



### **Report of 3<sup>rd</sup> Cohort of Science Advice Skills Development Program (SASDP-3)**

Science advice is a key area for science capacity development in Africa. It has the potential to create notable contributions to developing research and innovation in Africa. The scientific community in the African continent is engaged in a range of scientific research in different areas, specifically to address the continent's various challenges. The employment of relevant African scientific knowledge in decision making must be emphasized as this is important for society. There is an urgent need for effective communication to connect scientists and policymakers. There is also a responsibility for scientists to convey their knowledge and findings of their research to policy makers, and to the public.

INGSA-Africa, the Regional Chapter of the International Network for Government Science Advice, in its aim to build capacity of African Scientists across Africa for effective communication of science advice, developed a mentorship Program – Science Advice Skills Development Program (SASDP) that ran over a period of 3 months in 2022. The objective of the SASDP was to support mid-career African scientists and researchers in strengthening their skills to communicate their research results and viewpoints as science advice to their identified audiences and to foster their overall development.

The SASDP with a theme of Climate Change in Africa, focusing on areas of Health, Water, Energy and Food Security has thus become a yearly project. A call for the 3<sup>rd</sup> cohort of mentees and mentors launched in June 2024 attracted 60 mentee and 111 mentor applicants, respectively. After a rigorous screening process, 22 mentees and mentors, each were finally selected to undertake a 6-month program between September 2024 and March 2025.

The mentees (12 male and 10 female) came from all five sub-regions of Africa (North, Southern, East, West and Central) and the Islands, typically including first timers from Benin, Cote d'Ivoire, Guinea, Madagascar and Zimbabwe. Their areas of expertise included Medicine, Parasitology, Agricultural Economics and Extension, Microbiology, Linguistics and Cultural Studies, Cancer Biology, Actuarial Science, Engineering, Geography, Environmental Science, Data Science and Nanomaterials. The mentors who were selected from Africa, Europe, North America and The Caribbeans included some who were on the SASDP-1 and SASDP-2.

The SASDP started with a contact phase in the form of a virtual mentor-mentee Introductory Workshop on 26 September 2024 where core topics - such as introduction to tools for transformative policy advice and experiences, balancing political realities and scientific advice

and the role of science in addressing climate change in the African continent - were addressed by invited specialists in science advice. Seventeen mentees (10 males and 7 females finally completing the program). The SASDP-3 officially ended on 3<sup>rd</sup> April 2025 with a virtual Closing Workshop at which findings and outputs of the mentorship program were shared by the mentees while the mentors discussed their experience engaging with mentees.

Below are the credentials of the mentees and their mentors, and the projects they worked on:

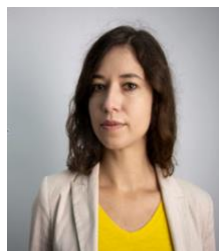
## **1. Dr Deborah Olufunmilola Ayodele-Olajire/Nataliia Sokolovska**

**Mentee: Dr Deborah Olufunmilola Ayodele-Olajire (Nigeria)**



Deborah Ayodele-Olajire, a researcher at the University of Ibadan, works at the intersection of climate change and sustainability, particularly on energy, waste management, water governance and public health issues. She is lead researcher on the project 'Developing Evidence-Based Policies for Clean Cooking in Nigeria' funded by International Science Partnerships Fund.

**Mentor: Nataliia Sokolovska (Ukraine)**



Nataliia Sokolovska leads the "Knowledge and Society" research program at the Humboldt Institute for Internet and Society. Her work focuses on bridging academia, policymaking, and society, with a particular emphasis on enhancing the quality of scientific advice to policymakers, increasing the societal relevance of research, and promoting openness and integrity in the process. Prior to joining the Institute, she worked as a journalist for Deutsche Welle, Germany's international broadcaster.

### **Project Title: Bridging the Gap: The Role of Science and the Academia in Advancing Nigeria's Energy Transition**

*Nigeria's energy transition is a national priority and scientific expertise is a crucial part of this process, yet researchers remain overlooked in policy decisions. The project highlighted Nigerian scientists' contributions to the clean cooking transition, especially, and the importance of their continuous active engagements during the planning and execution of interventions.*

## **2. Dr Chinwoke Clara Ifeanyi-obi /Dorine Odongo**

**Mentee: Dr Chinwoke Clara Ifeanyi-obi (Nigeria)**



Dr Chinwoke Clara Ifeanyi-obi is a senior lecturer at the Department of Agricultural Extension and Development Studies, University of Port Harcourt, Rivers State; An AWARD Fellow, under the Gender responsive Agricultural Policy Systems Fellowship. She is the project Lead for Gender Responsive Climate Change Adaptation Initiative in Nigerian Agriculture (GCAINA).

