

# **FUNCTIONS OF GOVERNMENT CHEMIST LABORATORY AUTHORITY**



## **SENSITIZATION TRAINING TO SUPERVISORS ON MANAGEMENT AND CONTROL OF CHEMICALS AND ITS PRODUCTS**

**VENUE:** MOUNT MERU HOTEL

**DATES:** 06 - 08<sup>th</sup> DECEMBER 2023

By: E. Kapinga  
DCS



# 1.0 INTRODUCTION

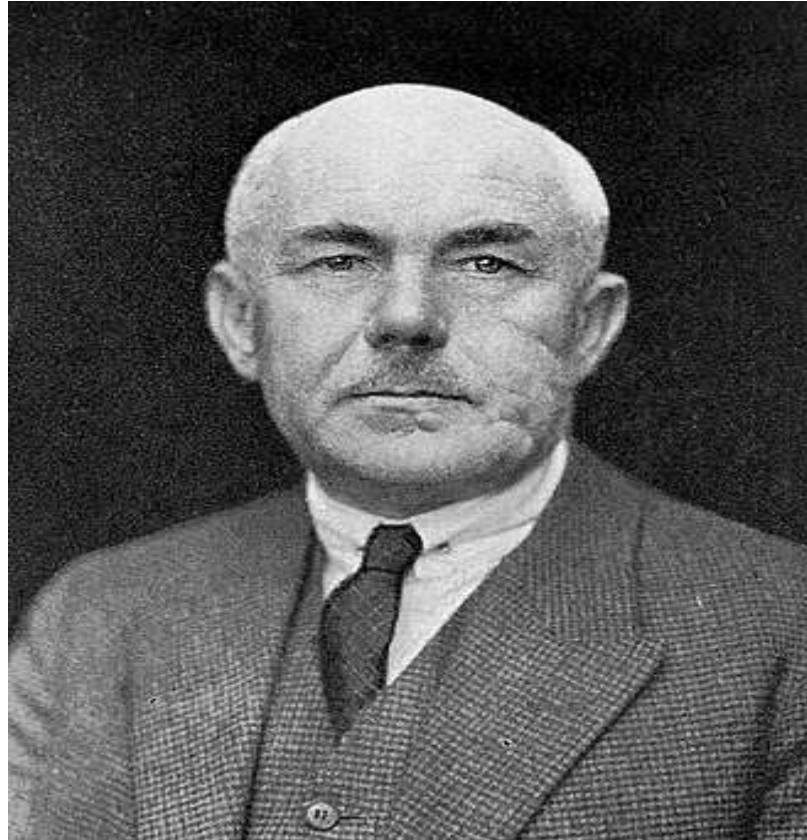
- Government Chemist Laboratory (GCL) was established in 1895 under the German Colonial Administration.
- The main purpose was to conduct research on tropical diseases particularly Malaria and Tuberculosis (1897-1898).

# 1.0 INTRODUCTION

Results of the researches were:

- ❑ Giemsa stain named after Gustav Giemsa technique for the staining *plasmodium parasites of Malaria*
  - This technique made rapid malaria screening feasible and is still used in laboratories today.
  
- ❑ Gustav Giemsa was the First Chief Chemist under the office of the Governor (1895 – 1932)

# 1.0 INTRODUCTION ...



**Gustav Giemsa (1867 – 1948)**

*German [Chemist](#) and [Bacteriologist](#)*

# 1.0 INTRODUCTION...

- **Prof. Dr. Robert Koch, a German** who also worked at Research Center discovered the specific causative bacteria of deadly infectious diseases of *Tuberculosis* (TB).



