



# Alliance for Entrepreneurial Universities in Africa (AEUA)

## Editorial

The main objective of the AEUA is to encourage universities to promote, nurture and drive entrepreneurship and business development within the institution, in the region and beyond.

Through collective and aligned engagement, partnerships, and support in encouraging universities to become entrepreneurial in nature, the Alliance envisions the successful development of entrepreneurial universities in the African continent by:

- ◆ Advancing university initiatives that promote innovation and entrepreneurship, including entrepreneurship curriculum,
- ◆ Creating a conducive environment for universities to embark on initiatives whereby income could be generated through innovative businesses,
- ◆ Sharing relevant knowledge, resources, experience and good practice, and
- ◆ Forming strategic partnerships.

AEUA members can now benefit from collaboration with the first Origin Lab launched in Kenya.

Team: Dr Victor Konde (UNECA), Prof Archana Bhaw-Luximon (Mauritius), Dr Samuel Chigome (Botswana), Prof Balla Diop Ngom (Senegal), Dr Geoffrey Monari (Kenya), Dr Norah Clarke (South Africa)

## Best Universities for Entrepreneurship in Africa

Edurank 2023 list of best universities in Africa ranked based on their research performance in Entrepreneurship.

Edurank method: A graph of 19.5K citations received by 2.03K academic papers made by 15 universities in Africa was used to calculate publications' ratings, which then were adjusted for release dates and added to final scores.

1. University of Pretoria (South Africa)
2. University of the Witwatersrand (South Africa)
3. University of South Africa (South Africa)
4. University of Johannesburg (South Africa)
5. University of Cape Town (South Africa)
6. University of Sfax (Tunisia)
7. Obafemi Awolowo University (Nigeria)
8. University of Ghana (Ghana)
9. North West University (South Africa)
10. University of Stellenbosch
11. Cape Peninsula University of Technology (South Africa)
12. Jomo Kenyatta University of Agriculture and Technology (Kenya)
13. University of KwaZulu-Natal (South Africa)
14. University of Sousse (Tunisia)
15. Nnamdi Azikiwe University (Nigeria)

[Africa's best Entrepreneurship universities \[2023 Rankings\] \(edurank.org\)](https://edurank.org)

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- ◆ Shaping an African Entrepreneurship Academy
- ◆ Upcoming Events
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### African Entrepreneurship Highlight—Part I

#### Portrait of an aspiring global Entrepreneur—Walid Elrawy



**Walid is from Egypt and the founder of Fit Solar Tech LLC; a startup that provides sustainable solutions for small to medium sized-boats to transition from diesel and petrol to solar-powered engines. Walid shares his experiences on being an entrepreneur. The interview was conducted by Marie Louise Razafy Kjellman, Novia University of Applied Sciences, Finland for AEUA.**

**Hello Walid and thank you for accepting to do this interview. Could you please introduce yourself?**

My name is Walid Elrawy and I am from Egypt. I have a degree in mechanical engineering from Alexandria University in Egypt and a Master's degree in Digital Business and Management from Novia University of Applied Sciences in Vasa, Finland. I started my career working for a family business in textile and workwear production in Egypt and then I moved to the UAE to work for a large company for four years as a business development manager. After that, I found my own company in Dubai; currently I am the founder of a startup called Fit Solar Tech LLC. We are registered both in Egypt and Dubai.

**What does Fit Solar Tech do and how does it respond to the African and global sustainable energy challenges?**

Fit Solar Tech started in 2019 and opened officially in 2020 as a consultant and service provider to help companies, both public and private and individuals to transition from diesel and petrol-powered boat to 100% environmentally friendly boat with zero emission with the use of solar powered engines. Some of our target customers are individuals who have and use boats, governments or organization who work with local communities such as fishermen, companies who use boats to transport people or goods such as the tourism industry.