**Mentor: Dorine Odongo (Kenya)**

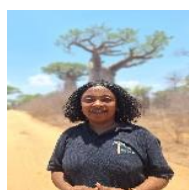
Senior, Manager, Communications, Strategy and Engagement, World Agroforestry (ICRAF), Kenya.

**Project Title: Enhancing Climate Resilient Agriculture in Nigeria through the Utilisation of Gender Responsive SMART Monitor (G-SMART Monitor)**

*Efforts to tackle climate change effects in Nigerian rural agricultural sector which comprised over 70% of women must be gender responsive. The G-SMART Monitor is aimed to bridge the gap through adopting a participatory and inclusive approach to develop a real time tool to aid in tracking the implementation of gender components in existing policies and frameworks in agricultural sector.*

**3. Dr Razanamaro Onja Hariveloniaina Morilline/Professor Paul Arthur Berkman**

**Mentee: Dr Razanamaro Onja Hariveloniaina Morilline (Madagascar)**



Dr Razanamaro Onja Hariveloniaina Morilline is a Malagasy botanist specializing in baobab conservation. With a PhD in Life Science, she has led numerous research projects, secured international funding, and published on baobab ecology and conservation. She is a dedicated advocate for Madagascar's unique flora.

**Mentor: Professor Paul Arthur Berkman (USA)**



Professor Paul Arthur Berkman is a science diplomat, applying, training and refining informed decisionmaking to balance national interests and common interests for the benefit of all on Earth across generations. Prof. Berkman is the Founder and President of the Science Diplomacy Center™, serving also as a Faculty Associate with the Program on Negotiation (PON) at Harvard Law School and Associate Director of Science Diplomacy in the Harvard-MIT Public Disputes Program as well as an Associated Fellow with the United Nations Institute for Training and Research (UNITAR). Among his many awards, most recently the United States Department of State and Norwegian Ministry of Foreign Affairs awarded Prof. Berkman the Fulbright Arctic Chair 2021-2022

**Project Title: Ivato Declaration Implementation: Science Advice Model**

*Ivato Declaration redefined with Government alignment, Senator Discussion, Presidential Implementation.*

**4. Dr Aliyu Muhammad/Prof Mohamed Hamzawy**

**Mentee: Dr Aliyu Muhammad (Nigeria)**



Dr. Aliyu Muhammad is an Associate Professor of Biochemistry with a Ph.D. from University of Ibadan. Having 14 years of academic and research experience at Ahmadu Bello University, Aliyu is interested in public health policy, science advice, and cancer research. He is experienced in training Ph.D., MSc, and undergraduate students.

**Mentor: Prof Mohamed Hamzawy (Egypt)**

Professor and Dean, Faculty of Pharmacy, Fayoum University, Egypt

**Project Title: Assessing Public Perception of Climate Change and Its Links to Breast Cancer Risk Factors in Nigeria: Implications for Health Policy and Advocacy**

*Climate change is a global issue affecting public health, including breast cancer. Among the respondents/key stakeholders, the project observed a substantial knowledge deficit regarding breast cancer risk factors (39.7%) and climate change policies (92.6%). Targeted public campaigns are needed to highlight the interconnection between climate change and breast cancer risk factors.*

**5. Dr Lucy K.L. Mandillah/ Dr Jane Yau**

**Mentee: Dr Lucy K.L. Mandillah (Kenya)**



Lucy Mandillah is a Senior Lecturer at Masinde Muliro University of Science and Technology, Kenya. She holds a Doctorate in English Language and Applied Linguistics. Her research focuses on African Linguistics, language revitalization, Ecolinguistics, communication and gender studies, and she actively participates in various professional organizations and networks.

