





MSRTI PhDs support their colleague Gilbert KABANDA

Admission of NSC President Prof. MPIANA TSHIMANKINDA to the African Academy of Sciences Mpox: 17 patients on the run in South Kivu NIASR takes part in the Triennial Symposium of the International Society of Root and Tuber Plants

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Centers and Public Sector Research Institutes in the D.R. Congo..........

information for submission

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BULLETIN March 2025

<u>Editorial</u>

Beyond stereotypes: Congolese women, pillars of science and innovation



Professor Pius MPIANA TSHIMANKINDA NSC President

n this month of March, dedicated to the celebration of women's rights, it is imperative to highlight the crucial role of Congolese women in scientific research and the development of our Nation. Invisible for too long, they embody hope and innovation, defying stereotypes and paving the way for a bright future in the Democratic Republic of Congo (DRC).

Our history is full of exceptional Congolese women who have left their mark on the history of science and society. Among them are HEM Raïssa Malu, Minister of State for Education and New Citizenship, for her contributions to geospatial and socio-economic progress in Africa, Professor Sandrine NGALULA MUBENGA for her invention of the "Bi-Level Equalizer" technology, an equalizer for lithium-ion batteries, Professor Marie-Claire YANDJU, expert in food and nutrition technologies, engineer Thérèse IZAY KIRONGOZI, inventor of road signalling robots and hand-washing devices during the Covid-19 pandemic, Doctor Bénédicte MONI, passionate about new technologies, and the list goes on.

These women and so many others, through their courage and determination, have blazed an inspiring trail for future generations. It's high time to reject the retrograde stereotypes that limit women to household tasks, and to recognize their full potential.

In a context of many challenges poverty, disease, climate change - Congolese women scientists are at the forefront of finding innovative solutions. Their expertise is essential in fields such as agriculture, health, the environment and technology, contributing to our country's development.

However, despite their potential, Congolese women scientists often face considerable obstacles: limited access to education, lack of funding, gender discrimination, etc. It is our duty to break down these barriers and create an environment where they can flourish and realize their full potential.

The Bulletin Sciences et Innovations Technologiques is committed to the promotion of women's rights, and is actively involved in their recognition. Research into the Kikobo language, a dead language that is being resurrected thanks to the work of a woman, is eloquent proof of this. Similarly, the recent distribution of vehicles by the Minister of Scientific Research and Technological Innovation, Dr. Gilbert Kabanda Kurhenga, to several state research structures, from which many women will benefit, bears witness to a desire to support their full participation in scientific research. This gesture, which honours the profession of Congolese researcher and helps to restore the image of scientific research and women researchers, free of all stereotypes, is part of a wider dynamic. It reflects the sustained efforts of Her Excellency Mrs. Judith Suminwa Tuluka, the Prime Minister and Head of Government of DR Congo, to promote equality and excellence in all fields, including research.

In this Women's Month, following in the footsteps of the champion of positive masculinity, His Excellency Félix-Antoine TSHISEKEDI TSHILOMBO, President of the Republic and Head of State, let us commit ourselves to supporting Congolese women scientists. Let's invest in their education, support their research and value their contributions. Together, let's build a DRC where equal opportunities are a reality, not a myth, and where every woman's talent is put to work for the progress of our Nation.



NDA, SG Odon Ndambu, NSC President, Prof. Pius Mpiana, PhDs from MSRTI and distinguished guests

MRSIT PhDs support their colleague Gilbert KABANDA

MSRTI PhDs organized a reception to show their support for their colleague, Minister Gilbert KABANDA, who joined the class of scholars, on March 23, 2025 at the Chapiteau of the Restaurant 19 du Royal Event in Gombe township.

In his address, Minister Gilbert KABANDA recalled the content of his thesis, defended on January 6, 2025 at the University of Kinshasa, on the scientific crusade against the silent killer that is hypertension, which has claimed the lives of five FARDC generals and several colonels in recent years. This doctoral thesis tackles a crucial issue: how physical activity can transform a soldier's life and improve performance.

The results of this ten-year research highlight innovative solutions for the health of military personnel, and at the same time raise essential questions about the role of physical exercise in disease prevention within the FARDC.

Dr Gilbert KABANDA KURHENGA concluded his speech by recommending that the FARDC High Command make cardiovascular conditioning a major element in the preparation of soldiers for the front. During the event, the President of the National Scientific Council (NSC), Professor Pius MPIANA TSHIMANKINDA, paid tribute to Dr Gilbert KABANDA KURHENGA, a model of tenacity, courage, perseverance and humility, thanks to which he has always left his mark wherever he has been called to public office.

Communication Unit of the Minister of SRTI and Christian MAZONO/NSC

USCActivities

Opening speech by the NSC President, Prof. MPIANA TSHIMANKINDA Pius, at the reception organized by MSRTI PhDs for their colleague, Minister Gilbert KABANDA.

Honorable Members of Parliament and Senators, Excellencies, Members of the Government ;

Minister of Scientific Research and Technological Innovation; Distinguished guests in your respective capacities

Before beginning my remarks, I'd like to take my turn in welcoming you to this modest reception organized by the PhDs of the MSRTI and some of the evaluators of the two Congolese scientific engineering forums held in our Ministry over the last two years, all of whom are PhDs.

l'd like to make it clear from the outset that our guest today is not the Minister of SRTI, but Dr. Gilbert KABANDA KURHENGA, Associate Professor of Medicine. This allows me to speak a little more relaxed.

l remember that a few years ago, to welcome the new students and integrate them into their environment, the alumni organized a "bleusaille". So the PhDs in our department asked themselves the question: "How can we make Dr Gilbert KABANDA blue, so as to accept him into the corporation?

