



Université
de Lomé

Passion for Nanoscale Physics

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Researcher

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Scientific Excellence (ARISE) Fellow

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25-29 September 2023
George, South Africa

ACP2023

ASK An ASP2014 (Alumni)



TOGO



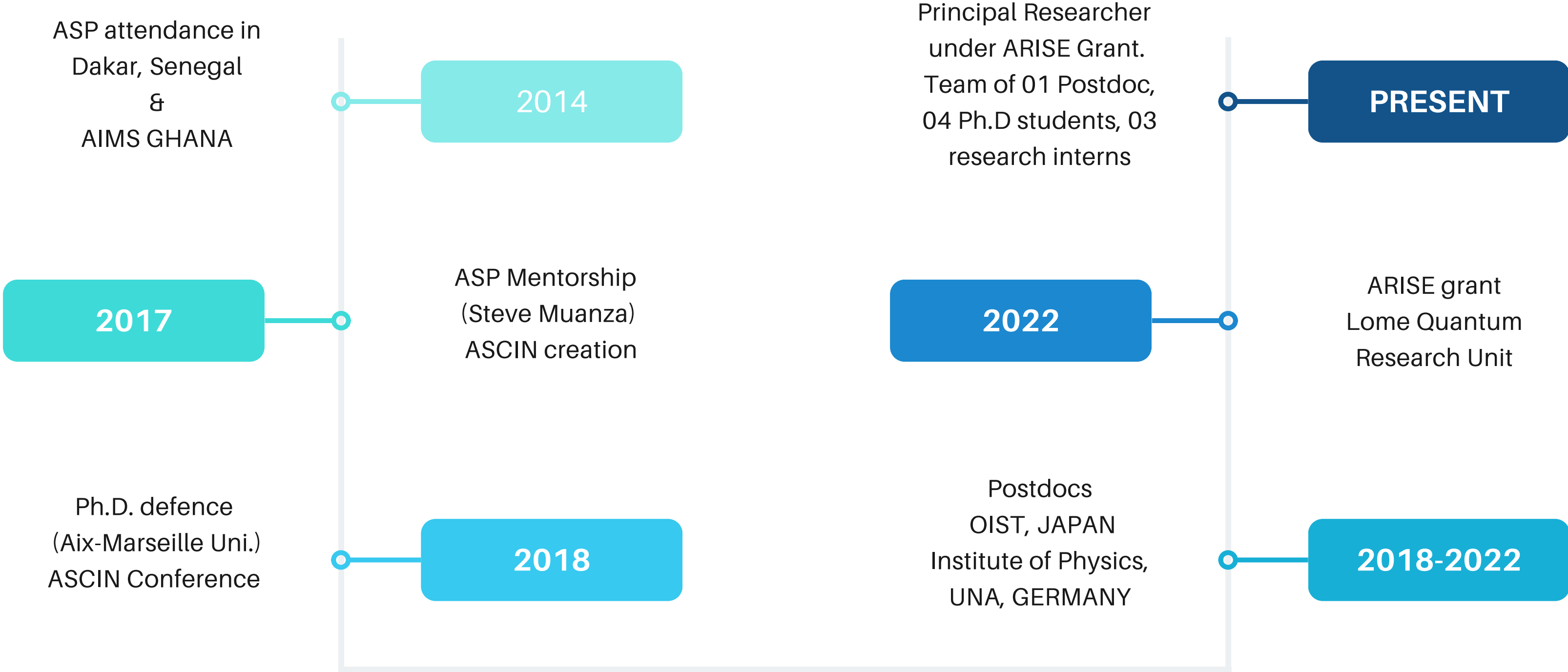
ASP 2014: SENEGAL
**GREAT LECTURES,
MIND BLOWING PHYSICS!**

Food was so good



BACKGROUND

A brief history !

