with the increase in water volume as the region is bestowed with winter and spring seasons when

the Nile River Region is awash with flood. The applied GERD project-based action research should have also been used how to increase the water level even at the summer and drier time when there is no wet and flood. The entire weather pattern and climate can be examined systematically to make sure the water level is never reduced. There can be also solar panels that can be used to store the heat from the sun during hot seasons to retain the green zone on the ground and retain water. We have created the African Network for Solar Energy (www.ansole.org) to harness the heat and light from the sun to create electricity and continue to use the land to produce as many fruits and crops as possible.



Prof. Mammo Muchie during lauching of ANSOLE on 4 Feb 2011: Left) together with Prof. Yohannes Teketel and Dr Getachew Adam from Ethiopia. Right) together with ANSOLE´s coordinator Daniel A. M. Egbe and Ms Leslie Tobin from Cameroon/Germany and Scotland, respectively

2. There are many possibilities and opportunities that the region as a whole can gain from GERD. What is lacking is focus to find real solutions to any problem. The much-needed applicable research is not often done. This is what should have been undertaken by joining the research team and not go alone by each side and come out with information to create problems rather than solutions. The power of knowledge should have been used to empower all the countries together rather than using the power of unnecessary and divisive politics, prejudice and selfish interest to divide and fight rather than build the GERD and unite.
3. The filling of the dam can be accomplished with water gain by discovering the right and agreed high way to avoid water loss. What all of you must put in the Communique is that this opportunity for water gain rather than water loss is fully available. It is a matter of how on the journey all can agree to share and work to achieve high quality output on both the hydroelectricity and water level sides. In Japan, they can now recycle toilet water. There is no reason why we cannot apply engineering knowledge to make sure that the water level can continue to increase rather than play unnecessary politics by claiming building the dam brings risk rather than opportunity.



Founding fathers and mothers of ANSOLE

4. The weather condition and climate can be thoroughly examined with now space satellites with remote sensing communications and a variety of ground and water level experiments that are waiting to be applied, used and assist to make sure the water is not only retained but also ways can be discovered to recycle the water and increase the level by regulating the flow annually.
5. Consideration should be given to methodologies of saving the water being lost due to evaporation, flow beyond Egypt and waste because of environmental challenges in all the three countries.
6. The principle of mutual benefit must guide the relationship of all the countries that are now meeting to produce the final Communique to move forward with peace and security for all. It is critical to recognize no conflict is necessary to prevent the GERD to reach the final stage of completion.
7. All the countries in the region such as Ethiopia, Egypt, Sudan that share the waters of the Nile River along with the countries that are directly and indirectly involved (e.g. the USA, Israel and some of the countries in the Middle East) have to agree even when they disagree to re-agree to create a win-win outcome in every sphere related to the GERD. They all must clearly articulate this commitment in the coming communique.
8. There is no justification in using any threats of violence, war and interference to fast track the full completion of the GERD by not losing more time anymore now.
9. The interference in the internal politics to polarize by inflicting ethnic and religious divisions to distract Ethiopia from completing the GERD is a violation of human rights and international law. Governments that spearhead such interventions must stop and apologize for all the damage that Ethiopia has been continuing to suffer. The Communique should explicitly articulate the risk that Ethiopia has suffered and make it explicit that there will be no interference to promote tribal conflict in Ethiopia to distract Ethiopia from finalizing the completion of the GERD.

III: GERD: Resource to Generate Abundance of Electricity and Water

10. GERD will not reduce the water level. In fact, the engineering design and model can be framed in such a way that GERD's hydroelectricity can come with the increase rather than the decrease of the water level in the Nile River region as a whole.
11. The communique should explicitly recommend for all the Governments of the Nile region to apply science, technology, engineering and innovation to understand the space, the land and the water in the Nile River region to generate hydroelectric power by increasing the water level rather than reducing it. If all the politicians from all the countries involved can agree to apply scientific knowledge rather than entering into conflict, there will be absolutely no reason to prevent the GERD from being completed as soon as possible.
12. GERD can in fact make it possible for Egypt to get even more water than what it is getting now. What is needed is to create the dam without any sabotage to facilitate both the provision of water and electricity. The engineering to store the water is not difficult. What is very damaging is the unnecessary politics that the politicians and media play. The politicians, the extremists and media preferred to promote ethnic political division openly to hurt and divide Ethiopia rather than learning to agree on how best both electricity and water can be shared. What cost is involved and how best to agree to share the needed cost? South Africa pays annually to Lesotho for the water that flows to them. The Nile River water is the source of life for Egypt that flows from Ethiopia. Egypt too like South Africa does should have paid. In the Communique on 28-29, 2020, Egypt should agree to contribute and agree to pay even for all the years it has shared the water of the Nile River.
13. Egypt should also commit to contribute for building GERD rather than opposing and delaying it any more. Egypt should learn from China that contributed to help build the renaissance dam on time to make all in the region benefit from the provision of preserved water with the dam. It is much better to create and use the dam and reservoir than relying on downstream water levels that flow at different rates depending on the cycle of dry and wet season.

14. The communique should also advise all the regional countries never to fail to find restorative and rehabilitative justice to resolve any differences. They must all apply the rich spiritual heritage that promotes African values, traditions and associational culture to do the needed, necessary and honestly done mediation and resolve any problem by addressing systematically all the issues to move forward together by all undertaking a shared future.
15. The Communique should clearly articulate a road map of how all the Nile River Regional states can deal with any difference with one another from here on. It is better they do it themselves than involving all other external actors.
16. If the outsiders are to get involved, be good if the AU can be recommended to handle it. It will be good to find African solutions to African problems.
17. We appreciate all who can contribute to make sure all the regional states are engaged to solve problems rather than create problems. Let all in the Nile region create unity, rather than division, create peace rather than war, undertake sustainable and enduring engagement to make the people to be innovative, inventive, and integrative to make sustainable and transformative development future for all by making the health, safety and prosperity of all the people the priority of priorities.
18. The inspiring part of the GERD is how the payment for the construction has been made. There is no aid requested. It is n the people that contribute. Those from outside also do not give loans, they con tribute like China did.
19. Payment for the GERD construction should continue without bringing loan, aid, and debt.
20. We ask Egypt, Ethiopia and Sudan to become three as one and one as three united firmly, anchored to promote the well-being of the people and the water, soil and nature to make the GERD construction done now without taking any more time with full agreement. All those from Africa and the rest of the world are welcome to contribute but not to lend loans and debt. GERD must be purely a people's project done by the people and for all the people.

IV: Concluding Remarks

We are all eagerly looking forward that the expected communique will recommend strongly for GERD to be delayed never and to be implemented soonest ever. The agreement must be based on clear principle and value to make sure mutual benefit comes first. Any conflict must be resolved with the principle, culture and value of reconciliation. The GERD is a real asset not just for Ethiopia but also for all. Let peace prevail and GERD be achieved and done, now, now and now.