It was a very difficult research question to answer, especially as he is not only a Minister but also a retired General in the Congolese Army, with bodyguards who are not policemen but soldiers. Each member was given time to research and put forward the most plausible working hypotheses. After this period of research, the jury of thesis doctors, after debate and deliberation behind closed doors, took the serious decision that l have the heavy burden of announcing to you today: that of inviting them to a meal among peers, in relaxed attire, on a Sunday, far from the stresses of weekdays.

Please applaud this grave decision by the jury, as is done everywhere. I hope I didn't scare you too much.

Why Sunday, the Lord's Day? But because God himself, the scientist par excellence, after being stressed for six days trying to organize the universe, thinking how to make an internal organization for a biological cell, the smallest unit of life, where to place each microorganism, how to organize human physiology by putting the heart, the lung and the other organs in place and putting a police force so that blood circulation goes well without creating cardiovascular disease, by putting in the Democratic Republic of Congo cobalt, copper, coltan, lithium and all the ores derived from the elements of Mendeleïev's periodic table, by placing a majestic river in the basin that houses the planet's second-largest lung, which attracts the jealousy of other peoples, but also by placing in this blessed country a somewhat oblivious people who don't understand that we have to work hard to transform all these gifts from God into real wealth, and who sometimes ally themselves with those who are jealous of our riches to fight and kill their own people.

So I was saying that after doing all this for six days, God decided to de-stress on the seventh day, I can't tell if he took off the week's work suit to be in relaxed clothes.

Speaking of stress, several studies have been conducted to assess stress among PhDs. For example, a survey by Dahirel et al in 2021 of 131 doctoral students in Lettres, Social and Human Sciences found that 73.6% considered the doctorate a source of stress. Another study, involving 2,000 PhD students from various disciplines, showed that almost a fifth had a perceived stress score above the pathological threshold. Factors influencing this stress included age, gender, year of PhD enrolment, history of psychological counselling, sporting activity and sleep quality (Levecque et al., 2017).

When we consider the stress of doctoral research and add to it the significant daily stress of ministerial duties, taking into account the scientific rigor of the jury set up by UNIKIN's Faculty of Medicine in complicity with its Management Committee, which took several hours to evaluate the doctoral dissertation in private and then in public, and



The NSC President, Prof. Pius MPIANA TSHIMANKINDA

that he emerged unscathed and victorious, there is cause to heartily congratulate the young Associate in Medicine, Dr Gilbert KABANDA KURHENGA.

l ask you to give him a standing ovation.

Indeed, anyone who has ever had to write a doctoral thesis knows that this is one of the most difficult periods of their lives, when abnormal events sometimes occur: loss of data, computer theft, illness, aggression, death of loved ones or even the death of the doctoral student himself. That's why we say that every thesis has a story.

But I can guess the secret of his success: he is a researcher who is already putting his research results into practice. As a member of the military, he continues to exercise even after retirement, whereas many still-serving members of the armed forces don't, exposing them to cardiovascular disease. It's not me who says this, but the work of researcher Gilbert KABANDA.

So there's no need to send him to Prof. Tshimpi Wola's Incubateur du Génie Scientifique Congolais, set up by the Minister of SRTI, because he has already started to put his research results into practice. As Chairman of the National Scientific Council, I recommend him to Prof. KABEYA TSHIKUKU's Fond National à la RSIT for funding, when the Congolese State is willing to make the necessary funds available. In the meantime, he will be able to supervise junior researchers at the Research Institute in Health Science, RIHS in short.

l would like to conclude by reiterating my congratulations to Dr Gilbert KABANDA and welcoming him to the corporation of PhDs. This ceremony was organized under the supervision of a small organizing committee made up of : Prof. David Ngindu, CEO of NCRS Prof. Odette Kabena, Vice-President of NCPIR Prof. Patience Ngelinkoto, CEO of WERC Prof. Roland Kakule, CEO of GMRC Prof. Allegra Kabamba, DFA of NFSRTI Prof. Pius Mpiana, President of NSC, yours truly With the support of all the PhDs here and a few aspiring PhDs. This reception was due to take place in January, but has been postponed twice due to events in the east of our country.

l'd like to thank all of you who have agreed to sacrifice your Sunday off to come and mark this modest event with your presence.

Prof. Pius Mpiana TSHIMANKINDA

Thread

Admission of NSC President Prof. MPIANA TSHIMANKINDA to the African Academy of Sciences

The President of the National Scientific Council (NSC), Professor MPIANA TSHIMANKINDA Pius, was admitted as a member of the African Academy of Sciences (AAS) on Saturday March 30, 2025.

This prestigious recognition testifies to his exceptional commitment to the advancement of scientific research in the Democratic Republic of Congo (DRC) and in Africa through his scientific publications. His admission strengthens the DRC's visibility and influence within this community.

ens the DRCS visibility and influence within this continuency. STIB congratulates the President of NSC, Professor MPIANA TSHIMANKINDA Pius, and wishes him every success in this new responsibility.

It was new responsibility. It should be noted that the African Academy of Sciences (AAS) is a non-aligned, apolitical and non-profit pan-African organization whose vision is to see lives transformed through Science.

The AAS recognizes excellence through the election of Fellows, and its affiliates are distinguished researchers who represent talented and promising men and women from across the continent and around the world.

MAZONO MPIA Christian and ASUKA Jacques /NSC



NIASR CEO, Mr. Dominique Kankonde receiving computer equipment donated by PURPA

NIASR receives computer equipment to monitor and evaluate PURPA results

IASR General Manager Dominique KANKONDE NTUMBA received from his partners a large consignment of computer equipment for monitoring and evaluating the results of the Emergency Project for Food Production (PURPA), on Monday February 11, 2025 in Kinshasa.