Prof. Dr. Robert Koch (1843 – 1910)  
***German Physician and Microbiologist.***

# 1.0 INTRODUCTION...

- In 1999 -The Laboratory was transformed to the Government Chemist Laboratory Agency under the Executive Agency's Act, Act No. 30 of 1999
- In 2016 - The Agency was Transformed to an Government Chemist Laboratory Authority (GCLA) under the Government Chemist Laboratory Authority Act , Act No. 8 of 2016 (Cap. 177).
- **Thereafter:** GCLA became supreme and a referral Laboratory of the URT as provided in Section 4(2) of the Act,

# 1.0 IN TRODUCTION...

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1895-2020

1999-TO DATE



2022 -TO DATE



ISO 9001  
BUREAU VERITAS  
Certification

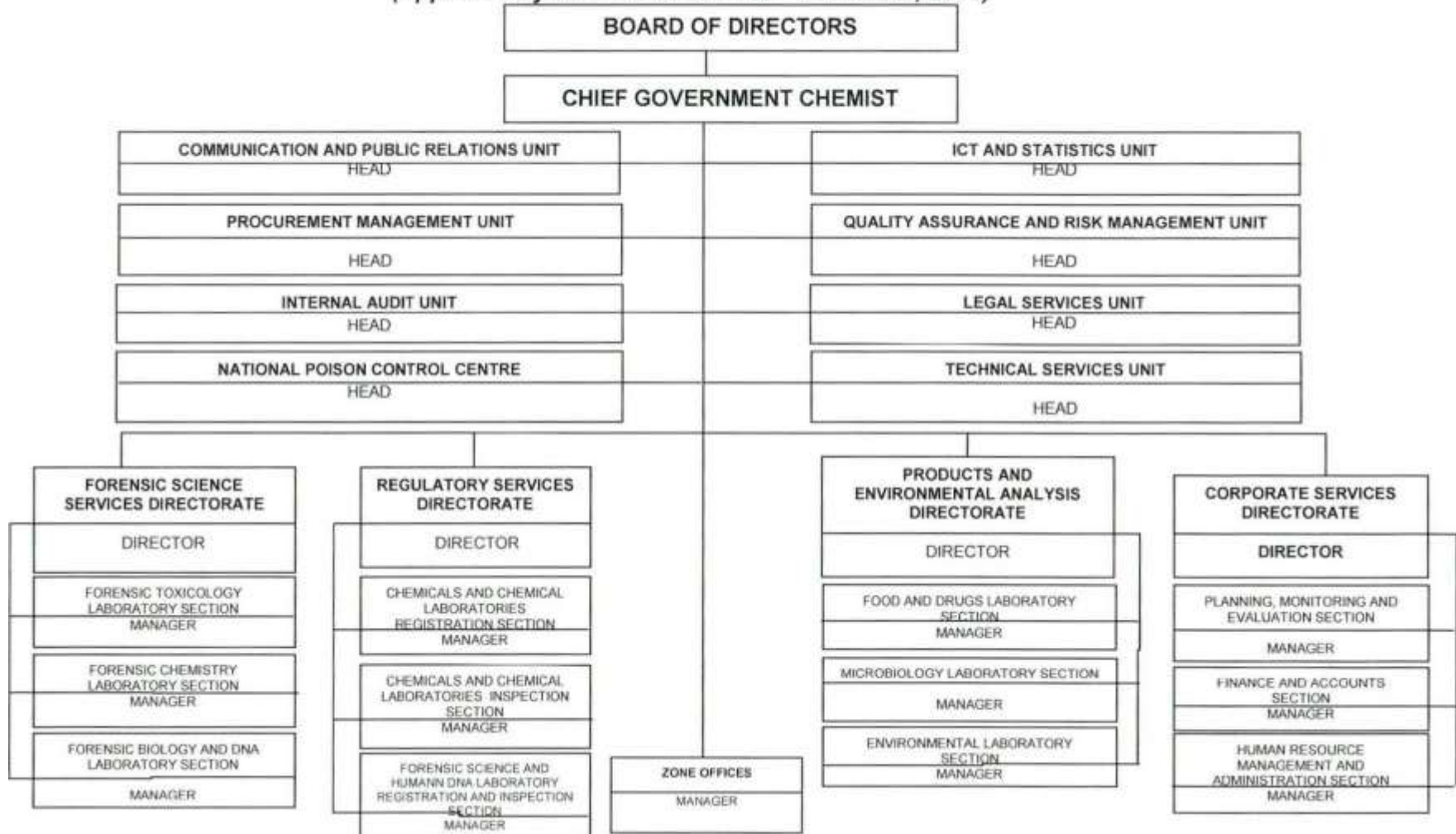


# 1.0 IN TRODUCTION...

Chart II

THE APPROVED ORGANISATION STRUCTURE OF THE GOVERNMENT CHEMIST LABORATORY AUTHORITY

(Approved by the President on 17<sup>th</sup> November, 2019)





## 2.0 FUNCTIONS OF GCLA

Functions of GCLA are stipulated in Section 5(2) of the GCLA Act, Cap.177.