Africa has a lot of waterways, and we know that a lot of communities make a living with fishing and make use of waterways as route to transport goods and people. Fit Solar Tech is born out of the question – “how to make a living without damaging the environment?” Our boat motors, which is one of our products, are reliable and efficient. I believe that we can help communities in Africa to make a better living while being environmentally friendly. Fit Solar Tech has some customers in Africa but we would still like to increase our customer base in the continent.

**Why did you become an entrepreneur? Was it the influence of the family business that you were involved with?**

The family business was part of the influence but not the only influence. It is something that I always had in me from childhood. I believe being an entrepreneur will give freedom and wider scope to help others and make positive change in society. But I have to admit, being an entrepreneur is not easy.

**How did your education contribute towards you becoming an entrepreneur and the creation of FitSolar Tech?**

It is important for an entrepreneur to be a lifelong learner. When talking about education, there is of course the academic side, it helps you expand your knowledge both theoretical and technical. It helps you also to learn how to identify market trends. When I talk about education, I also talk about learning from your community – friends and family, other entrepreneurs, and your team members. To be an entrepreneur is to be humble, meaning that you should be ready to learn from others even those who you think might not have an idea about your business.

*To be continued.....*



UNECA has placed youth at the heart of the future economic development motor of Africa. For the past three years UNECA has contributed in the organization of bootcamps and innovation challenge competitions to allow the emergence of African ideas and paradigm shifts in African knowledge creation models. UNECA is building on these models coupled with global models to culminate into an African Entrepreneurship Academy which will be hosted by the AEUA.

The Academy is intended to be a one stop shop for all contents and materials to support youths at universities and colleges. It will also be the place where universities can share teaching and learning materials, practices and methodologies.

### 1st Nanotechnology Entrepreneurship Bootcamp, 29 Jan-2 Feb 2023, Egypt

The Nanotechnology Entrepreneurship Bootcamp was organized by UNESCO in partnership with the British University in Egypt (BUE), UNECA, ET Cube International, African Materials Research Society (AfricanMRS), Pennsylvania State University and the University of South Africa (UNISA). It was hosted by the British University in Egypt at their state of the art Science and Innovation Park.

Budding entrepreneurs from across Africa gathered at the bootcamp that would introduce them to the finer points of nanotechnology and show them how to pitch their business ideas to potential investors. Most successful applicants were Master's or PhD students, or young researchers who had studied nanotechnology or related fields, such as biotechnology, chemistry, environmental science and engineering, energy, agronomy or physics. Four had a business background. All harboured a strong desire to create their own nanotech company.

In addition to equipping students with nanotechnology and entrepreneurial skills, the bootcamp presented an opportunity for the expansion of the Alliance of Entrepreneurial Universities to North Africa. Strategic linkages were established with two Universities in Egypt through Prof Hala Hattab who developed a program in Entrepreneurship at the BUE and Prof Yehea Ismail the Director of the Nanoelectronics and Devices Centre at the American University in Cairo and Zewail City and committee member of the African Engineering and Technology Network (AFRETEC) a pan African platform for collaboration of technology focused Universities. Dr. Adham Ramadan, the Associate Provost for Research and Entrepreneurship at the American University in Cairo has also supported the link.



#### Trainers at the Bootcamp (from left to right):

Karim Mohamed, Technology Transfer Officer; Seif El Din Abdel Rehim, Senior Enterprise Researcher; Islam Mohamed, Director of Science and Innovation Park; Amal Kasry, Chief of Section for Basic Science, Research and Innovation, UNESCO; Nazar Hassan, Senior Science and Technology Advisor, Jing Zhao, Junior Professional Officer; Oleg Stukalov, Business Development Manager, Waterloo Institute for Nanotechnology; Ali El Amrani, Founder, iBTIQUAR; Richard Brooks, Founder, FD Solutions; Surya Raghu, Founder, ET Cube International; Samuel Chigome, President, African Materials Research Society



### Fifth African Science, Technology and Innovation Forum

Niamey (hybrid), 26 and 27 February 2023

The 5th STI Forum focused on accelerating the development and diffusion of emerging technologies to build a green, inclusive and resilient Africa. Hosted by the Government of Niger through the Minister of Higher Education and Research, His Excellency Mamoudou Djibo. The event was attended by Ministers of Niger, Democratic Republic of Congo, Namibia and Rwanda; the Executive Secretary of ECA, the Commissioner for Education, Science, Technology and Innovation at the AUC and various leaders of the UN system, private and public sector.