Prof ***Mammo Muchie*** is DST/NRF SARChI Research Professor on Science, Technology, Innovation and Development at Tshwane University of Technology, Pretoria, South Africa (www.sarchi.org), Adjunct Professor in BDU & Harmaya, Ethiopia , and Riara University in Kenya, and Associate Faculty Professor, Sussex University, U.K. He founded the African Journal on Science, Technology, Innovation and Development (AJSTID) in 2008 and serves as its editor-in-chief. He has been given a number of awards: long dedicated and valued service awards, best institutional senior researcher of the year merit, academic excellence award, outstanding contribution to Science, Engineering, Technology (SET) and innovation by NTSF in South Africa. Professor Muchie's scholarly contribution to the discipline of innovation has been: strengthening and contextualising the theoretical framework of National Innovation Systems as applied to the African context. The principles and theory of the National Innovation Systems, as it is practised in the developed and industrial economies could not be applied directly to the developing or under-developed and largely agrarian economies of the African

continent. Prof. Muchie took up the mammoth task of producing an impressive body of research on the innovation systems (in whatever rudimentary forms or degrees of evolutionary state they exist) in various African countries. He taught over 400 doctoral candidates in doctoral academies across the world in the Globelics, Africalics, Cicalics, Indialics networks. He has taken major initiatives for running Doctoral and Masters Academy in various universities in Africa and all over the world. One such academy is recently organized by the Association of Common Wealth Universities. Also, he has been invited for many keynote addresses and lectures in Africa and world-wide. He is the Founder of the Africa Post-Graduate Academy that has been training masters and doctoral students drawn from different disciplinary backgrounds applying the unity of knowledge approach to upgrade quality supervision. He has published over 400 papers, book chapters, articles and given over 100 keynotes. e-mail: muchiem@tut.ac.za, mammo.muchie@gmail.com

Greening Africa Together (GATo) Network and ANSOLE: A New Partnership for Social Responsibility of African Universities

By ***Lilly Seidler****

GREENING AFRICA TOGETHER

The potential of African universities to address the problems of climate change, especially in the fields of energy and waste and resource management remains largely untapped. Efforts in addressing the root causes of climate change will also foster sustainable development. African Higher Education Institutions (HEI) represent a growing part of the young, well-educated population. Empowering students of relevant study programmes to implement projects that deliver practical solutions can profoundly impact on the future of the African continent. This approach is known under different terms, such as **service-learning**, **community engagement**, **community development**, **civic engagement**, and **community outreach**. It is a way to put into practice the so-called third mission of higher education institutions, their social responsibility. Where universities institutionalise this approach, they contribute to the sustainable development of communities and to the employability, the holistic development and the interdisciplinary learning of their students. Therefore, service-learning modules are increasingly integrated in the curricula and study programs and are a way to earn credit points, sometimes as mandatory modules or as replacement for internship

programs.



GATo in Benin 2018

In this spirit, **Greening Africa Together**, a network of African universities, non-governmental institutions, and other partners, is implementing service-learning modules to address local needs in the field of environment, climate change and health, thereby strengthening local capacities, creating young leaders and supporting Pan-African and international cooperation since 2015.This network is linked to an NGO network of local African members of the international NGO “New Humanity” and other NGO partners like “Forêt Internationale” and local partner Universities. Beginning with the University Cheikh Anta Diop Dakar, the University Assane Seck of Ziguinchor, the University of Kinshasa, the National University of Benin, the University of Abomey Calawi, the IRD at the Polytechnique University of Bobo Dioulasso and the CIRDES, Burkina Faso and new partners in Cameroon, Uganda and Kenia joined the network. Within their projects, student teams implemented PV systems for schools, maternities, small hospitals, orphanages, and streets, Solar home systems with microcredits in Senegal, Benin, DRCongo and now in Burkina Faso, Solar dryers for fruits and vegetables in Senegal and Turkey, biogas plants in Senegal and now in Benin, organic agriculture and poultries in Benin, Senegal and now in Cameroon, PV water pumps and water filter systems in Senegal and now in Cameroon, fuel briquettes and improved stoves in Senegal and now in Uganda, waste management and plastic recycling now in Burkina Faso and Uganda, sustainable reforestation with accompanying measures like beekeeping in Senegal and Kenya and prepares them in Cameroon and Burkina Faso,…

A service-learning project is characterised by a horizontal relationship between the community and the members (students and teaching staff) of the higher education institution. The community or the social institution discusses their needs with the NGO partners and communicates with the University coordinators. Over the course of several months, the student teams develop an approach to address the needs and provide solutions to be implemented in a practical phase in exchange with the NGO and the community, which can be implemented if the community is near regularly or in the form of a summer school. To

develop and implement quality solutions the engagement of teaching staff in the field is essential, to provide workshops, consult the teams, and evaluate project presentations. Here the partnership with ANSOLE is opening new doors providing engaged researchers or teachers aware of their role as change makers for the African continent. Through ANSOLE, which will offer trainings in the service-learning pedagogy in the different meetings from now on. This is an opportunity to empower the network of Greening Africa Together further and increase the impact of the projects.



GATo team in Cameroon (March 2020) for an irrigation project in favour of internal displaced persons (IDP) from the anglophone crisis

The members of Greening Africa Together are united by the aim to encourage, empower, and enable African youth to fight climate change and provide new perspectives in Africa together, but more than this, we are also led by the idea of universal fraternity. In the spirit of a united world, all our projects aim to create sustainable positive change for people and nature across cultural, religious and social borders. There are also partnerships with universities and organisations from other continents like the TU Berlin, now the UPC Barcelona, the University of Pretoria (having a huge community development program), IngenieuxSud, foundations, companies, like Solariss, small NGOs….

However, how are these projects financed? The most important part is certainly that universities recognise how important community engagement is to fulfil their mission, as such they should include it in the teaching programmes of their staff. But for project implementation the most sustainable way is to create partnerships with development programmes, NGOs, businesses, in for a sustainable implementation of projects, which are means to get finances. Together ANSOLE and Greening Africa Together will aim to increase these meaningful partnerships,

**Dr Lilly Seidler is the international coordinator of the GATo network and responsible for Service Learning programme at the Technical University (TU) of Berlin, Germany. Contact: lilly.seidler@tu-berlin.de*

Indigenous Knowledge Systems

By ***Monicca Bhuda***

Indigenous knowledge is the cumulative body of strategies, practices, techniques, tools, intellectual resources, and explanations accumulated over time in a particular locality, without

the interference and impositions of external hegemonic forces, shared from one generation to another.



Indigenous Knowledge Systems (IKS) are ways for (relational) knowing and living created within indigenous communities from native to a certain geographical area. Indigenous knowledge systems are "accumulative, representing generation of experience, careful observation, participations and trial and error experiments. All members of the community have indigenous knowledge and contribute to IK processes: elders, women, men and children.

Indigenous knowledge (IK) has an ability to increase our scientific understanding of natural phenomena which might be crucial for sustainable development. In this modern world, indigenous people can incorporate and reinterpret aspects of Western knowledge and practice into their traditions as part of the ongoing process of globalization. IK can also be checked and evaluated in different contexts to assess if the IKS will contribute to the creation of appropriate technology that address sustainably.

Indigenous knowledge forms the basis for agriculture, food production, nutrition, education and training, protection of the environment, and many other activities. In addition, indigenous societies have decision-making processes because IKS interacts with the world and it also includes: systems of technology, social, cultural, philosophical, learning and governance.



For centuries, indigenous peoples have maintained their distinctive world-views and associated information structures, even though experiencing massive societal upheavals due to disruptive forces beyond their influence. Many of the basic values, ideals and traditions associated with these views of the world have survived and are finding importance for the generations of today just as they have been for generations past. Indigenous people have had their own ways to look at the world, the cosmos and each other. Therefore, indigenous knowledge should be part and parcel of the education system as it plays a fundamental role in different aspects.