According to Mr. Dominique KANKONDE NTUMBA, NIASR's CEO, this delivery is part of a drive to modernize and optimize results and means of communication, enabling interaction between field agents and the coordination team. The new equipment will significantly increase PURPA's capacity to collect and transmit impact data.

In conclusion, Mr. Daniel LUNZE, PURPA's focal point at NIASR, indicated that the institution had received 25 laptops, 15 inverters, 6 drones, 14 GPS units and 18 small and large printers.

It should be noted that these IT tools reinforce the technical resources of

NIASR's Research Stations and Centers.

NIASR is involved in research in the field of agronomy, and has research facilities throughout the DRC.

NIASR Communication Unit and Christian MAZONO/NSC



NIASR takes part in the Triennial Symposium of the International Society of Root and Tuber Plants

embers of the National Institute for Agronomic Study and Research) (NIASR) took part in the 15th Triennial Symposium of the International Society

of Root and Tuber Plants in Abidjan, Ivory Coast, from February 3 to 7, 2025.

Present at the meeting were NIASR General Manager Dominique KAN-KONDE, Prof. MONDE, Dr. Olivier from IFA YANGAMBI and Prof. Tony BAKELA-NA from INERA MVUAZI.

NIASR Communication Unit and Christian MAZONO/NSC



Helena oil: a valuable source of energy and nutrients in Kinshasa

ver the past ten years, Helena, the first caterpillar oil, called Mposé in the Democratic Republic of Congo (DRC), has established itself as a key player in a context where food security and environmental sustainability are major issues. But, despite Helena's potential, Mposé caterpillars remain rare and expensive in the Congolese capital.

Under the initiative of Madame Hélène Baku Tamba, the first caterpillar oil produced in the DRC made its debut on the Kinshasa market in 2014. By then, a sixth animal-derived oil had appeared on the world market, certified the same year by the French UMR-IATE laboratory, CIRAD Montpelier, taking its place among the five other types of animal oil already known. Mposé, a nutritional treasure whose 100 grams (i.e. around twenty) make up 225 calories, known for their richness in energy and essential nutrients (proteins, lipids, vitamins and minerals), have become the focus of research by this teacher renowned for her work in Food Entomology, Nutrition-Dietetics and Public Health at the National Pedagogical University of Kinshasa.

Given these assets, Hélène Baku set about transforming this under-used local resource into a nutritious and beneficial oil, which she named Helena. The oil quickly became a boon for many households in Kinshasa, "mainly the middle class," she says, "such as households, the protein-calorie deficient sick (kwashiorkor), the anemic, the obese, diabetics..." Seductive for its nutritional qualities and health benefits, Helena can not only be used in cooking, but also has medicinal properties..

Nancy MASALY BOSSOMBO/RTNC



Reflections of our researchers

Engineer Charles Jacob MUKEBA TSHIBWABWA: regenerating lead-acid and NiCd batteries and Lithium-Ion batteries later in the DRC: an opportunity to create jobs for young people and clean up the environment

uring the preparatory phase of setting up a lithium-ion battery manufacturing industry in the DRC and Africa, African players and their partners can also invest in the regeneration of lead-acid and NiCd batteries as part of a circular economy, for reasons such as the following :

- Many renewable energy systems still use NiCd, AGM, liquid lead-acid or sealed-gel batteries (which can be regenerated);
- Many energy storage applications still use these types of batteries, which can be regenerated several times before recycling;
- The regeneration of these batteries also contributes to the achievement of the SDGs (Sustainable Development Goals) through the creation of new local jobs and the resilience of territories

where these batteries constitute a raw material for the production of clean energies, with a reduction in the kgs of CO2 equivalent produced by the manufacture of new batteries or the recycling of degraded batteries (i.e. decarbonization);

- The regeneration of a lead-acid battery is 50 times less carbon-intensive than the manufacture of a battery in kgs of CO2 equivalent (according to Be Energy's 2020 carbon assessment);
 - The regeneration of a lead-acid battery is 50 times less carbon-intensive than the manufacture of a battery in kgs of CO2 equivalent (according to Be Energy's 2020 carbon assessment);

5.

 Regeneration delays the industrial waste stage and doubles or even triples the battery's lifespan through preventive or curative treatment; Recycling lead-acid batteries is highly complex, due to the wide variety of materials used (metallic lead, lead paste, sulfuric acid, polypropylene) and the hazardous nature of certain components. After the various recycling phases, the refined lead is used again to supply battery manufacturing plants, while the polypropylene is sold to plastic recyclers;

- 7. The regeneration process is part of the process of controlling the risks posed by used lead batteries, which are a hazardous waste for both health and the environment. Training in lead-related risks and the systematic use of collective and individual protective equipment are among the legal obligations in this business, which delays the pollution linked to recycling and the new manufacture of batteries.
- 8. Promoting the battery regeneration sector could help to increase the DRC's share of renewable energy production, as well as providing a means of integrating battery repairers and recyclers, who work in an artisanal way, poisoning their own health and polluting the environment.

Integrating these compatriots into the regeneration chain, after awareness-raising and training in lead-related risks, would be highly beneficial for the Congolese nation, which needs them for its socio-economic development.

Before closing, the author recommends reading the article by Mathilde Cabral and colleagues, published in Les Annales de Toxicologie Analytique (in Senegal) in 2012, to help understand the scale of this kind of risk.

In conclusion, the engineer believes that regenerating lead-acid or lithium-ion batteries at a later date can be useful, through a formalized test (in accordance with DRC Metrology and Industrial Standards) and can serve as an Interface to control the flow of regenerable batteries for reuse (second life) and the flow of batteries that have reached the end of their life, which should be sent to Recycling specialists for responsible and sustainable treatment.