The Forum was co-organized by the Governments of Niger and South Africa, AUC, UNESCO, IAEA, UNIDO, UN Technology Bank for the LDCs, African Material Research Society and the African Biomedical Engineering Consortium. It was also supported by the Konrad-Adenauer-Stiftung (KAS) Foundation of Germany and with participation of the European Union.

The Forum was preceded by a virtual STI Forum Youth Innovation and Design Bootcamp that exposed 354 participants and 52 mentors and trainers to emerging energy and water technologies, entrepreneurship, intellectual property protection and scaling up for impact. Further, a physical Science, Technology, Engineering and Mathematics (STEM) bootcamp for primary and secondary schools as well as a hackathon for climate change and a Connected Africa Girls Coding Camps were organized in Niger. Overall, over 800 participants from about 41 countries benefited from the STI-related events.

The Forum was composed of several sessions that looked at critical elements of STI performance; the SDGs under review in 2023 and launch of various initiatives. Overall, the Forum renewed calls on African countries to scale up investment in science, technology and innovation and in human resource development in order to fully benefit from the opportunities emerging technologies present.

#### Key recommendations:

- The Forum renewed the call to increase the number of researchers in R&D and investment in R&D up to the African Union's agreed 1% of GDP.
- Tap on the African diaspora, youths and women to strength the national and regional innovation system of Africa.
- Provide the necessary support infrastructure, such as technology and innovation park and hubs, that can attract and grow technologies business from around the world.

A session on the role of Universities as engines of regional and national transformation with a focus on the 'Alliance of Entrepreneurial Universities in Africa' called on countries to join the Alliance and support their universities to inspire entrepreneurship. The Origin Research and Innovation Lab initiative was launched at the Dedan Kimathi University in Kenya. Origin Labs are open, responsible and sustainable platforms for solving complex challenges, designing revolutionary solutions that can be deployed at large scales in African and beyond; and for showcasing African creativity and ingenuity. The at the Dedan Kimathi University in Kenya.



### Origin Research and Innovation Lab Initiative Launched

The Origin Initiative was launched by ECA) and its partners at the 5th African Science, Technology and Innovation Forum 2023 in Niamey, Niger. Origin is an interdisciplinary research and innovation hub, the purpose of which is to solve the complex problems of Africa. Five Origin Labs are envisaged across Africa.

The first Origin Lab at the Dedan Kimathi University of Technology, Kenya, was showcased by its Vice Chancellor, Professor Kioni. The Lab will serve the East African region through collaborations and partnerships with firms, research institutions and other stakeholders.

#### *What makes Origin Unique?*

While researchers generally develop solutions to societal problems they have identified, Origin works with entities to solve the problems they wish to fix now by leveraging teams from the sciences, arts, design and media. Thus co-create and co-innovate with the problem owner. In addition, Origin offers space to talented scientists and innovators that wish to change the world to test and develop their solutions. The aim is to make Africa the global pole of scientific and technological discoveries.

Finally, Origin will also offer a platform for showcasing innovation and technologies likely to make a major impact. For instance, the Origin Lab East Africa will employ metaverse in identifying, analyzing and solving African challenges in education, energy and climate change. Metaverse is expected to generate up to \$5 trillion in value by 2030.

#### *Get involved*

**Contact:** Asfaw Yitna, Research Assistant, ECA. Email: [yitna@un.org](mailto:yitna@un.org)



### Expanding Francophone Africa Participation

There are 54 countries in Africa and out of which 21 speak French (Francophone countries), 27 speak English (Anglophone countries) and 6 speak Portuguese (Lusophone countries).