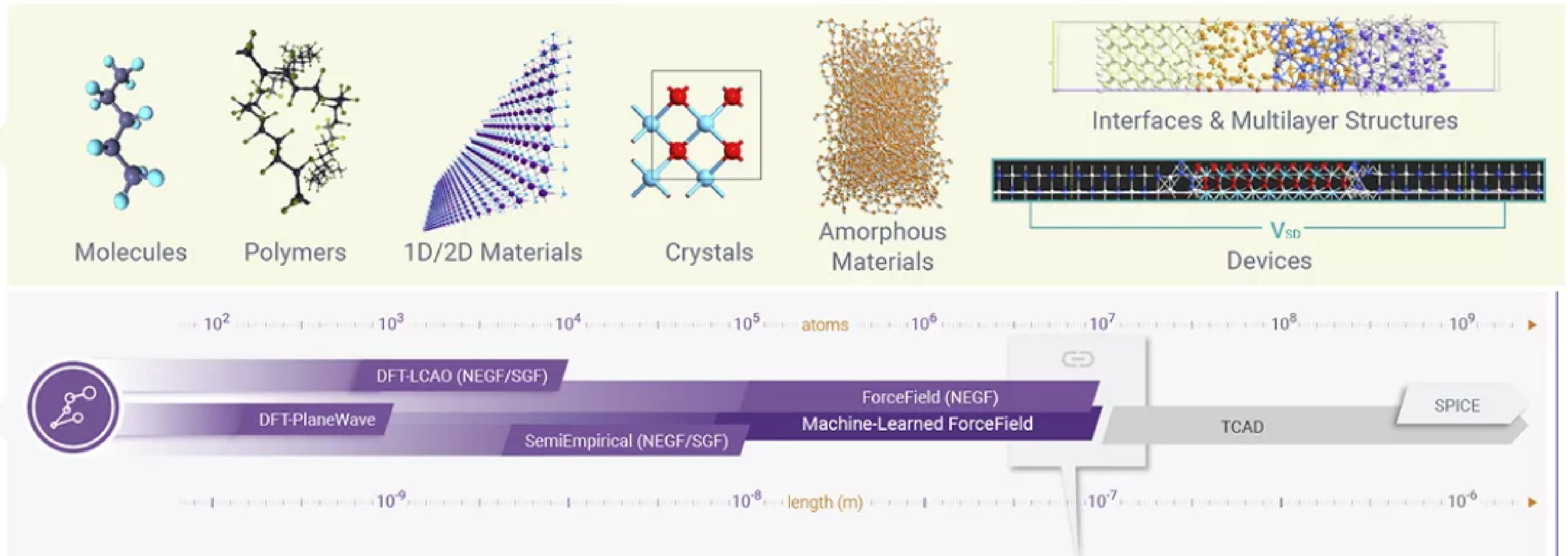


NANOSCALE AND EXPERTISES

How it looks like (Synopsis)

PARTICLES PHYSICS

INTEGRATED CIRCUIT

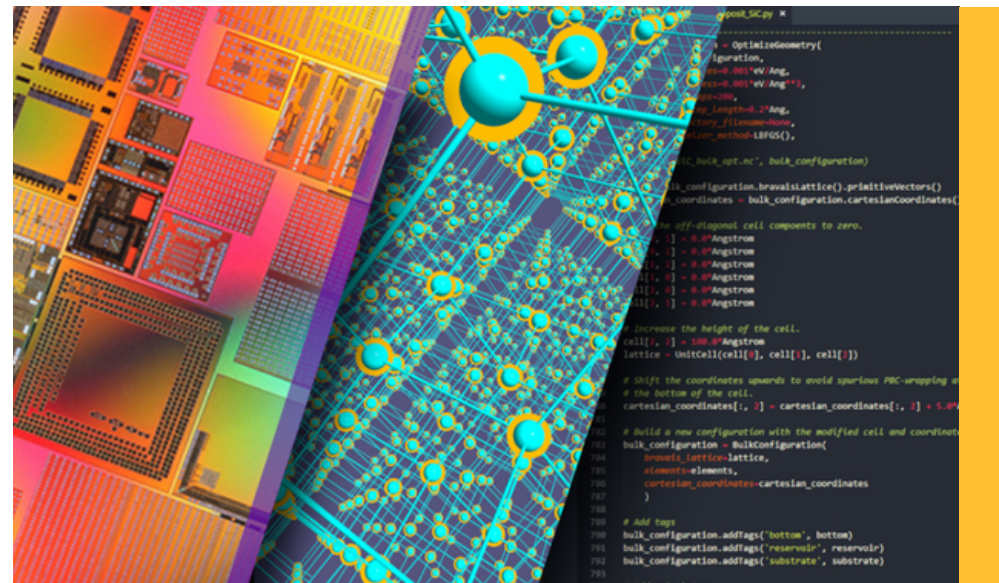


TCAD: QuantumATK, SCAPS, Boltztrap...

Quantum Transport: DFT-NEGF, OpenMX, Transiesta ...