"The advantages of battery regeneration present an opportunity to materialize the vision of the President of the DRC, H.E. Félix-Antoine TSH-ISEKEDI TSHILOMBO, as part of the DRC's Master Plan for Industrialization (creation of jobs and wealth, promotion of a circular economy at the service of ecological transition)." he added.

Charles Jacob Mukeba Tshibwabwa Mukala,

Retired Maintenance Engineer, Independent Researcher in Energy Technologies and the Fight against Climate Change.

Importance of English in Scientific Research

hglish has become an essential language on a global scale, and its importance extends to a variety of fields, including scientific research:

English occupies a central place in scientific research, because of its role as a language of international communication. It has become essential to researchers worldwide for scientific publications, knowledge sharing and collaborative discoveries. Here are just a few examples of where this language is essential to scientific research :

- Scientific journals: the majority of the most prestigious academic and scientific journals publish their articles in English (Nature, Science, The Lancet, etc.). These journals are written in English and are major sources of information and discoveries in the scientific world.
- Access to research results: research has a global impact if it is published in English. This enables scientific results to be read, examined and reproduced by the international scientific community. By publishing in English, researchers ensure that their scientific publications will reach a global audience.
- Global research projects: researchers from different countries often collaborate on large-scale scientific projects. As the preferred language of communication in these collaborations, English facilitates the exchange of ideas, project management and the writing of joint reports.

Meetings and conferences: at international scientific conferences, English is generally the language of choice, as it enables researchers to present their work to a global audience, establish collaborations, share research results and discuss new scientific challenges.

- Scientific databases and articles: the main scientific databases, such as PubMed, Scopus, Google Scholar or IEEE Xplore, are mainly in English. This means that researchers with a good command of English can more easily access research articles, theses and conferences, and even submit draft articles.
- Tools and software: most data analysis software and web interfaces in scientific fields are available in English. This facilitates access to recent technologies and innovations.
- Standardization of scientific terms: English standardizes scientific vocabulary worldwide. As a result, researchers can use uniform terms to describe phenomena or discoveries, reducing the risk of confusion or misinterpretation.
- Clear, effective communication: as science is a universal language, English gives researchers the opportunity to express themselves coherently, ensuring that scientific results are better understood and replicated by their colleagues.
- Rapid dissemination of knowledge: thanks to English, discoveries are



Roger MBOMA KWENGE/NSC

rapidly disseminated to a wide audience. Scientific articles written in English can be shared more quickly, so that other researchers can examine them, test them and suggest revisions or improvements. This speeds up the process of validating and improving results.

- Global scientific progress: English, as the language of scientific communication, stimulates progress in various fields (medicine, physics, biotechnology, climatology, etc.) by enabling a fluid flow of information and ideas.
- International study programs: many universities and research institutions around the world offer study programs in English (Master's and PhD cycles, etc.). Proficiency in English is

an asset when it comes to benefiting from high-quality scientific training programs at prestigious institutions.

- Access to courses and resources: English also provides access to a large number of online courses (MOOCs), seminars and international conferences, where the latest scientific advances are discussed and shared.
- International networking: proficiency in English enables researchers to participate in international scientific events, interact with colleagues from all over the world and develop an important professional network.
- Career opportunities: researchers who speak English have better career opportunities in international scientific institutions and research companies. This is particularly true in the fields of biotechnology, physical sciences and artificial intelligence.
- Sharing knowledge: the global scientific community is constantly evolving, and much of the scientific literature, conferences and discussions take place in English. This enables researchers to actively engage with the world's scientific culture, accessing a

vast amount of knowledge.

Inspiration and influence: many influential researchers and innovators in scientific fields communicate in English, enabling researchers around the world to draw inspiration from their work and be influenced by new ideas.

Considering the above-mentioned and non-exhaustive advantages, English has become the international language of science, and its mastery is essential and recommended for accessing resources, sharing knowledge and collaborating globally. Specifically, for researchers, speaking English means having the opportunity to publish their results in prestigious journals, to participate in international projects, to work with other experts and to keep up to date with scientific advances. Furthermore, its importance is recognized in international communication, professional opportunities; access to education, technology and the Internet, mass media, networking and personal development, access to cultural and historical resources. Although English is not the only important language, its mastery is now a major asset in a globalized world and learning English becomes a means to

access a more open, more connected, and more enriching world.

Roger MBOMA KWENGE and Consort Belesi/NSC

Quid on the academies of sciences?

At the apex of the intelligentsia of every developed and emerging country are the academies of science, whose essential role is to provide reasoned, evidence-based advice to the government and other stakeholders. a science academy is an essential instrument for a country's development and progress.

Academies of Sciences, some of which are more than three hundred years old, are associations of high-level scientists, recognized by their peers, who agree to come together to put their skills at the service of the community.

They issue mature, mature, and reasoned opinions and recommendations, the foundations of which, which give them all their values and specificities, rest on: the expertise of the members, independence from political pressure, objectivity, and integrity. The academy plays a major role in the development of science, technology, literature, and the arts in a country, as well as in the implementation of sustainable development policies. Affiliation to such academies is based on demonstrated scientific distinction or notable achievements in the fields of science, technology, literature, and the arts. Most recent Academies of Sciences follow a proven model, accepted by the National Academies of the United States or other similar Academies existing in developed countries.

Academies are apolitical and non-profit, but are created by a law passed by parliament. While the authorities are responsible for the socio-economic and cultural development of society, knowledge is responsible for producing and providing those authorities with choices in the decisions that fall to them. A partnership between an academy and decision-makers is very important in a country's sustainable development process. Because of their major role in the smooth running of a state, academies are always under the protection of the country's highest authority (King, Head of State).