Monicca Thulisile Bhuda is a PhD candidate in Indigenous Knowledge Systems (IKS) at the North-West University, South Africa. She is also a lecturer in culture and heritage at the University of Mpumalanga, South Africa. Ms Bhuda Holds a Bachelor's Degree in indigenous Knowledge Systems and a Master's degree in Indigenous Knowledge Systems. Her interest are on culture preservation, promotion and using indigenous methods for sustaining livelihoods.

Ms Bhuda is an ANSOLE member and a culture activist who grew in the rural areas of Mpumalanga in South Africa. Her interests in Indigenous Knowledge Systems filed have been influenced by her cultural background and environment. The Indigenous Knowledge Systems is a programme that aims to decolonize education. It speaks to the African ways of living, doing and being. Indigenous knowledge (IK) is an important element of the intellectual and cultural heritage of indigenous people. Email: bhudamonicca@gmail.com

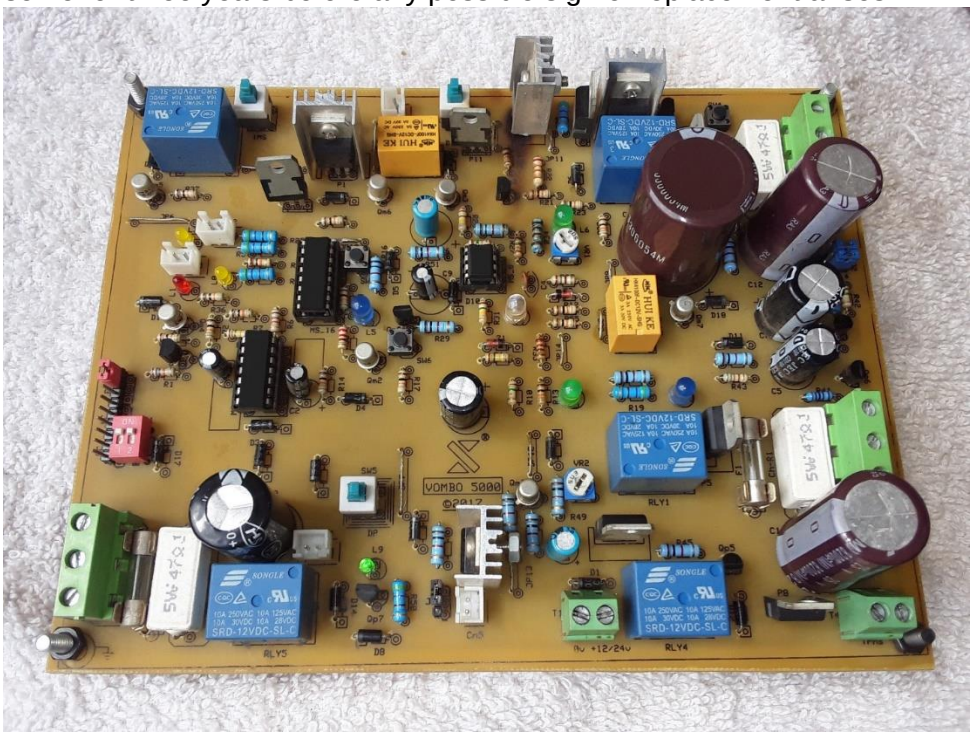
Innovation in Solar...

Twenty Straight Hours of Solar Power

By ***Mwendwa Mtongwe***

My name is Victor Mwendwa Mtongwe, an Electronics Technologist. I acquired my Diploma in Electrical & Electronics Engineering at Kenya Institute of Highways and Building Technology (KIHBT) in Kenya in 2004, in 2006 I did another Diploma in Mass Communication at Pago Training Institute in Kenya, then in 2013 I did a certification course on Certified Cisco Network Association (CCNA) at Computer Pride in Kenya, and from 2017 up to date I am pursuing a B.Tech still in Electrical & Electronics Engineering, Instrumentation & Control option, at the Technical University of Kenya.

I have worked in the engineering industry as a technician of Audio Visual Systems between 2004 and 2006, and as a technician of Hi-tech Security Systems since 2008 up to 2016, when I resigned from employment to pursue my innovation dreams. During this working period, I came to note that solar power DC batteries in the local market are sold out without a warranty to the customer. Without a warranty because, once sold and installed, the DC batteries mostly last for less than three months working properly. On the other side, according to the DC batteries manufacturer's specifications on usage, the batteries should serve for three years before any possible sign of replacement arises.



Efficient Solar Battery Charging Management System (VOMBO 5000)

It is due to wrong connectivity (of overloading the solar panel) during installation, that soon or later, the cells of the DC batteries die off and hence the batteries stop retaining power for later use at night as

expected.
The Efficient Solar Battery Charging Management System (VOMBO 5000) was designed to enable one solar panel to charge more batteries in a day, as desired by the customer, and at a lower cost: without buying extra solar panels to charge the extra batteries, and have the batteries serving up to their designed full life time of three years (and not three months).



After the design and testing, I registered my company by the name VOMBO SYSTEMS to bring together like minded engineers in Kenya, whom I had come across and seen their potential in my journey of design works, to develop our engineering inventions & innovations based on the needs of humanity.
So far, the VOMBO SYSTEMS has developed and tested the VOMBO 5000 to an acceptable standard by the user. It has a potential to manage a single solar panel to generate power for twenty hours continuous - from 6am to 2am.
I am a Kenyan, happily married to one wife, having two children together, a boy and a girl. I am a Christian who speaks English, Kiswahili, Kamba, & Kikuyu languages. Email: victormtongwe@gmail. WhatsApp: +254 733 807 200

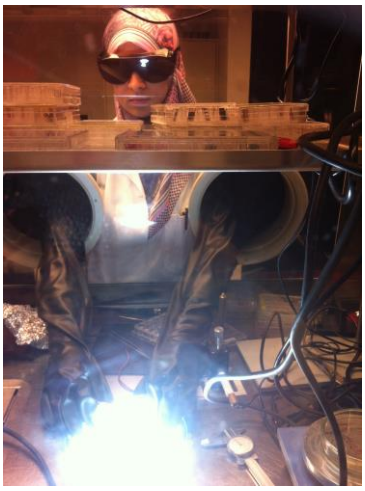
Update of ICTP-ANSOLE Alumni...

Safae AAZOU

I, **Dr. Safae AAZOU** was born on May 12th 1984, in Settat, Morocco. I did my primary education at Feqih Erradi Primary School in Azemmour from 1992 to 1997, then my secondary education in Lalla Hasna Middle School from 1998 to 2000 before receiving a *baccalauréat* in sciences in 2003 from Oum Errabiii High School in Azemmour. In 2006 I earned my BSc in Physics from Chouaib Doukkali University (UCD), El Jadida, Morocco. In 2008 I obtained my MSc in Electronic Automatic and Signal Processing, from UCD, then my PhD from both UCD and Ulg (Luik University, Luik, Belgium) in May 2014.