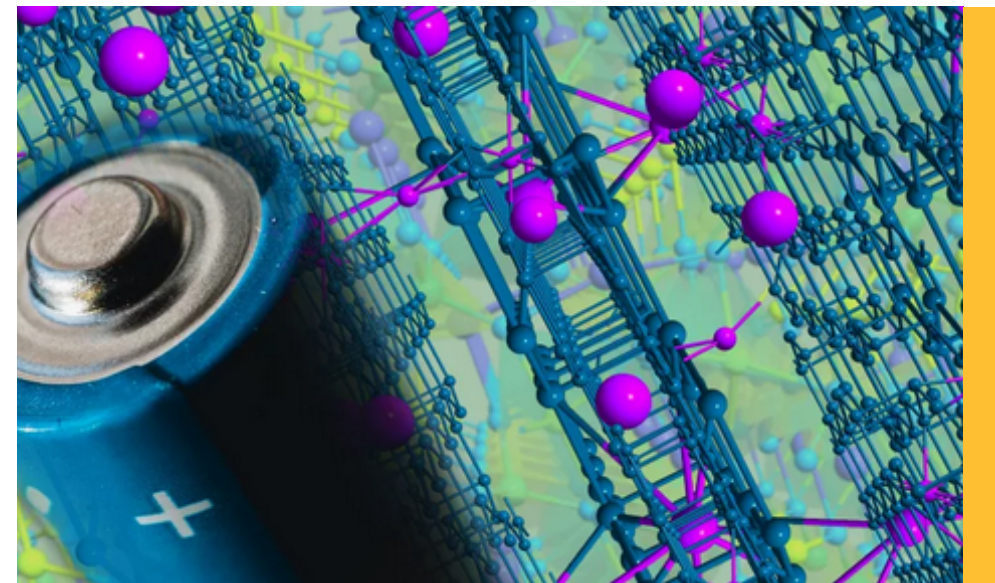
Computing: HPC, Machine Learning, Quantum Computing

Research and innovation



Low power consumption Electronics

Design of next generation electronics
Transistors , IC design
Semiconductor Modeling, Materials
Modeling for Polymer Simulation



Energy and storage

Photovoltaics, Battery Simulation for
Materials Design, Hydrogen, Fuel cells,
and wind



Science capacity and Policie

List the research questions
relevant to your problem.



**ENERGY, ENVIRONEMENT
TECHNOLOGY, HEALTH**

	Edition 1 (2018) Uni. Lome (in person)	Edition 2 (2020) Uni. Lome (hybrid)	Edition 3 (2022) Uni. Obafemi Awolowo
Countrie	Togo	Togo	Nigeria
N. part.	90	120	150
Status	Done	Done	Done

ASCIN CONFERENCE 2024

*Registration will open
01.12.2023*



AScIN Conference 2024

+ Submit abstract/ View submitted abstracts

Partnering on Energy, Security, Environment and Health in Africa

The 4th Biennial Conference of the African Science Integration Network (AScIN 2024) is scheduled to hold from July 15 - 19, 2024 at the Centre for Energy Research and Development, Obafemi Awolowo University Ile-Ife, Nigeria.

The African Science Integration Network (AScIN) is a forum for the exchange of the latest scientific discoveries and research ideas in the form of presentations and discussions in theoretical and experimental research in very broad areas of the physical sciences in a multidisciplinary approach. The network connects researchers and scientists from African universities with professional researchers from industry, and seeks to provide mentoring for aspiring researchers and scientists, as well as postgraduate students.

AScIN 2024 is the fourth edition of AScIN's biennial conference, whose theme is "Energy, Security, Environment and Health in Africa". This theme has been carefully chosen to mobilize efforts to meet certain challenges in critical areas of life such as energy and energy security, environmental protection and its requirements to ensure excellent and affordable health for all. These goals are fully integrated into the 17 Millennium Development Goals (MDGs), the last of which is the global partnership between countries and international institutions to achieve these goals by 2030.

Sub-themes

Energy

- Assessment of Nuclear energy and other electricity generation technologies,
- Role of solid mineral in energy generation,
- Sustainable energy transition,
- Local solutions to energy access,
- Energy security - electricity, oil and gas,
- Politics of energy and sustainable supply,
- Energy financing for economic development,



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HARMATTAN WORKSHOP
**LECTURES,
PRACTICAL TUTORIALS!**

FIRST EDITION IN 2022

	Edition 1 (2022) Uni. Lomé (hybrid)
Country	Togo
N. part.	120
Status	Done

HARMATTAN WORKSHOP

**ALGORITHMICS
SIMULATIONS
MODELLING**

PHYSICS PROBLEMS SOLVING
WITH PYTHON AND ML

TUESDAY
27.12.22



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GOOD FINANCIAL GRANT PRACTICE

**BETTER POLICIES,
NEW FINANCIAL GRANT
MANAGEMENT PROCESS!**

Good Financial Grant Practice (GFGP) certification

In 2018, the Global Grant Community (GGC) introduced an online pre-certification-assessment tool, a certification scheme, and a pool of licensed Certification Bodies for an internationally approved standard for Good Financial Grant Practice.

GFGP standard was established for non-governmental, research, government and academic institutions of any size to rate or measure their compliance to the GFGP standard and hence how effectively they manage funding.