The 21 Francophone countries in Africa represent almost 50 percent of the world's French-speaking states and territories.

During the STI Forum and Africa Regional Forum on Sustainable Development in Niamey, Prof Balla Diop Ngom, President of the African Materials Research Society (AfricanMRS) who is based in Senegal and Dr Samuel Chigome immediate Past President (AfricanMRS) based in Botswana had the opportunity to meet with the Secretary General Prof AG Arya Moussa of the Ministry of High Education Research and Innovation of Niger.

The meeting was held in the presence of Dr Dr Halidou Ibrahima Hima Director of Research and Innovation and Dr Rabiou Hibou Technical Director of Research and Innovation of Niamey.

The objectives of the meeting were to discuss how to engage Niger to be involved in the activities of the AMRS and more specifically the Universities from Niger to be part of the AEUA.

After a brief introduction of the African MRS and AEUA in French by Prof Ngom , the Secretary General expressed his appreciation of the initiatives and showed his engagement to have a large discussion with the minister to ensure the involvement of Niger as an opportunity for the development of Niger.

In closing, Dr Chigome outlined the opportunities available for the benefit of francophone countries through the various collaborative engagements that the AfricanMRS is involved in. He highlighted that he hoped that Niger and Senegal would take the leading role in boosting the AEUA francophone countries of Africa. Lastly, he appreciated the invaluable contributions of Professor Yayé Aïssétou Dramé, of Université Abdou Moumouni, Niamey during the AEUA panel discussion of the STI forum.



**From left: Dr Halidou Ibrahima Hima; Dr Rabiou Hibou, Prof AG Arya Moussa, Prof Balla Diop Ngom, Dr Samuel Chigome**



### Upcoming Events & Collaborations

The African Biomedical Engineering Consortium (ABEC) focuses on improved health-care outcomes in Africa inspired by UNECA which has encouraged and supported the formation of ABEC at the very first innovators' summer school, in Uganda in 2012.

In 2020, ABEC was fully incorporated as a legal entity with coordination offices in Uganda, with a Board of Directors chaired by Dr Atwine Daniel of Mbarara University of Science and Technology (MUST). ABEC has been conducting annual Innovators Summer Schools (ISS) and Design competitions since 2012 with much of their focus on stimulating innovation and skilling students with Entrepreneurial skills.

ABEC is open to collaborations with like-minded organizations and persons so as to sustain its long achieved impacts.

AEUA and ABEC are exploring avenues of collaboration and upcoming details in our next Newsletter.

#### **ABEC-UBORA Design School: Medical Device Design Innovation for One-Health, December 2023, Venue: Kenyatta University**

This Design School will follow the format of previous schools, beginning with a competition, selection of winning project proposals, and participation in a 5 day intensive training course focusing on Design Innovation for One-Health.

#### **Call for Student Entrepreneurship Societies**

The Hub will be a compass for students to navigate the entrepreneurial network and find teammates, partners, and supporters.

The Hub will include two sections:

- ◆ An interest and idea-sharing platform to connect people
- ◆ A directory of resources of the entrepreneurial ecosystem

**Interested student societies coordinators, please contact Asfaw Yitna, [yitna@un.org](mailto:yitna@un.org) or Gedion Workneh, [workneh@un.org](mailto:workneh@un.org)**

#### **Call for Monthly Showcasing of Entrepreneurship initiatives**

If you have an entrepreneurship initiative which you would like to showcase to members and the community in the next newsletter **please contact Asfaw Yitna, [yitna@un.org](mailto:yitna@un.org) or Gedion Workneh, [workneh@un.org](mailto:workneh@un.org)**

#### **New Members**

Please click on the link to fill in the [Membership form](#) and we will revert back to you with more details.

<https://forms.gle/7xsKwK24r4twS8Yf8>