Dr Safae Aazou (in the middle) during her stay at LIOS, JKU Linz in 2012



I met Professor Daniel A. M. Egbe, ANSOLE coordinator, during a conference in Morocco in 2011, during which he presented the ANSOLE network. That motivated me to become an ANSOLE member. Through mediation of Prof. Egbe, I was privileged to visit the Linz Institute for Organic Solar Cells (LIOS) of the Johannes Kepler University Linz, Austria, and I spent two months there to learn about organic devices and to do the experimental part of my PhD project. My thesis was devoted to theoretical and experimental studies of the basic device of photovoltaic conversion: the solar cell. Starting from Maxwell equations, the basic semiconductor equations are established. Next, discretization of these equations using a finite difference scheme and of the continuity equations by the Gummel-Scharfetter scheme are performed. The obtained system of equations is solved iteratively according Newton-Raphson algorithm. The experimental part of the work, entirely achieved at LIOS, aimed the fabrication and the characterization of organic bulk heterojunction solar cells based on two different polymers used as donors P3HT and AnE-PV*stat* and the molecule PCBM as acceptor. A comparative study of the fabricated solar cells indicates that the device efficiency depends on the donor:acceptor ratio. In order to understand electronic and optical mechanisms occurring within a solar cell and which may affect its characteristics and performance, and to identify the role of the equivalent circuit parameters describing these mechanisms, many electronic circuits modeling the solar cell are presented and only the five physical parameters circuit is chosen. Several physical parameters extraction methods are exposed in detail retained to extract the five physical parameters of the fabricated organic solar cells. The effects of each physical parameter on the solar cell efficiency are investigated. Thus, the variation intervals of the photovoltaic metrics, fill factor and efficiency under the influence of parameters variations can be identified.

I am an assistant professor at University of Mohammed V, Rabat, Morocco since June 2019. Besides, I occupied the job of researcher and then senior researcher, from September 2014 to June 2019, at Moroccan Foundation for Advanced Science, Innovation and Research (MAScIR), Rabat Morocco in Optics and Photonics Center, directed by Professor Zouheir Sekkat. I am the leader of international projects and was involved in international and national projects in the Photovoltaic field. I presently co-supervised 5 PhD students and 5 Master students. I authored and coauthored 19 papers published in peer-reviewed journals, and more than 30 presenations in international and national conferences.



Women in Renewable Energy (WiRE), SPIE,11 -15 August 2019, San Diego, USA.

ANSOLE was the bridge to discover new labs and achieve my targets. Thanks to ANSOLE for giving me the opportunity to complete my PhD thesis, get known by world leader professor in the field of PV, Prof. Serdar Sariciftci, and enlarge my scientific network. My fruitful knowledge after ANSOLE fellowship allows me to accomplish goals and objectives in my OPV projects and lectures related to organic devices in my current position as professor at UM5 and as affiliate researcher at MAScIR. Email: aazou.safae@yahoo.fr

Armel Duvalier PENE

I am **Armel Duvalier PÉNÉ**, born on 15 January 1980 in Bafoussam, West Region of Cameroon. I am the 2nd child of a family of 3 children. My father died in 2017, two weeks before my thesis defence, while my mother had died already in 1998. I did my secondary education in Baham and Bafoussam. I obtained my *Baccalauréat* in Electrical Engineering at *Collège Polyvalent Bilingue Martin Luther King de Bafoussam* in June 2002. I enrolled the same year at the University of Ngaoundere where I obtained a Bachelor in Electronics, Electrical Engineering and Automatics in September 2007. I started my Masters thesis in the same field in January 2008 and obtained it in September 2009. I was selected to do a PhD in Applied Physics and Engineering in August 2011 under the supervision of Professors Laurent BITJOKA and César KAPSEU of University of Ngaoundere, and George ELAMBO NKENG of the "Ecole Naionale des Travaux Publics" of Yaounde. I obtained my PhD in June 2017.
I obtained the ANSOLE-ICTP fellowship in 2012 and it lasted two years and six months. I was sponsored under the Intra African Exchange (INEX) Program. I was hosted by two laboratories. I began in the "*Laboratoire des semi-conducteurs et d'énergie solaire*", Faculté des Sciences et Technologies, Cheikh Anta Diop University in Senegal where I worked one year (2012-2013) under the supervision of Pr Grégoire Sissoko. Then, I continued to the «*Laboratoire de Physique des Matériaux et Applications des Energies Renouvelables*», Faculté des Sciences et Techniques, Université Hassan II Mohammedia, in Morocco.



During my PhD study in Mohammedia, Morocco (left) and during my PhD defence in 2017 at the University of Ngaoundere

I did a Theoretical study of a bifacial solar cell under multispectral illumination (effect of magnetic field and light incidence angle) and Elaboration and characterization of solid diffusion sources on silicon wafers by sol-gel method for realization of a solar cell emitter.
I made in the Semiconductors and Solar Energy laboratory (LASES) in Dakar (Senegal) a modeling study of a bifacial solar cell in steady state and under multispectral illumination. An external magnetic field was applied to the cell and the light incidence angle was also varied. For this kind of solar cell, the three illumination modes were used: front side illumination, back side illumination and simultaneous front and back sides illumination. We considered in this work these three illumination modes of the bifacial solar cell and we established the expressions of the excess minority carrier's density in the base of the cell, the photocurrent, the photovoltage, the diffusion capacity according to the incidence angle and the intensity of

the magnetic field. At the end of this work, we submitted an article which was accepted and published in the International Journal of Emerging Technology and Advanced Engineering, Volume 3, Issue 9, September 2013. We also presented two oral communications at the multidisciplinary international symposium, St. Jerome Catholic University Institute of Douala, on the 08th to 10th January 2014 and the 1st ANSOLE-ICTP fellows' workshop "AIFW 2013", Mohammedia, Morocco on 5th January 2013. I continued to the «Laboratoire de Physique des Matériaux et Applications des Energies Renouvelables», in Morocco. I worked on the realization of emitters made by diffusion of phosphorus or boron from solid doping sources developed by the sol-gel method associated to spin coating and dip coating on monocrystalline and polycrystalline silicon wafers. At the end of this work, three articles were published in Afrique Science, Vol.11, N°5 (2015), septembre 2015, Afrique Science, Vol.10, N°3 (2014), 1er septembre 2014 and Phys. Status Solidi C. doi: 10.1002/pssc.201400060, 13 August 2014. We also presented three communications: (oral and posters): the "1er Colloque franco-marocain sur les énergies nouvelles et renouvelables (COFMER'01)" on the 28th to 30th 0ctober 2014, "Ecole Mohammadia d'Ingénieurs", Rabat, Morocco (Oral presentation), the International Conference on Functional Materials and their technological Applications(CIMFAT 2014), wich took place on October 24th to 25th at the "Ecole Normale Supérieure" Hassan II University Casablanca, Morocco (Poster presentation) and the E-MRS Spring Meeting 2014, on May 26th to 30th at Lille Congress Center, France (Poster presentation). At the end of this thesis, four articles were published.



In the electronic laboratory of University Institute of Technology in Ngaoundere, Cameroon

I submitted my PhD thesis in March 2015 and I defended it in June 2017.
At the end of my defense, I did not directly get a job. It was after two years and six months that I was recruited in the Electrical Engineering department of the University Institute of Technology (IUT) of the University of Ngaoundere. I took office on January 2, 2020 as a lecturer of electronics and electrical engineering.
The ANSOLE scholarship allowed me to do the experimental part of my thesis and allowed me to build my scientific career.
I am very grateful to ICTP (The Abdus Salam International Centre for Theoretical Physics) and ANSOLE and also to his international coordinator Prof. Daniel A. M. EGBE for his advices and encouragements which help me always to keep the cape. Email: duvalierarmel@gmail.com