GFGP is now used globally in 50+ countries across 5 continents and is revolutionising and strengthening the global financial management system. Some of the major global funders who are using GFGP with their grantees include UK Department of Health and Social Care UK (DHSC), National Institute of Health Research (NIHR), Wellcome, Bill and Melinda Gates Foundation, Segal Family Foundation and Africa Population Health Research Council (APHRC). Discussions with additional funding agencies are ongoing to ensure global adoption of GFGP.

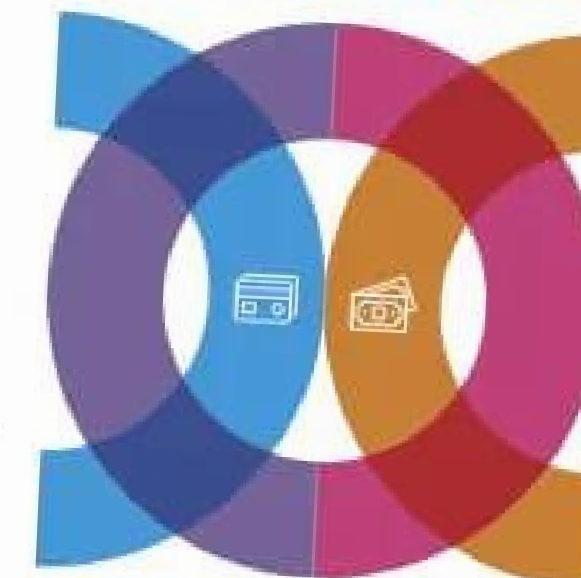
CFGP Certification value and benefits

Trust and Accountability

Internationally accredited symbol of Trust and Accountability (Analogous to being certified to GCP or GCLP except in this instance for finance)

Directory of the Global Grant Community

Be listed as a GFGP certified organisation in the Directory of the Global Grant Community which private and corporate donors can use to find trusted partners to fund.



Funders assurance

Assurance to funders that an organisation provides governance of their funds to the highest standards

Grants Management capabilities

Organisations strengthen their grants management capabilities

Attracting more funding

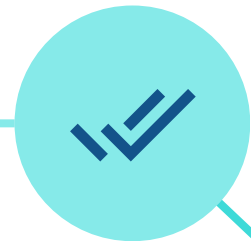
A GFGP certificate can be used in communication materials to enhance an organisation's ability to attract further funding



LEARNING DO AND DON'T

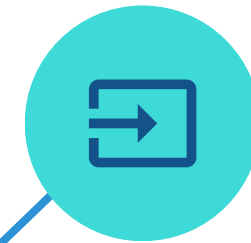
Skills and Qualities

- Effective Communication
- Critical thinking
- Organizational skills
- Ethical conduct



Career Development

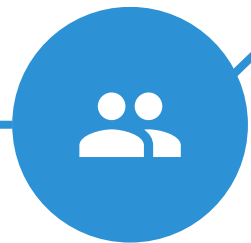
- Next step, always near
- Opportunities availability
- Academia or industry?
- Where?



EARLY CAREER RESEARCHER LIFE MAP

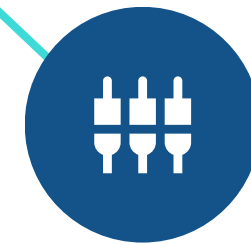
Family life

- Work during WE?
- Work Family balance
- Distance relationshipst
- Wellbeing, Exercise



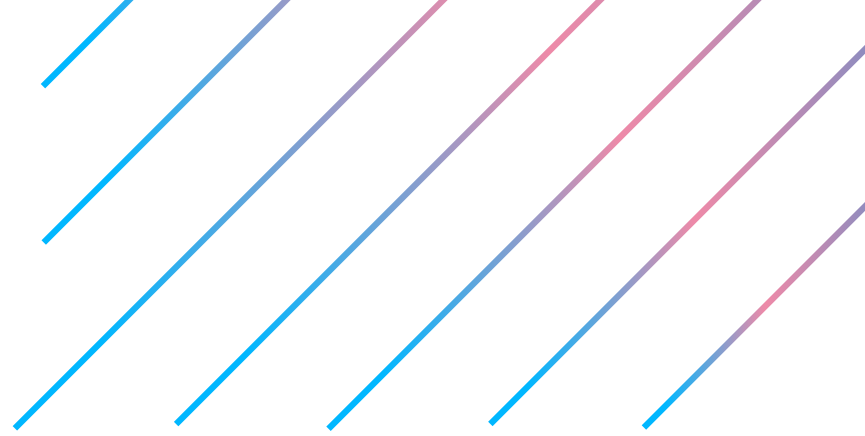
Capacity building

- Grant writing
- Publication process
- Mentorship
- Networking**





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Thank You



If you want to collaborate on these topics, please
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katawoura@aims.edu.gh