Although academies are supported by state finances, they are independent institutions tasked with recognizing the excellence and achievements of scientists. However, the strength of an academy is not what it can do for the scientific community, but its ability to mobilize scientists to play a leading role in the development of society.

Members are elected from among a country's leading scientists. The role of the academy can only be fulfilled if it is independent of all interest groups.

Scientific academies and scientific societies can play an important role in promoting science and technology for the benefit of

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the population. The experiences of these professional institutions in development show that they exert considerable influence through the virtue of their members and their autonomy.

The best-known Academy of Sciences is the Royal Swedish Academy of Sciences, which has contributed to making Sweden a highly influential country and is best known for its annual selection of Nobel Prize winners in medicine, physics, chemistry, and literature. Another prestigious Academy of Sciences is the Norwegian Academy of Sciences, which is interdisciplinary and aims to promote the advancement of science and knowledge in the country. This Academy is also responsible for awarding prestigious international science prizes such as the Nobel Peace Prize.

Currently, national academies occupy a central position in providing academic expertise to government decision-makers on major global issues, including climate change, the digitalization of life, and the shift in geopolitics. There are several types of academies. Some are discipline-based, others are interdisciplinary. Some manage research funds, while others also conduct research through their research institutes and laboratories, as in China and Russia.

The Democratic Republic of Congo, our country, is one of the last countries in Africa to have an Academy of Sciences. The need and urgency of having a Congolese Academy of Sciences have been felt for years by several compatriots and national organizations, notably the National Scientific Council and the University Board of Directors. One of the major difficulties they encountered was choosing pioneer members.

This difficulty was overcome by ten Congolese scientists belonging to foreign academies who came together in September 2017 to form the core of the country's Academy of Sciences. The Congolese Academy of Sciences (ACCOS) was officially launched on March 26, 2021, and in August of the same year, it received its ministerial decree of creation.

The Congolese Academy of Sciences currently comprises four divisions:

Physical and Applied Sciences

Medical and Natural Sciences

Human and Social Sciences

Literature and Fine Arts

On the day of the academy's launch, March 26, 2021, there were seven founding members, three full members, and one honorary member. Currently, ACCOS is comprised of 7 founding members, 16 full members, 3 corresponding members, 1 associate member, and 1 honorary member.

The presence of four different divisions within ACCOS leads to a transdisciplinary approach to problem analysis, which is a major asset in today's world where a frantic race is underway to acquire knowledge to control an economy based primarily on knowledge.

Although apolitical, the Congolese Academy of Sciences' role is to advise and support decision-makers from all points of view by issuing reasoned opinions based on evidence. The perspective of an Academy is very important for the proper functioning of a state because it is home to top-level scientists, recognized in their own discipline by their peers internationally.

The DRC now has an Academy, and decision-makers should use it, not just turn it into a decorative piece. We hope that a dialogue will soon be established between the Academy and decision-makers, and especially with its High Protector, the President of the Republic.

Abdus Salam, Nobel Prize winner in Physics and first President of the World Academy of Sciences (TWAS), said, "With mankind's recent mastery of science and technology, there is no longer any physical reason for the existence of hunger and want for any segment of the human race."

The DRC possesses abundant natural resources but a very poor population. Science and technology can transform this potential into wealth, and ACCOS can be the necessary tool for this transformation.

In the normal functioning of an academy, it may be approached with a problem by the government or other partners, but it can also address itself to a problem it deems important.

ACCOS is currently a member of the Network of African Academies of Sciences (NASAC) and has also joined the ISC (International Sciences Council). ISC, which is the voice of science at the global level, is the result of the merger in 2018 of ICSU (International Council of Science Union) and ISSC (International Social Science Council).

Since the early 2000s, young scientists from

most developed, emerging, and African countries have organized themselves into structures similar to senior academies. The Young Science Academy is an organization formed by young scientists at the beginning of their careers. They are selected by senior scientists based on the excellence of their research and their service to the community for a period of 4 to 5 years, then they become alumina. The Academy of Sciences for Young People in the DRC (ACSJ-RDC) was created in 2020, well before the senior academy, by former BEBUC (Bringman Excellence Scholarship for Congolese Universities) fellows.

It is a source of pride and an honor to belong to a science academy, but it requires that one remain scientifically productive, demonstrating the role model of the excellent researcher in the community. Scientific productivity is the major criterion for admission to an academy. It is important for the university, as well as for the Congolese state, to provide material and moral support to science academies, while preserving their independence. It is a fact that, apart from African countries that export their best minds, no developed or emerging country does so, because the best minds are rare and very important resources in today's highly competitive world.

> Professor TABA KALULU/Unikin Perpetual Secretary of the ACCOS



A Congolese linguist revives forgotten language and captures international attention

n the tumultuous east of the Democratic Republic of Congo, a passionate researcher, Ms. Saruti Adelphine of MDRC/Bunia, has accomplished a remarkable linguistic feat. Her work to promote the Kikobo language, once considered a dying dialect, has not only revived this Bantu language but also attracted the attention of international linguists, including the eminent American analyst Douglas Boone.

Bunia, DRC – In the heart of a region torn apart by constant conflict, a glimmer of hope is emerging for Kikobo thanks to the tireless efforts of Dr. Saruti Adelphine.

This Congolese researcher in African Bantu Linguistics has dedicated her career since 2014 to the resurrection of the Kikobo language, a long-neglected linguistic treasure considered by many to be a mere dialect of neighboring languages such as Nande and Hunde. The spark that ignited this linguistic renaissance came from abroad when Douglas Boone, an American linguistic analyst, was struck by the originality of Dr. Saruti's work. A meticulous comparative study of a list of 210 words revealed significant differences between Kikobo and its neighboring languages, confirming its status as a language in its own right. "Kikobo has a unique structure, with its five characteristic vowels and consonants," explains Dr. Saruti. "Although it is related to Nande, it has a distinct identity that deserves to be preserved." Since the international conference on the crisis in eastern DRC, which opened on Novem-



Mrs. Saruti with Mr. Douglas Boon

ber 7, 2008, in Nairobi, the importance of allowing victims to express themselves in their mother tongue for the healing of their trauma has been highlighted, thus awakening scientific curiosity about little-known languages.