Hervé Joël Tchognia NKUISSI

I am **Hervé Joël Tchognia Nkuissi**, I'm born on 04 December 1984 at Kékem (Cameroon), and I'm Cameroonian. I received my secondary high school graduation "Baccalauréat Général Série C" majoring in Mathematics and Physics at Secondary High School of Kékem in June 2003. Then, I went to the University of Yaoundé I where I received my BSc and MSc in Physics in 2007 and 2010, respectively. In 2012, is a PhD student at the University of Yaoundé I, I was awarded a highly competitive ICTP-ANSOLE scholarship within the framework of the Intra-African Exchange (INEX) program to carry out my thesis work at the Hassan II University of Casablanca in Morocco from October 2012 to April 2015. Thesis I have finally defended in October 2016 at the University of Yaoundé I in Cameroon. The title of the thesis was: "Optimization of the deposition conditions of Cu_2ZnSnS_4 (CZTS) thin films using Taguchi design of experiments methodology for photovoltaic applications." The results obtained from this thesis, as well as additional work, have been the subject of around twenty



While doing my PhD in the lab of Prof. Bouchaib Hartiti in Mohammedia, Morocco

scientific publications in peer-reviewed journals including books and book chapters, and have been presented in ten of international conferences in Morocco, South Africa, Turkey and Cameroon. After my defense in 2016, I had a postdoc offer in South Africa which unfortunately did not go through. Recently, in September 2019, I had another offer still in South Africa but this time I was refused a visa because I didn't produce a police clearance certificate from Morocco as they told me at the embassy. After 3 years working in private institutions in Cameroon, I was finally recruited by a state institution. Actually I am an Assistant Lecturer at the School of Geology and Mining Engineering (EGEM) of the University of Ngaoundere in Cameroon.



Presently working as an assistant lecturer at EGEM, University of Ngaoundere, Cameroon

By giving me the opportunity to go to Morocco to do my thesis, ANSOLE allowed me to be competitive in my field. If I can today in my young research career receive invitations as a reviewer, to give talks in international conferences, to participate in ebook projects which I have already contributed to the height of two chapters, one edited by Elsevier and another

one by Intechopen ... it is because ANSOLE gave me the opportunity to do research in an appropriate setting by giving me this scholarship. Today I am satisfied with what I have been able to achieve thanks to ANSOLE and I thank infinitely again ANSOLE and its International Coordinator Prof. Daniel Egbe for everything they did for me.
Email: hervetchognia@gmail.com

Serge Izzedine Mohamed ADJIBADE



Very happy to be part of this wonderful ANSOLE family I am **Serge Izzedine Mohamed ADJIBADE**. I was born on February 26, 1987 in Cotonou in the Republic of Benin. I did my secondary studies at the Catholic College Notre Dame de Lourdes in Benin. After a scientific baccalaureate, I am admitted to a preparatory school for the engineering diploma. I obtained the diploma of design engineer of Mechanical and Energetic Engineering, Energetic Option at the Polytechnic School of Abomey-Calavi in Benin. After this diploma, I pursued the thesis at the Laboratory of Applied Energetics of the Cheikh Anta Diop University of Dakar in Senegal. My thesis subject concerns the study of a micro cogeneration for the simultaneous production of electricity and cold in sub-Saharan zone with a view to the conservation of dairy products. After a year of thesis, I was able to benefit from the ANSOLE-ICTP grant for 2 years. I benefited from the ANSUP grant. After 3 years of thesis, I defended in 2017 my doctorate in energy systems and environment. During this thesis, we published three articles in international peer-reviewed journals. We had waited 2 years to find a teaching researcher position.



I am presently recruited as Einseigant-chercheur at the Ecole Supérieure Polytechnique de l Université Cheikh Anta Diop

I was recently recruited as *Enseigant-Chercheur* at the University Cheikh Anta Diop of Dakar-Ecole Supérieure Polytechnique within the mechanical engineering department. I am in charge of thermal and materials resistance courses. Several responsibilities have been assigned to me, namely among others responsible for internships for graduating students (Licence, Master and Engineer in electromechanics). In addition, at the level of Senegal, I was recently appointed to the CAMES-Energy Thematic Research Program within the monitoring and communication unit.

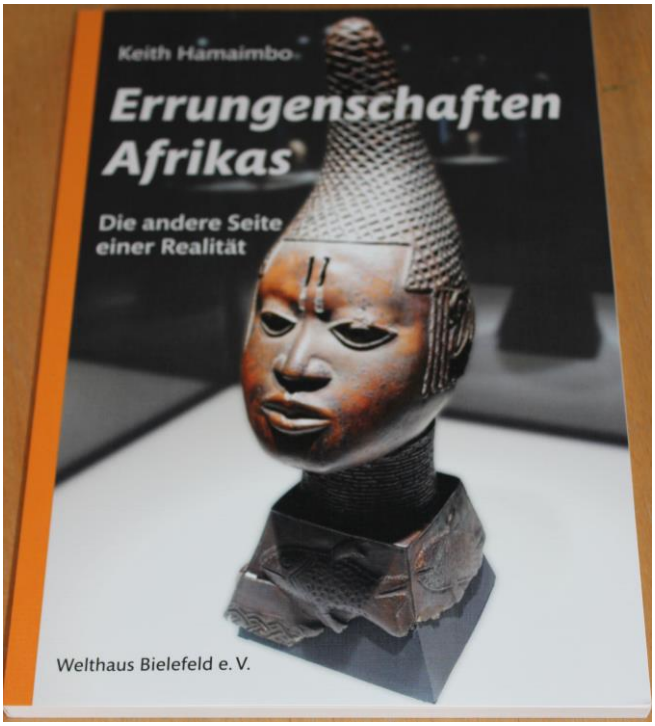
Thanks to the ANSOLE grant, I was able to realize a big dream: the doctorate. Research in Africa without funding is very complicated. Several researchers either abandon their work due to lack of funding or arrive at it after several years. Theses which must be completed in 3 to 4 years are done in 7 to 10 years. This funding allowed me to carry out the thesis in good conditions. Funding like this can do very good things in Africa, research being one of the fundamental foundations for development on several fronts. The second advantage of ANSOLE network is mobility to participate to conferences. I was able to exchange with several experts in our fields by participating in a conference and a summer school in Egypt and Burkina Faso, respectively.

It is one of the few thesis funding models. The possibility of being financed locally is an innovation in the grant obtained. In my humble opinion, this funding must be renewed to benefit more researchers.
Long live the ANSOLE network,
Long live the research
and
Long live the ANSUP scholarship
Email: izzedineadjibade@gmail.com

Book Presentation…

Errungenschaften Afrikas, die andere Seite einer Realität (*Africa´s achievements, the other side of a reality*)

By ***Keith Hamaimbo***



The images of the past and the present that are conveyed to us play a major role in our perception of the world and the formation of our identity. What contribution did black people make to world history? How much do we know about their role in history and the present, and what are we not yet aware of?

This book is meant to question our image and ideas of black people. The achievements of various Black people and groups, be it in medicine, seafaring, architecture, religion, politics and much more, should fill the gaps in our knowledge of the contributions of African people. It is information that has been forgotten or never became known, has not been brought up for discussion due to a

Eurocentric narrative, or has simply been ignored.
This book urges to let the (to us) unknown of history and the present to speak, in order to correct the so far one-sided depiction of Africa. With the new self-confidence of black people all over the world, they can take their own history in hand and tell it themselves. Because: "Until the lions have their own historians, the history of hunting will always glorify the hunter."