**Mentor: Dr Jane Yau (Britain)**



Dr Jane Yau is a senior researcher at the Leibniz Institute for Research and Information in Education, Germany. She is a member of the Global Young Academy, an Advisory Committee member of the Smithsonian Science Education Center, and an expert member of the International Science Council

**Project Title: Indigenous Knowledge and Policy for Biodiversity Conservation**

*The project explored the role of indigenous conservation practices in biodiversity protection, focusing on African totems and traditional ecological knowledge. It highlighted the threats posed by modernization and policy gaps, proposing solutions such as documentation, education, legal frameworks, and stakeholder collaboration to integrate indigenous knowledge into national conservation policies.*

**6. Dr Queensley C. Chukwudum/ Prof Norbert Francois Tchouaffe Tchiadje**

**Mentee: Dr Queensley C. Chukwudum (Nigeria)**



Dr. Queensley C. Chukwudum holds a doctorate in financial mathematics with a focus on extreme value analysis from the Pan African University, Kenya. She also has degrees in mathematics, computer science, and actuarial science. Dr. Chukwudum is a senior lecturer at the University of Uyo, Nigeria, with research interests in climate change modelling, risk analysis, and gender development. She has received several national and international awards, including the African Union's "My Thesis in 180 Seconds" competition in 2019. She advocates for women in mathematics, persons with disabilities and climate justice.

**Mentor: Prof Norbert Francois Tchouaffe Tchiadje (Cameroon)**



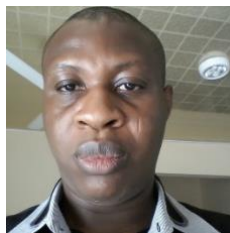
Currently, I am a mentor at the African Academy of Sciences. I am also an Associate Professor in Leadership, Environmental Health, and Integrated Water Resources Management at the Advanced School of Agriculture, Forestry Water and Environment, University of Ebolowa, Cameroon, and a Senior Researcher at the Pan-African Institute for Development.

**Project Title: Unlocking Climate Finance for Structural Transformation in sub-Saharan Africa**

*This study analyzed public climate finance flows in sub-Saharan Africa using the CFU-BFU framework. It evaluated funding allocation, disbursement efficiency, risk responsiveness, and governance. Results highlighted disparities in performance, with some funds showing efficient disbursement and others exposed to corruption. The findings emphasized the need for structural reforms in climate finance.*

## **7. Assoc. Prof Monday Osagie Adenomon/Assoc. Prof Peter Elias**

**Mentee: Assoc. Prof Monday Osagie Adenomon**



Dr. Adenomon Monday Osagie is an expert in Data Science, Machine learning and M & E. Director, ADECLAR Research Consult; Founder, FOUND-LEAS-IN-NIGERIA. Associate Professor of Statistics and Director Centre for Cyberspace Studies, Nasarawa State University, Keffi, Nigeria; Elected member, ISI; Chair, IASC-AMG; Coordinator, ISLP-Nigeria; Geographic Centre Lead for Africa (RoSE).

**Mentor: Assoc. Prof Peter Elias (Nigeria)**



Peter Elias is an Associate Professor with a Ph.D. in Geography from the University of Ibadan, Nigeria. He is the Team Lead, Lagos Urban Studies Group and the Co-Director, Centre for Housing and Sustainable Development, University of Lagos. He has expertise in transdisciplinary research for science, policy, and society.

**Project Title: Building the capacity of the Next Generation STEM Researchers to Influence Policy in Nigeria and Africa**

*Sometimes it could be a challenge for student in STEM or upcoming STEM researcher to face the problem of how to navigate from theory to practice. Hence the need to build the capacity of the next Generation STEM researchers to influence policy in Nigeria and Africa. To achieve this, webinars were organized around mentoring, collaboration, volunteering and data science story-telling that is capable of building the next generation STEM students and upcoming researchers. The impact of efficient mentoring, collaboration, volunteering and data science story telling have the potential to influence policy in Nigeria and Africa.*



## 8. Dr Victorien Tamègnon Dougnon/Prof Kabiru Olusegun Akinyemi

Mentee: **Dr Victorien Tamègnon Dougnon (Benin)**



I am Victorien Tamègnon DOUGNON, Associate Professor of Microbiology at EPAC, University of Abomey-Calavi, Benin. With a PhD in Environmental and Health Sciences, my academic journey, enriched by international collaboration, focuses on institutional development, microbiology, and public health, driving research and innovation in Benin's higher education system.

Mentor: **Prof Kabiru Olusegun Akinyemi (Nigeria)**

Professor/Director, Department of Microbiology, Faculty of Science, Lagos State University, Ojo, Lagos. Nigeria

### **Project Title: Strengthening Community-Based Hygiene Interventions and Healthcare Professional Training to Reduce Maternal and Neonatal Infections in Benin**

*This study aimed to explore the impact of integrating community-based hygiene interventions with healthcare professional training to reduce maternal and neonatal infections in Benin. Infections remain a leading cause of maternal and neonatal mortality, exacerbated by inadequate hygiene practices both in healthcare settings and within communities. The research focused on two key areas: Community-Based Hygiene Interventions and Healthcare Professional Training.*

## 9. Dr Roger Yoboue Guy Koffi/Dr Abdess Salem Saumtally

Mentee: **Dr Roger Yoboue Guy Koffi (Ivory Coast)**



Dr KOFFI Guy Roger Yoboué is a geographer and lecturer at Alassane Ouattara University in Côte d'Ivoire, and the author of more than ten scientific publications. His research focuses on food security and livelihoods, climate change and the resilience of rural households.