Although awareness has been raised, efforts have remained limited. This awareness, however, has given new impetus to the Kikobo translation project, aimed at providing psychological and spiritual support to local populations. "Language is a vehicle for healing. It allows people to reconnect with their identity, their culture, and regain a sense of belonging," emphasizes Adelphine. The official recognition of Kikobo as a distinct language, with the IETF language code "okc," was a moment of triumph for this researcher and for the speakers of this language. His experience attracted several local and regional media, curious to know more about this language and culture.

However, ongoing armed conflicts in the region have hampered Ms. Saruti's efforts, making it difficult to contact Kikobo speakers. Despite these obstacles, she remains determined to continue her research, collaborating with SIL (Summer Institute of Linguistics International), an organization that shares her passion for preserving endangered languages. "Language is an essential part of cultural identity," emphasizes Ms. Saruti. "The preservation of Kikobo is crucial for the collective memory of this people and for their future. Kikobo is much more than a dialect." asserts Saruti Adelphine, her voice filled with passion. "It is a language in its own right, with its own grammar, unique vocabulary, and a rich history. It is a treasure that we must protect, a part

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guistic treasures that make our country so rich. In a world where languages are disappearing at an alarming rate, this researcher is an example of courage and perseverance. Her tireless work reminds us that each language is a world unto itself, a window onto a unique culture and history.

Jean-Luc BALOGIJE SELENGE/MDRC-Bunia

of our heritage, a voice that deserves to be heard," concludes Saruti, her voice impassioned.

To carry out her mission, the researcher relies on the expertise of SIL, a non-profit evangelical Christian organization dedicated to the study and documentation of minority languages. SIL, with its Ethnologue database and language documentation software such as FieldWorks Language Explorer (FLEx) and Lexique Pro, provides valuable support to the Congolese linguist. "SIL is an essential partner in my work," explains Saruti Adelphine. "Their expertise and resources allow me to carry out my research and make the Kikobo language known to the world." Beyond academic recognition, this researcher of African Bantu languages is aware of the importance of language in rebuilding a society traumatized by war. As war continues to rage in eastern DRC, Research Associate Saruti's work is a testament to the resilience of women and the importance of preserving the lin-

SRTI: Renewal of the car fleet: all things considered

Perfect of research in the Democratic Republic of Congo (DRC) has not been abandoned. It is being given a new lease of life, given the actions that are multiplying daily by the country's authorities in this sector. Despite the fact that the research field would need to be fully equipped to achieve its objectives, considerable efforts are being made at the supervisory level. There is no longer any doubt that everything is coming together wonderfully.

Indeed, many know that Congolese researchers must equip themselves with substantial resources to successfully complete their projects. But many times, the challenge remains enormous, as many are aware of the problems facing Congolese researchers. Beyond laboratory materials, research equipment, and social and financial conditions, there is also the means of transportation, which presents researchers with unprecedented difficulties, preventing them from achieving effective mobility.

Whereas with a means of transportation, researchers can move in all directions to reach one location after another to continue their research. This issue, which was a major concern for the supervisory authority, has now been resolved. The Congolese Minister of Scientific Research and Technological Innovation, Dr. Gilbert Kabanda Kurhenga, responded favorably to this need for vehicle transport. He handed over the work vehicles to various research institutions in the DRC.

This is an innovation to the Minister's credit. Kudos to the supervisory authority. She saw clearly because the need was acute. For many, this action, one among many others, is a necessity.

But also a source of pride that honors the work of Congolese researchers. Yesterday, scientific research and technological innovation were the least important fields in the country; however, today, everything is being done to restore the tarnished image of this sector, which is nevertheless a driving force behind a country's development. With new, snazzy vehicles, it is safe to say that scientific research is relaunching and scientific innovations are becoming more and more a reality (several innovations have been identified during the various forums of Congolese scientific genius. Little by little, the bird is building its nest, they say, the action of the Minister of SRTI is a gesture of the political will driven by HE Mr. Félix-Antoine Tshisekedi Tshilombo, President of the Republic and Head of State and put into practice by the Congolese Government headed by HE Mr. Judith Suminwa Tuluka, to put research back in its place. All things considered, this gesture is useful in encouraging the Congolese researcher to go all the way. These vehicles are part of the material assets inextricably linked to the work of research. Tomorrow will be better for the Congolese researcher each time one action is added to the other.

A bird in the hand is worth two in the bush, they say. Research continues and all the staff of The SRTI welcomes this positive initiative, which will go some way toward solving the thorny mobility problem. It should be noted that several research institutions did not have company vehicles, and SRTI employees were spending a lot of money each month to get to work.

ASUKA Jacques /NSC



BGFI Bank raises awareness among HEC students about financial education

s part of its initiatives in favor of financial inclusion and female entrepreneurship and on the occasion of the closing of the month dedicated to women's rights, BG-FIBank DRC organized a conference on financial education for female students and academic staff of the Higher School of Commerce (HEC Kinshasa, formerly ISC Gombe), on Tuesday, March 25, 2025.

According to the Bank, this initiative reflects BGFI Bank's commitment in the DRC to supporting young Congolese women in gaining better control over their personal and professional finances.

The goal is to provide them with con-

crete tools to strengthen their financial independence and prepare them for their economic future. Access to quality financial education is an essential lever for empowerment for young girls.