The German Version oft he book can be ordered at:
https://www.welthaus.de/bildung/errungenschaften-afrikas/

The English version will be published soon…



Dr. Keith Hamaimbo was born in Zambia and studied theology at the *philosophisch-theologische Hochschule* in Sankt Augustin and at the University of Bonn. Since 2014 he has been working in the Welthaus Bielefeld e.V. as an education officer for global learning and a regional promoter for development policy education work in the state of North Rhine-Westphalia for Bielefeld and for East Westphalia town of Lippe. He is a trainer for introductory seminars on *Global Learning* on behalf *Engagement Global* and leads Workshops and trainings on racism and empowerment. Email: keith.hamaimbo@welthaus.de

Food for Thought…

Corona virus

By ***Raffaele Morelli****,

"I believe that the cosmos has its way of rebalancing things and its laws, when these come to be too upset. The moment we live in, full of anomalies and paradoxes, makes us think ...
In a phase where climate change, caused by environmental disasters, has reached worrying levels.
First China, then so many other countries, are forced to block; the economy is crumbling, but pollution is drastically decreasing.
The air is improving; we use a mask, but we breathe…
In a historic moment when, all over the world, certain discriminatory ideologies and policies are reactivated, strongly recalling a petty past, a virus arrives, which makes us experience that, in an instant, we too can become the discriminated, the segregated, those who are blocked at the borders, who bring diseases.
Even if we have nothing to do with it.
Even if we are white, Western, and we travel in first class (= complex of any power)
In a society based on productivity and consumption, in which we all run 14 hours a day after what is not clear why, without Saturday or Sunday, without more breaks in the calendar, suddenly, the "stop" arrives.
All stationary, at home, for days and days.
To count the time whose value we have lost, as soon as it is no longer measurable in money, in profit.
Do we even know what to do with it?
In a period when the education of our own children, by force of circumstances, is often delegated to various figures and institutions, the virus closes schools and forces us to find alternative solutions, to reunite moms and dads with their own children.

It forces us to rebuild a "family".
In a dimension where relationships, communication, sociability, are essentially played out in this non-virtual space of social networks, giving us the illusion of proximity, the virus takes away proximity, the one that is very real: nobody must not touch, no kissing, distance, in the cold of non-contact.
Since when have we taken these gestures and their meaning for granted?
In a social climate where thinking about yourself has become the rule, the virus sends us a clear message: the only way to get out of it is reciprocity, a sense of belonging, community, feeling part of something bigger that needs to be taken care of and that can take care of us.
Shared responsibility, feeling that our actions depend not only on our own fate, but on the fate of others, of all those around us. And that we depend on them.
So, if we stop the "witch hunt", to ask ourselves who the fault is and why it all happened, to ask ourselves more about what we can learn, I think we all have a lot to think about and to act.
Because with the cosmos and its laws, obviously, we have an excessive debt.
He reminds us of it at a high price, with a virus.

* *Rafaele Morelli is an Italian psychiatrist and psychotherapist. This text was google translated from French. Text received as forwarded WhatsApp message!*

L'Humanité Ébranlée et la Société Effondrée par un Petit Machin.

By ***Moustapha Dahleb****

Un petit machin microscopique appelé coronavirus bouleverse la planète. Quelque chose d'invisible est venu pour faire sa loi. Il remet tout en question et chamboule l'ordre établi. Tout se remet en place, autrement, différemment.
Ce que les grandes puissances occidentales n'ont pu obtenir en Syrie, en Lybie, au Yemen, ...ce petit machin l'a obtenu (cessez-le-feu, trêve...).
Ce que l'armée algérienne n'a pu obtenir, ce petit machin l'a obtenu (le Hirak à pris fin).
Ce que les opposants politiques n'ont pu obtenir, ce petit machin l'a obtenu (report des échéances électorales...).
Ce que les entreprises n'ont pu obtenir, ce petit machin l'a obtenu (remise d'impôts, exonérations, crédits à taux zéro, fonds d'investissement, baisse des cours des matières premières stratégiques...).
Ce que les gilets jaunes et les syndicats n'ont pu obtenir, ce petit machin l'a obtenu (baisse de prix à la pompe, protection sociale renforcée...).
Soudain, on observe dans le monde occidental le carburant a baissé, la pollution a baissé, les gens ont commencé à avoir du temps, tellement de temps qu'ils ne savent même pas quoi en faire. Les parents apprennent à connaître leurs enfants, les enfants apprennent à rester en famille, le travail n'est plus une priorité, les voyages et les loisirs ne sont plus la norme d'une vie réussie.
Soudain, en silence, nous nous retournons en nous-mêmes et comprenons la valeur des mots solidarité et vulnérabilité.
Soudain, nous réalisons que nous sommes tous embarqués dans le même bateau, riches et pauvres. Nous réalisons que nous avions dévalisé ensemble les étagères des magasins et constatons ensemble que les hôpitaux sont pleins et que l'argent n'a aucune importance. Que nous avons tous la même identité humaine face au coronavirus.
Nous réalisons que dans les garages, les voitures haut de gamme sont arrêtées juste parce que personne ne peut sortir.
Quelques jours seulement ont suffi à l'univers pour établir l'égalité sociale qui était impossible à imaginer.

La peur a envahi tout le monde. Elle a changé de camp. Elle a quitté les pauvres pour aller habiter les riches et les puissants. Elle leur a rappelé leur humanité et leur a révélé leur humanisme.
Puisse cela servir à réaliser la vulnérabilité des êtres humains qui cherchent à aller habiter sur la planète mars et qui se croient forts pour clôner des êtres humains pour espérer vivre éternellement.
Puisse cela servir à réaliser la limite de l'intelligence humaine face à la force du ciel.
Il a suffi de quelques jours pour que la certitude devienne incertitude, que la force devienne faiblesse, que le pouvoir devienne solidarité et concertation.
Il a suffi de quelques jours pour que l'Afrique devienne un continent sûr. Que le songe devienne mensonge.
Il a suffi de quelques jours pour que l'humanité prenne conscience qu'elle n'est que souffle et poussière.
Qui sommes-nous? Que valons-nous? Que pouvons-nous face à ce coronavirus?
Rendons-nous à l'évidence en attendant la providence.
Interrogeons notre "humanité" dans cette "mondialité" à l'épreuve du coronavirus.
Restons chez nous et meditons sur cette pandémie.
Aimons-nous vivants!
**Moustapha Dahleb is of Chadian origin. Text received as forwarded WhatsApp message.*

Events Calendar*

03 March 2020, Technical University of Kenya (TUK), Nairobi, Kenya: 2nd ANSOLE Scientific Meeting in Kenya (ASMKE 2020)
02-04 April 2020, Ouagadougou, Burkina Faso: Semaine des Energies et Energies Renouvelables d´Afrique (SEERA 2020)
23 May 2020, Africa Day 2020 Jena, Germany: International Conference on „Jena Declaration“
06 June 2020, **University of Kinshasa (UNIKIN), DRCongo**: 2nd ANSOLE Scientific Meeting in DRCongo (ASMCO 2020)
7-10 July 2020, Achalm, Reutlingen, Germany: Nanofiltration 2020 organized by Karlsruhe Institute of Technology. http://nanofiltration2020-mt.ifg.kit.edu/
28 August 2020, University of Lesotho, Lesotho: 1st ANSOLE Scientific Meeting in Lesotho (ASMLES 2020)
16-19 October 2020, Cheikh Anta Diop University of Dakar, Senegal: ANSOLE DAYS 2020 & BALEWARE 2020
02-05 February 2021, Sousse, Tunisia: ANSOLE DAYS 2021, 10th Anniversary of ANSOLE.