Mentor: **Dr Abdess Salem Saumtally (Mauritius)**



Dr Salem Saumtally is the Chairman of the Board of the Higher Education Commission Mauritius and a Fellow of the Mauritius Academy of Science and Technology. He forms part of the Executive Committee of the International Society of Sugar Cane Technologists, an apex international body for sugarcane.

### **Project Title: Understanding and Acting: Towards a Sustainable Food Environment for Central-Western Côte D'Ivoire**

*In Côte d'Ivoire, agriculture is based on coffee and cocoa, which occupy most of the agricultural land in the central-western region. The deterioration of climatic conditions and the politico-military crisis have led to a decline in agricultural production, making food supplies insufficient. Households are therefore exposed to the risk of food insecurity. Findings from documentary research and a field survey, based on household food consumption scores,*

*revealed that many households are food insecure. This situation highlights an urgent need to rethink agricultural priorities and establish a sustainable food environment in west-central Côte d'Ivoire.*

## **10. Assoc. Prof Julius Caesar Puoza/Dr Tiangoua Kone**

### **Mentee: Prof Julius Caesar Puoza (Ghana)**



Julius Caesar Puoza, an Associate Professor at Sunyani Technical University, has over 13 years of experience in mechanical engineering. His research focuses on tribology, energy efficiency, and manufacturing. He has over 20 publications, mentors students and staff, and has held leadership roles, aiming to inspire lifelong learning and leadership globally.

### **Mentor: Dr Tiangoua Kone (Ivory Coast)**



Dr Tiangoua Kone is a Lecturer at the Université Nangui Abrogoua (Abidjan, Côte d'Ivoire) and conducts research programmes in the field of Environmental Engineering. He records several years of working with international development partners and the Government of Côte d'Ivoire relating to climate strategies and policy, including access to climate finance.

### **Project Title: Cutting Fossil Greenhouse Gas Emissions with Tailored Internal Combustion (IC) Engines**

*Internal combustion engines (ICEs) remain key in transportation and industry but contribute approximately 16% of global greenhouse gas emissions causing climate change. This policy brief explores tailored ICE technologies such as laser surface texturing as a means to reduce emissions while supporting sustainable transport solutions. Policy recommendations include R&D incentives, industry adoption, and regulations. Integrating tailored ICE advancements with alternative fuels can support a sustainable transition in transportation.*

## **11. Dr Clarietta Chagwiza/Liliana Pasecinic**

### **Mentee: Dr Clarietta Chagwiza (Zimbabwe)**



Dr Clarietta Chagwiza holds a PhD in International Development Studies from Radboud University Nijmegen, the Netherlands and an MPhil in Development Finance from Stellenbosch University. She is currently working as a Senior PDR Fellow at the University of Pretoria under the African Science and Technology Futures Domain.

### **Mentor: Liliana Pasecinic (Romania)**

Deputy Head of Unit, European Commission Joint Research Centre, Belgium.

### **Project Title: Governance, Research and Development Expenditure and Economic Growth nexus in South Africa: A Policy Brief**

*Chronic government investment in research and development (R&D) in conjunction with ill-governance pose challenges to the development efforts in South Africa and the African continent at large. This policy brief examined the effect of governance on the relationship between R&D expenditure and economic growth in South Africa.*

## **12. Dr Rasheed Olatunji Moruf/Dr Adeogun, Oludare Akanni**

**Mentee: Dr Rasheed Olatunji Moruf (Nigeria)**



Dr Rasheed Olatunji MORUF, an early-career lecturer with a Ph.D. in Marine and Coastal Fisheries from the University of Lagos, Nigeria. He has over 90 publications and currently lectures in the Department of Fisheries and Aquaculture at Bayero University, Kano, North-Western, Nigeria.

**Mentor: Dr Adeogun, Oludare Akanni (Nigeria)**



Dr. Oludare Akanni Adeogun is a scientist at the Nigerian Institute for Oceanography and Marine Research, Lagos, Nigeria. Oludare developed a keen interest in the field of Resource economics and its intersectionality with food systems. His areas of work and research focus on fisheries, climate and oceanography. Oludare combines his knowledge of science communication and design to disseminate innovations to a wide audience.