During the conference, several key themes were addressed: the importance of budget management, the usefulness of savings, some basic concepts of credit, how to conduct financial negotiations, and the use of digital financial services.

Through this initiative, BGFI Bank DRC reaffirms its role as a leading bank in supporting the sector. Participants have a valuable opportunity to interact with banking experts and acquire essential knowledge in financial management. Furthermore, BGFI Bank RDC reiterates, through this approach, its role as a leading bank in supporting the education sector and promoting financial inclusion. It also intends to consolidate its commitment to financial education and the economic development of young Congolese women.

Actualité.cd and STIB editorial staff

Mpox: 17 patients on the run in South Kivu

esidents of South Kivu have expressed concern following the flight of Mpox patients from the Miti-Murehesa Treatment Center. They fled clashes between the FARDC and the M23.

According to the Ministry of Public Health report, there are 17 Mpox patients, including 10 confirmed positive and 7 awaiting results, admitted to the Miti-Murhesa health zone. Contacted on this subject, Professor Manwa Baudoin, a medical biology specialist, stated that these people who have not been declared cured of Mpox will create a hotbed of disease activation, thus creating a high risk of contamination. He calls on all seqments of the population to mobilize and apply conventional barrier measures, including avoiding all contact with a sick or dead animal, its meat or blood, as well as contact with a person infected with Mpox.



rector of the Mpox Treatment Center at the UOB University Clinics in the city of Bukavu, notes that the security situation is hampering the supply of medical supplies, a huge need for the treatment of pathologies. ince has deteriorated since February 14, 2025, with the entry of the M23/AFC rebels. The Kamituga health zone is the epicenter of the pathology in the region.