**Most of the events will be/have been postponed or cancelled due to corona virus!*

Statuts du Club ANSOLE Energies Renouvelables et Environnement de l' Université de Ngaoundéré (en abrégé CANERUN)

PREAMBULE

Vu la constitution,
Vu la loi N°90/053 du 19 décembre 1990 portant sur la liberté d'association, modifiée et complétée par la loi N°99/011 du 20 juillet 1999,
Nous, étudiants de l'Université de Ngaoundéré,
Animés par la volonté d'entretenir de bons rapports entre nous,
Et soucieux de contribuer au développement d'un environnement sain pour une éducation de qualité dans notre université,
Convenons en ce mois de Janvier 2020 de la création d'un cadre d'entraide, de collaboration et de sensibilisation sur l'environnement, le développement durable et l'efficacité énergétique.

Dénomination:
« CLUB ANSOLE ENERGIES RENOUVELABLES ET ENVIRONNEMENT DE L'UNIVERSITE DE NGAOUNDERE »
(CANERUN)

Titre I: Des dispositions générales

Article 1: Objet
Le CLUB ANSOLE des étudiants de l'Université de Ngaounderé est une association laïque, à but non lucratif, qui accueille en son sein tous les étudiants régulièrement inscrits à l'Université de Ngaounderé.

Article 2: Siège-Devise
1. Son siège social est le Campus Universitaire de Ngaounderé.
2. Sa devise est: ***«Un environnement sain pour éducation de qualité***».

Article 3: Objectifs
1. Renforcer les liens d'amitié et de solidarité entre les membres;
2. Développer une politique d'hygiène et salubrité au sein du campus;
3. Servir de cadre d'échanges et de sensibilisation sur l'environnement et le développement durable au sein du campus universitaire;
4. Faire connaitre et valoriser l'efficacité énergétique au sein du campus universitaire.
5. Accompagner, participer et encadrer les événements organisés au sein du campus.

Titre II: De la structure

Article 4: Le CLUB ANSOLE est composé de (des):
-une Assemblée Générale;
-bureau exécutif ou universitaire élu pour un mandat deux (02) ans renouvelables;
-la commission spécialisée;
-bureaux de coordination dans les différents Etablissements.

Chapitre 1: de l'Assemblée Générale

Article 5:
(1) L'Assemblée Générale est composée de tous les adhérents;
(2) Elle se réunit en session ordinaire trimestriellement par convocation du Président;
(3) Toutefois, elle peut se réunir en session extraordinaire sur convocation du président, du Point Focal ANSOLE de l'Université ou à la demande des ¾ des adhérents,
(4) Les réunions de l'Assemblée Générale sont présidées par le Président ou son vice ou par tout autre membre désigné par le bureau ou par le Point Focal ANSOLE.
(5) Les convocations portant l'ordre du jour doivent parvenir aux adhérents au moins une semaine avant la tenue de l'Assemblée Générale.

Article 6: Attributions de l'Assemblée Générale

C'est l'organe suprême du club
Elle est chargée de:
-fixer les taux d'adhésion;
-approuver le plan d'action et les rapports du bureau exécutif et des différentes coordinations;
-délibérer sur les rapports de gestion;
-adopter le procès-verbal de la précédente assemblée;
-valider les élections des différents bureaux de coordination et élire le bureau exécutif pour une durée de deux ans;
-délibérer en session extraordinaire sur les modifications des statuts et règlement intérieur;
-délibérer sur le rapport financier du trésorier et déléguer ses pouvoirs au président du bureau exécutif.

Chapitre 2: Du Bureau Exécutif

Section 1: De l'Administration

article 7: le bureau exécutif comprend:
-Un(e) Président(e);
-Un(e) vice-président(e);
-Un(e) Secrétaire Général(e);
-Un(e) Secrétaire Général(e) Adjoint(e);
-UnTrésorier/une Trésorière
-Deux Rapporteurs;
-Deux émissaires permanents.

Section 2: Des attributions du Bureau Exécutif

Article 8: Le Président du CLUB ANSOLE;
(6) Veille à la bonne marche du club et coordonne toutes les activités du club;
(7) Représente le club dans tous les actes de la vie civile;
(8) Convoque et préside toutes les réunions du club;
(9) Ordonne les dépenses, prend acte des décisions de l'assemblée générale et des sections disciplinaires;
(10) Peut convoquer une Assemblée Générale extraordinaire;
(11) Délègue ses pouvoirs par écrit au Vice-président ou tout autre membre du Bureau Exécutif.

Article 9: Le Vice-Président
Il assure l'intérim en cas d'empêchement, de défaillance, de démission ou de décès du président.

Article 10: Le Secrétaire Général et son Adjoint
Le Secrétaire Général, assisté de son Adjoint qui le supplée en cas d'empêchement, est le principal coordonnateur du club.
Il est chargé:
(12) De la gestion des archives du club;
(13) De la rédaction des procès-verbaux des réunions de l'Assemblée Générale dont il en donne lecture et en assure la diffusion;
(14) De la tenue du registre général de tout ce qui concerne les activités du club.

Article 11: Le Trésorier
Il est chargé:
(15) De la gestion financière du club;
(16) De la mise à jour du registre financier et rend compte de la gestion financière du club à chaque réunion à l'Assemblée Générale;
(17) De procéder aux dépenses éventuelles, jugées nécessaire par le bureau exécutif sur ordre du Président;
(18) De contresigner les titres de recettes et dépenses du club.

Article 12: Les Rapporteurs
Ils sont chargés:

(19) Du contrôle permanant des registres financiers;
(20) De saisir l'Assemblée Générale en cas de menace grave de la gestion financière du club ;
(21) Du respect du plan d'action et des décisions issues de l'Assemblée Générale;
(22) De veiller au bon déroulement et encadre les réunions et activités du club.

Article 13: L'émissaire permanent
Il est chargé:

(23) De valoriser l'image du club;
(24) De faire toutes les courses du club;
(25) De gérer la logistique et la communication du club;
(26) Des affaires extérieures du club.

Chapitre 3: De la commission spécialisée

Section I: De la composition

Article 14: La commission spécialisée comprend**:**

(27) Un chargé de la surveillance et d'éveil;
(28) Un chargé de la sensibilisation et de la planification;
(29) Un chargé de la promotion énergétique et du développement durable;
(30) Un Chargé des affaires juridiques et de l'animation;
(31) Un chargé de la formation et de l'entrepreneuriat;
(32) Un chargé de l'hygiène, de la salubrité et de la protection de l'environnement.

Section 2: Des attributions de la commission spécialisée

Article 15: La Commission chargée de la surveillance et d'éveil a pour mission de renseigner à tout moment sur l'état de propreté des différents sites de l'Université. Ainsi que sur l'économie d'énergie.

Article 16: La Commission chargée de la sensibilisation et de la planification a pour mission de produire des programmes d'éducation et de formation sur l'économie d'énergie et la gestion de l'environnement; d'organiser les conférences et séminaires.

Article 17: Une Commission chargée de la promotion énergétique et du développement durable a pour mission de vulgariser et de développer les programmes d'implémentation des énergies renouvelables dans le campus universitaire.
Article 18: Une Commission chargée des affaires juridiques et animation a pour mission de veiller à l'encadrement juridique des activités, et d'organiser les séances de détentes sportives et animations.

Article 19: La commission chargée de la communication a pour mission d'informer l'opinion publique sur les activités, d'élaborer les slogans publicitaires et d'information.

Article 20: Une Commission chargée de l'hygiène, de la salubrité et de la protection de l'environnement a pour mission d'organiser les campagnes d'hygiène et de salubrité au sein du campus, de promouvoir l'efficacité énergétique et des actions écologiques.