**Project Title: Heavy Metal Bioaccumulation of Freshwater Snails from River Wudil, Kano State, Nigeria: Implications for Ecological Risk and Public Health**

*This study highlighted the bioaccumulation of heavy metals in freshwater snails, emphasizing the need for continuous monitoring. Such scientific evidence can support policymakers in developing strategies to mitigate ecological and human health risks, including improved water quality standards and stricter industrial waste regulations.*

## **13. Assoc. Prof Elsayed Gamal Zaki/Prof Abdel-Tawab Halim Mossa**

**Mentee: Assoc. Prof Elsayed Gamal Zaki (Egypt)**



Professor ElSayed Gamal Zaki, Associate professor at Egyptian Petroleum research institute, Publish more than 62 publications, 13 books, H-index 21 and He coordinates many research projects on wastewater treatment with low carbon foot print in collaboration with national and international partners and Valorization of Industrial Solid Waste to Green Sustainable Products.

**Mentor: Prof Abdel-Tawab Halim Mossa (Egypt)**



Prof. Mossa is head of Pesticide Chemistry Department and an expert in the field of pesticide science, with a Ph.D. degree from Alexandria University in pesticide chemistry and toxicology obtained in 2004. He conducts research on various aspects of pesticide chemistry and toxicology, such as pesticide residues, risk assessment, green pesticides, nanoformulations, nanopesticides, climate change, pest control in agriculture and public health, plant health, and environmental health.

**Project Title: Optimized Synthesis of Low Carbon Footprint Biodegradable Films from Gellan Gum/Crataegus Sinaica Nanocomposites for Sustainable Food Packaging**

*The demand for sustainable food packaging has driven the development of biodegradable materials with minimal environmental impact. This study focused on enhancing gellan gum/Crataegus sinaica nanocomposites to produce biodegradable films with improved mechanical strength, flexibility, and biodegradability, while maintaining a reduced carbon*



*footprint. Accelerated weathering tests indicated degradation within 96 hours, equivalent to four years under natural conditions. These films contribute to global efforts to reduce carbon emissions and plastic waste.*

#### **14. Dr Francis-Daniel Menga/Dr Mario Rivero Huguet**

Mentee: Dr Francis-Daniel Menga (Cameroon)



Francis-Daniel MENGA is an energy and environment researcher specializing in renewable energy and sustainability. With a Ph.D. in Energy and Environment, he has extensive experience in renewable energy technologies, energy efficiency, and project management. He actively contributes to advancing scientific knowledge and practical solutions for energy systems.

Mentor: **Dr Mario Rivero Huguet (Britain)**

Head, Science, Policy and Innovation, AI and Digital Technologies Lead, British High Commission, Ottawa, Canada

Project Title: **Resilient Energy Science and Policy in Cameroon**

*This project identified the problem of climate-induced declines in hydropower production, and proposes an integrated energy-climate tool. Solutions include scientific deliverables, stakeholder training and strategic partnerships. The aim was to position Cameroon as a leader in the green transition.*

#### **15. Dr Armelle Tsamo Tontsa/Prof Sherine Ibrahim Farrag**

Mentee: **Dr Armelle Tsamo Tontsa (Cameroon)**



Armelle is an organic chemist with expertise in natural products for drug discovery. She holds a PhD from the University of Yaoundé 1 and has completed postdoctoral training at Georg August University of Göttingen, Germany, Tshwane University of Technology, South Africa, and Université Paris Saclay, France. Her research focuses on the streamlined identification of bioactive natural compounds from natural resources to combat human diseases. Armelle has been awarded prestigious grants and fellowships, including the Canadian Commonwealth Exchange grant, South Africa National Research Foundation, German Academic Exchange Service, Royal Society of Chemistry research and Schlumberger Foundation Faculty for the Future. She is a Fellow of the African Science Leadership Programme, Cameroonian Academy of Young Scientists, Global Young Academy, an Affiliate of the African Academy of Sciences and member of the Organisation for Women in Science for the Developing World, as well as Cameroonian Professional Oriented Women Network.

Mentor: **Prof Sherine Ibrahim Farrag (Egypt)**



Professor of Biomedical Engineering; Former Egyptian Parliament member 2015. Higher council –Engineering Syndicate, and Specialized National Council (Biotechnology Committee). Thirty years proven

management, Business developer skills, in addition to the academic experience, medical equipment and hospital planning consultancy, CBRN Planning, Environmental engineering, Solid waste planning; Setting code for hospitals and non-ionizing radiation.