Actualité.cd and STIB editorial staff

The security situation in South Kivu prov-

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PUBLIG-SEGIUK KESEAKGH GENII	ERS AND INSTITUTES IN THE D.R. CONGO
RIHS (Research Institute in Health Science)	SSRC (Social Science Research Center / Bandunduville)
Objective: To improve the state of health of the population through research in the following fields: pharmaceutical, medical, anthropological, psychological or socio-cul-	Objective: to carry out practical scientific research into major socio-economic and cul tural issues.
tural. Address: 9, Av. Lukusa C/Gombe; E-mail: dnyembo@gmail.com; Tel: 0824580211	To promote sustainable aquatic development. Address: 29, Av. de la mission, Q/Salongo, C/Basoko. BANDUNDUVILLE, BP. 223
ATSRC (Applied and Technologic Sciences Research Center) Objectif: Mettre au point des matériaux, des appareils, des méthodes ou procédés Ob-	E-mail:akuzituka@gmail.com; Tel: 0815898971 FERC (Forest Ecology Research Center /Mabali)
jective: To develop materials, equipment, methods or processes with a view to finding solutions to the population's urgent problems in various fields: housing, rural develop- ment and the modernization of the society. Address: 106, Blvd du 30 Juin, C/Gombe; E-mail: Jeannoel.mputu@gmail.com; Tel:	Objective: Scientific research on plants, aquatic species and animal species. Address: D.S/MBANDAKA D.S/MBANDAKA/PROVINCE OF ECUADOR; E-mail: bosom boependi2@gmail.com; Tel: 0825241704
0821138261	
RCHS (Research Center in Human Sciences)	NDRC (Nutritional Diseases Research Center/Gemena) Objective: Research into diseases linked to malnutrition, such as related diseases b
Objective: To ensure the human development of the Congolese people through the study of its social, economic and political dimensions with a view to identifying the factors that have a positive or negative influence on its development. Address: 33,Av.comité urbain C/ Gombe; E-mail: mingashang@yahoo.fr; Tel: 0819377821	isolating certain molecules, such as SYZYSIUM GUINESIE to combat amoebic yeast and diarrhea in South Ubangi.
RCMT (Research Center in Mathematics Teaching)	Address: Mobutu n° 220/A. GEMENA/ SOUTH UBANGI PROVINCE; E-mail: cherusangi@ yahoo.fr; 0992416091
Objective: To carry out research in the field of mathematics teaching with a view to	NSRC (Natural Sciences Research Center /Lwiro)
improving quality. Address: 84, Av. des Ambassadeurs C/ Gombe; E-mail: mabelamatendorostin@qmail.	Objective: To carry out, promote and coordinate research in the fields of science, tech
com; Tel: 0815031877	nology and industry throughout the DRC. Address: LWIRO LWIRO , TERRITORY OF KABARE/SUD KIVU; E-mail: robert.kasisi@umor
GRC (Geophysical Research Center)	treal.com; Tel: 0996806699.
Objective: To provide the country with a national geophysical observation network, for	MDRC (Multidisciplinary Development Research Center /Bunia)
the global study of the internal behavior of the earth in the DRC. Address: 44, Av. de la démocratie, C/ Gombe(within GMRC); E-mail:tondozi@gmail. com;Tel: 0854426228	Objective: To carry out operational research in the north-east of the DRC in the fields or applied linguistics, African cultures and applied sciences. Study of nature, fauna, flora and protection of endangered species.
AIPS (African Institute of Prospective Studies)	Address:BUNIA/ITURI; E-mail: Kermwathomas@gmail.com; Tel: 0997717070
Objective: To carry out forward-looking studies in order to propose solutions to crises and problems linked to the evolution of African societies.	HRC (Hydrobiology Research Center in Uvira)
Address: Av. Cardinal Malula, C/ Lemba; E-mail: mgrtarcibangu@yahoo.fr; Tel: 0996658741	Objective: To program, coordinate and monitor research activities in hydrobiology, lin nology and hydrology.
MDRC (Multidisciplinary Development Research Center/Matadi)	hydrobiology, limnology and fisheries in all ecosystems. Address: 115, AV. du Congo, Q/Kimanga, C/Kalundu, UVIRA / SUD KIVU; E-mail: bida
Objective: To carry out operational research in central Congo in the field of applied linguistics of African cultures and applied sciences	kamuhoza@gmail.com; Tel: 0997716307.
Address :Hôtel de la porte Matadi; E-mail: Mwanzanicolas5@gmail.com; Tel:0815037949	CBRNEC (Chemical, Biological, Radiological and Nuclear Excellence Center)
NCPIR (National Committee for the Protection of ionizing Radia- tion)	Objective: To contribute to the mitigation of chemical, biological, radiological and nuclear risks.
Objective: - Regulatory authority for protection against the dangers of ionizing radia- tion in the DRC management of radioactive sources of radioactive materials such as uranium.	Address: 106, Blvd du 30 Juin, C/Gombe; E-mail: coe.cbrn.rdc@gmail.com; Tel: 0817742543.
Address: 4675, Av. Colonel Ebeya, Immeuble Quitus 2ème niveau; Email: Flory1963@	GVO (Goma Volcanological Observatory) Objective: Prevention of volcanic risks by monitoring volcanoes and Lake Kivu,
_gmail.com;Tel: 0816684665 AEC (French Atomic Energy Commission)	Kivu; Management of natural risks; scientific research.
Objective: To carry out, promote and coordinate scientific and technical research in various fields of science and industry, concerning the use of atomic energy and space	Address:142, Avenue Du Rond Point ; Quartier Les Volcans ; Commune de Goma ; Ville Goma; North-Kivu; E-mail: mavotulu@gmail.com; Tel: 0998584734
research. Address: UNIKIN building; E-mail: Steve.muanza.kamunga@gmail.com; Tel: 0808643248	WERC (Water and Environment Research Center) Objective: To serve as a training and research center focusing on water and enviror mental management.
CGI (Congo Geographic Institute) Objective: Production of the base map of the DRC at a scale of 1/50,000 and its derivatives. Address: 106, Blvd du 30 Juin, C/Gombe; E-mail: Fidele.balibuno@unikin.ac.cd; Tel: 0974449240	To propose solutions to problems that could arise around water. Create a national network of Congolese scientists and researchers to analyze and disseminate informa- tion on the impact of climate change in the DRC. Promote education and the right t the environment.
GMRC (Geologic and Mining Research Center)	Address: 44, Comité Urbain C/ GOMBE; E-mail: ngelipatience@gmail.com; Tel: 0818105625.
Objective: To carry out studies and analyses to improve knowledge of the soil and subsoil of the national territory. Address: 44, Av. de la démocratie, C/ Gombe; E-mail: rolandkakule@gmail.com; Tel:	RCSARP (Research Center for the Selection and Adaptation of Ruminants and Pigs)
0851506161	Objective: To carry out studies and research in the field of ruminant and pig breeding
NIASR (National Institute for Agronomic Study and Re- search)	Address: 45, Av. Lumumba, Q/de la gare, LUPUTA/ KASAI-ORIENTAL; E-mail: tshamalaga briel@gmail.com; Tel: 0851817370
Objective: To promote the development of agriculture in the Congo. To maintain vari- eties, multi-local trials, and its farmers, management and conservation of germplasm. Set up a program to monitor and evaluate research activities. To disseminate new varieties. Give the emerging technical department its reason for being, with a view to producing basic and pre-basic seed. Resume publication of the agricultural magazine to disseminate research results.	NCRS (National Center for Remote Sensing) Objective: Research in remote sensing. Address: PLACE ROYAL IMMEUBLE PLACE ROYAL IMMEUBLE KASAI; E-mail: davidngir dub@gmail.com;Tel:0815103502. NCROS (National Center for Research in Oral Science)
Address: 13, Av. des Cliniques, BP :2037 KINSHASA , C/Gombe; E-mail: domikankonde@ yahoo.fr; Tel: 0818248620	Objective: To carry out studies and research in the field of oral health. Address: 13, 10ème Rue, Industriel Quarter, C/Limete; E-mail: Cnrsbd.rdc.@gmail.com;
RCALC (Research Center into African Language and Culture)	Tel: 0822244152; 0811835159; 0840922982
Objective: To coordinate and carry out all research projects concerning African lan- guages and cultures.	CAS(Congolese Academy of Sciences) Objective: Promotion and dissemination of science, technology,arts and letter
Address: 53 C, Av. Makiso, blvd du 30 juin, Kisangani/ Tshopo. Tel: 0851934320	Support for inventive initiatives. Address: Sciences Faculty/ UNIKIN local 28; E-mail: jjmuyembet@gmail.com; Te
AFRC (Agro-Food Research Centre/Lubumbashi) Objective: To identify processes for processing and preserving basic local agricultural products.	0813330242 MIDDC (Mate di Interdingin Income Dedengging December)
To improve the quality of imported or locally produced foodstuffs by applying approved standards and quality control. Help the technological development of the existing agro-industry by providing them with technical	MIPRC (Matadi Interdisciplinary Pedagogical Research Center) Objective:Information science. Address: The buildings of the Matadi Higher Pedagogical Institute; Tel: 0896501462
assistance wherever possible. Address: 1, Av. Président ILEO, Q/CRAA, C/Lubumbashi; E-mail: Julesnkulu@gmail.com; Tel: 0997131002	



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- supervising the financial management of research centers and institutes
- approving the budgets of the Research Institutes and Centers and submitting them to the Minister for Scientific Research for approval
- approving the organic regulations of the Research Institutes and Centers;
- proposing to the Minister for Scientific Research the appointment and promotion of scientific and 6. administrative personnel.

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