Article 21: Les Commissions Spécialisées sont composées chacune de trois membres désignés par le président ou sur proposition du Point Focal ANSOLE Ngaoundéré.

Chapitre 4: **Des bureaux de coordination des Etablissements**

Article 22:

(33) Ce sont les relais du bureau exécutif. Ce sont les organes qui mettent en pratique les activités du CLUB ANSOLE.
(34) Dans chaque établissement, ils ont la même composition que le bureau universitaire.
(35) Les coordinations peuvent organiser leurs activités indépendamment du bureau universitaire. Ces actions doivent cependant obéir au cadrage général adopté lors de l'Assemblée Générale et ils doivent informer le bureau universitaire des activités menées;

(36) Les bureaux de coordination fonctionnent grâce aux 25% prélevés sur le fonds d'inscription ou d'adhésion de leurs membres ;
(37) Les coordinations se réunissent chaque semaine selon l'ampleur de leurs activités ou autres jours indiqués par le Président;
(38) Les membres des bureaux de coordinations sont élus par leurs pairs pour une durée d'un (01) an.

Article 23: Attributions des bureaux de coordination:
-Ils fixent leurs jours et dates de réunion;
-Ils sont autonomes en ce qui concerne l'organisation des activités au sein de leurs Etablissement respectifs;
-Ils sont tenus de présenter tout projet et activités pour avis au bureau exécutif;
-Ils sont tenus de présenter les rapports d'activités mensuelles au bureau exécutif.

Titre III: Des membres

Article 24: les membres du CLUB ANSOLE:
(1) Tout étudiant régulièrement inscrit à l'université de Ngaoundéré, qui accepte librement les dispositions des présents statuts et qui s'acquitte des droits fixés par le règlement intérieur;
(2) La perte de la qualité d'adhérent survient lors du décès ou de la démission d'un membre dûment constaté par l'Assemblée Générale. La démission d'un adhérent est constatée lorsque celui-ci notifie le Président de sa volonté de quitter le CLUB ANSOLE où par des absences non justifiés (quatre au moins) et répétitives aux différentes activités du CLUB ANSOLE (non payement des droits statutaires).
Les anciens membres peuvent être admis au club comme sympathisants.

Article 25: La composition du CLUB ANSOLE
Le club se compose:
-Des membres adhérents actifs;
-Des membres d'honneurs.

Article 26: De l'encadrement du CLUB ANSOLE
Le CLUB ANSOLE est encadré par un représentant de l'Administration qui le conseille et facilite ses contacts et rapports avec l'extérieur à l'instar du Point Focal.

Titre IV: De la dissolution-liquidation

Article 27: Le CLUB ANSOLE peut être dissout par la volonté de ses membres réunis en session extraordinaire en cas de perte de ¾ de ses membres.

Article 28: La dissolution peut être prononcée par l'autorité de tutelle conformément à la loi.

Article 29: Après la dissolution du CLUB ANSOLE, l'Assemblée Générale procède à la liquidation des biens.

Article 30: L'Assemblée Générale désigne en session extraordinaire les membres chargés de la liquidation et fixe leurs attributions.

Titre V: Des dispositions diverses.

Article 31: Le Bureau Exécutif est chargé de l'application des présents statuts qui seront distribués à tous les adhérents, et communiqués partout où besoin sera.

Article 32: Le Règlement Intérieur complète les dispositions des présents statuts.

Réglement Intérieur du Club ANSOLE Energies Renouvelables et Environnement de l Université de Ngaoundéré (CANERUN)

TITRE 1: DES DISPOSITIONS GENERALES

Article 1: Le présent règlement intérieur est arrêté et adopté par l'Assemblée Générale. Il précise des points non détaillés par les statuts et y est annexé. Il pourra être modifié par décision et adoption de l'Assemblée Générale.

Article 2: Tout membre du Club ANSOLE s'engage à respecter les présents statuts et règlement intérieur.

TITRE 2: DE L'ADHESION ET DE LA DISCIPLINE DES MEMBRES

Chapitre 1: De l'adhésion

Article 3: L'adhésion de tout membre au Club ANSOLE est subordonnée au versement des frais d'adhésion qui s'élèvent à 2000 (deux milles) FCFA. Ces frais contribuent au fonctionnement du CLUB ANSOLE.

Article 4: L'adhésion se renouvelle chaque année.

Chapitre 2: De la discipline

Article 5: La présence aux réunions de l'Assemblée Générale et aux différentes rencontres est obligatoire. En cas d'absence indépendante de sa volonté, le membre empêché devra tenir informé le Bureau Exécutif avant la tenue de l'Assemblée Générale. Toutefois, le membre tombera sous le coup d'une exclusion temporaire ou définitive pour plus de cinq absences consécutives aux réunions de l'Assemblée générale.

Article 6: Tous les membres ont l'obligation d'être ponctuels aux réunions de l'Assemblée Générale.

TITRE 3: DES SANCTIONS DISCIPLINAIRES

Article 7: Constitue une faute disciplinaire, tout comportement en violation des statuts et du présent règlement intérieur.

Article 8: Tout trouble à l'ordre (propos injurieux, bavardage caractérisé, diffamation, mauvaise conduite) pendant les réunions de l'Assemblée Générale est passible d'une amende de 100 (cent) FCFA par acte posé.
Article 9: En cas de faute lourde ou comportement visant à menacer l'intégrité ou la survie du Club ANSOLE, le Bureau Exécutif, après concertation, saisit l'Assemblée Générale réunie en session extraordinaire, pour statuer sur la nature de la sanction à infliger au membre fautif.

Chapitre 3: Des contributions financières

Article 10: Il existe au sein du Club ANSOLE des contributions obligatoires d'une part et des contributions facultatives d'autre part.
Les contributions obligatoires concernent:
-L'inscription
-Les pénalités
-Les quêtes ponctuelles.
Les contributions facultatives sont les suivantes:
-Les financements extérieurs
-Les dons et les legs

TITRE 4: DES AIDES ET DES ASSISTANCES

Article 11: L'adhérent apporte son aide et son assistance à tout membre en cas de survenance d'un évènement heureux ou malheureux.

Article 12: Une main levée est organisée pour tous les évènements suscités. Et les contributions sont laissées à la discrétion du membre.

TITRE 5: DE LA LIQUIDATION DES DROITS

Article 13: La perte de la qualité de membre peut se faire soit par démission, soit par une exclusion de l'adhérent dûment prononcée par l'Assemblée Générale.

TITRE 6: DES FESTIVITES DE FIN D'EXERCICE

Article 14: Sur accord des 3/4 de l'Assemblée Générale, il est organisé des festivités en fin d'année pour marquer la clôture de l'exercice. La formule desdites festivités est définie par l'Assemblée Générale.

Article 15: Les fonds relatifs aux cérémonies pour marquer la fin des activités annuelles du Club ANSOLE sont cotisés par tous les membres sans exception selon un taux fixé en Assemblée Générale; l'usage desdits fonds fera l'objet d'une étude en commission afin de fixer les responsabilités des uns et des autres dans le but d'une organisation harmonieuse de ces festivités.

TITRE 7: DES DISPOSITIONS FINALES

Article 16: Les fonctions exercées au Club ANSOLE sont gratuites.

Article 17: Tous les autres cas non prévus par les présents statuts et règlement intérieur seront débattus uniquement en Assemblée Générale.

Article 18: Le présent règlement intérieur prend effet à compter de la date de son adoption par l'Assemblée Générale.



GATo 2019 in DRCongo