**Project Title: Safeguarding Traditional Antimalarial Medicines in a Changing Climate: Urgent Call for Conservation and Policy Action**

*In the coming decades, climate change will significantly threaten malaria control and the sustainability of traditional antimalarial medicines in Cameroon. This project underscored the urgent need to safeguard medicinal plant resources through biodiversity conservation, sustainable cultivation, and botanical characterization to enhance standardization, registration, and the integration of improved traditional medicines into health policies. This project will be implemented by advocating the legal framework to governments, parliamentarians, and senators. It will also leverage social media campaigns, NGOs, and civil society organizations to influence public policies.*

**16. Dr Musah Abdulai/Prof Benjamin Vallejo Jr.**

**Mentee: Dr Musah Abdulai (Ghana)**



Musah Abdulai, a Lecturer at Sunyani Technical University, has 5 years of experience in materials engineering research and teaching. His expertise includes energy storage devices, ceramic processing techniques, and materials characterization. He has held leadership roles, published articles, and mentors students while promoting teamwork, creativity, innovation, and continuous learning.

**Mentor: Prof Benjamin Vallejo Jr. (Philippines)**



Professor Benjamin Vallejo is with the Institute of Environmental Science and Meteorology, College of Science, University of the Philippines Diliman. He has degrees in fisheries and marine science from UP and a PhD in Marine Biology from James Cook University, Australia which was awarded in 2004. He worked on coral reef resources, databases, and fisheries policy with WorldFish center prior to his Ph.D. from 1992 to 1998. He did his post-doctoral work in molecular marine biodiversity at Louisiana State University. His main area of marine research is on biological invasion. He was an exchange professor at St Norbert College in Wisconsin, USA. He also trained in governmental science advice under the International Network for Governmental Science Advice (INGSA) in Kuala Lumpur, Malaysia in 2017.

**Project Title: Ghana's Energy Future: Strengthening Privatization, Infrastructure, and Renewable Development for Sustainable Growth.**

*Ghana's energy sector is a critical driver of economic growth, with an installed electricity generation capacity of approximately 5,500 MW from hydropower (38%), thermal power (58%), and renewable energy (4%). Energy consumption has increased rapidly since 2017, driven by industrial expansion and urbanization, with oil, natural gas, and biomass dominating the energy mix. Although crude oil production has declined by 10% annually since 2019, domestic resources such as the Jubilee and TEN fields remain significant. This policy brief*

*explores privatization of the energy sector while supporting, infrastructure development, and renewable energy promotion. Policy recommendations include maintenance of aging infrastructure, and financial sustainability. Also, expanding renewable projects, and encouraging private sector participation to ensure a sustainable and resilient energy.*

## **17. Dr Ahmed Amara Konate/ Prof Khaled Mohamed Said Ibrahim Gemail**

### **Mentee: Dr Ahmed Amara Konate (Guinea)**



Dr Ahmed Amara Konaté, Associate Professor, is an ARISE fellow in 2022, and is General Director of Research at the Higher Institute of Mines and Geology of Boké, Guinea. Dr Konaté's current research aims to develop new approaches to solving environmental and societal problems linked to mining activities in West African states.

### **Mentor: Prof Khaled Mohamed Said Ibrahim Gemail (Egypt)**



Dr Khaled Gemail is a Professor of Environmental Geophysics and the Director of the Environmental Geophysics Research Center (ZEGL) at Zagazig University, Egypt. He earned his Ph.D. through the Channel Scholarship at TU Freiberg, Germany (2000-2002), and completed a post-doctoral fellowship at the University of Saskatchewan, Canada (2007-2008). He served as a lecturer at Saskatchewan University (2008-2011) and became an Associate Professor at Zagazig University (2012-2017). His research includes leading projects on sustainable groundwater resources and securing international lab accreditation (ISO 17025:2017) for his center. He has also managed grants from USAID and participated in EU collaborations (FP7- Erusams+, NEXT MED)

### **Project Title: Strategies for transferring scientific achievements and knowledge to stakeholders involved in artisanal gold mining: Case study from Siguiri Prefecture**

*Siguiri, known for its wealth in gold, has for years experienced an increasingly growing boom in the field of gold panning. In order to reduce the impact of gold panning on the environment and provide security for gold miners, it is necessary to raise education, awareness-raising and training for stakeholders involved.*