These functions are divided into the following categories:

- a) To perform laboratory analysis on different samples and exhibits such as:
  - ❑ samples related to criminal and civil matters (dug of abuse, biological, arson etc)
  - ❑ Food, drugs, herbs, chemicals and allied products, vaccines, occupational and environmental samples

## 2.0 FUNCTIONS OF GCLA

b) To attend court proceedings in courts

The government analysts of GCLA attends the court of proceedings in the country as provided in 18 (2) of Cap 177

c) To conduct research and consultancy services on areas related to GCLA Functions

## 2.0 FUNCTIONS ...

**Functions of GCLA are stipulated in Section 5(2) of the GCLA Act, Cap.177.**

d) To manage and control industrial and consumer chemicals under Industrial and consumer Chemicals (Management and Control) Act, Cap. 182 through Registration, inspection and *issuance* of permits (import, export, transport)

## 2.0 FUNCTIONS ...

e) To manage human DNA technology under Human DNA Regulation Act Cap. 73 through Registration, inspection and *issuance* of research permits

f) To establish, manage and regulate operation of the National DNA Database in accordance with the Human DNA Regulation Act, Cap.73

## 2.0 FUNCTIONS ....

g) To coordinate National Chemical Management Programmes, Forensic Science and Human DNA Services

h) To regulate and conduct training and outreach programmes on matters related to chemicals management, human DNA services.

## 2.0 FUNCTIONS ....

i) To develop and provide guidance, instructions, opportunity, coaching and mentor scientists within and beyond functional expertise in functions of the Authority;

j) To implement International Multilateral Environmental Agreements (MEAs) such as:

- ❑ ***Stockholm Convention*** (Sweden) which is a global treaty that aims to protect human health and the environment from the effects of persistent organic pollutants (POPs)

## 2.0 FUNCTIONS...

❑ **Rotterdam Convention (Netherlands ) on Prior Informed Consent** promotes shared responsibility and facilitates cooperative efforts among its Parties to protect human health and the environment from the adverse effects of hazardous chemicals and pesticides

## 2.0 FUNCTIONS...

- ❑ **Basel Convention** aims protecting human health and the environment against the adverse effects resulting from the generation, management, transboundary movements and disposal of hazardous and other wastes.
- ❑ **Minamata Convention on Mercury** addresses specific human activities which are contributing to widespread mercury pollution.



## 3.0. ACHIEVEMENTS

a) GCLA has established and operates six (6) Zone Offices (Lake Zone, Northern Zone, Southern Zone, Southern Highlands Zone, Eastern Zone and Central Zone Offices)

**Note:** Specialized Laboratories still operate from Dar es Salaam



### 3.0. ACHIEVEMENTS

b) Construction of Office and Laboratory Building for GCLA HQs in Dodoma Capital City



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## 3.0. ACHIEVEMENTS

c) GCLA IS 9001:2015 Certified - Quality Management System

d) GCLA Laboratories are ISO 17025:2017 Accredited - Competence on Laboratory Analysis

## 3.0. ACHIEVEMENTS...

**Some of our Achievements include :**

e) Acquisition of modern and advanced high tech equipment. These include:

- LC-MS/MS & GC-MS/MS
- Genetic Analyzer,
- AAS & ICP- EOS,
- ED-XRF & ED-XRD,
- FTIR & FTNIR,
- HPLC etc

# 3.0 ACHIEVEMENTS...

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**GC- MSMS**



# 3.0. ACHIEVEMENTS...

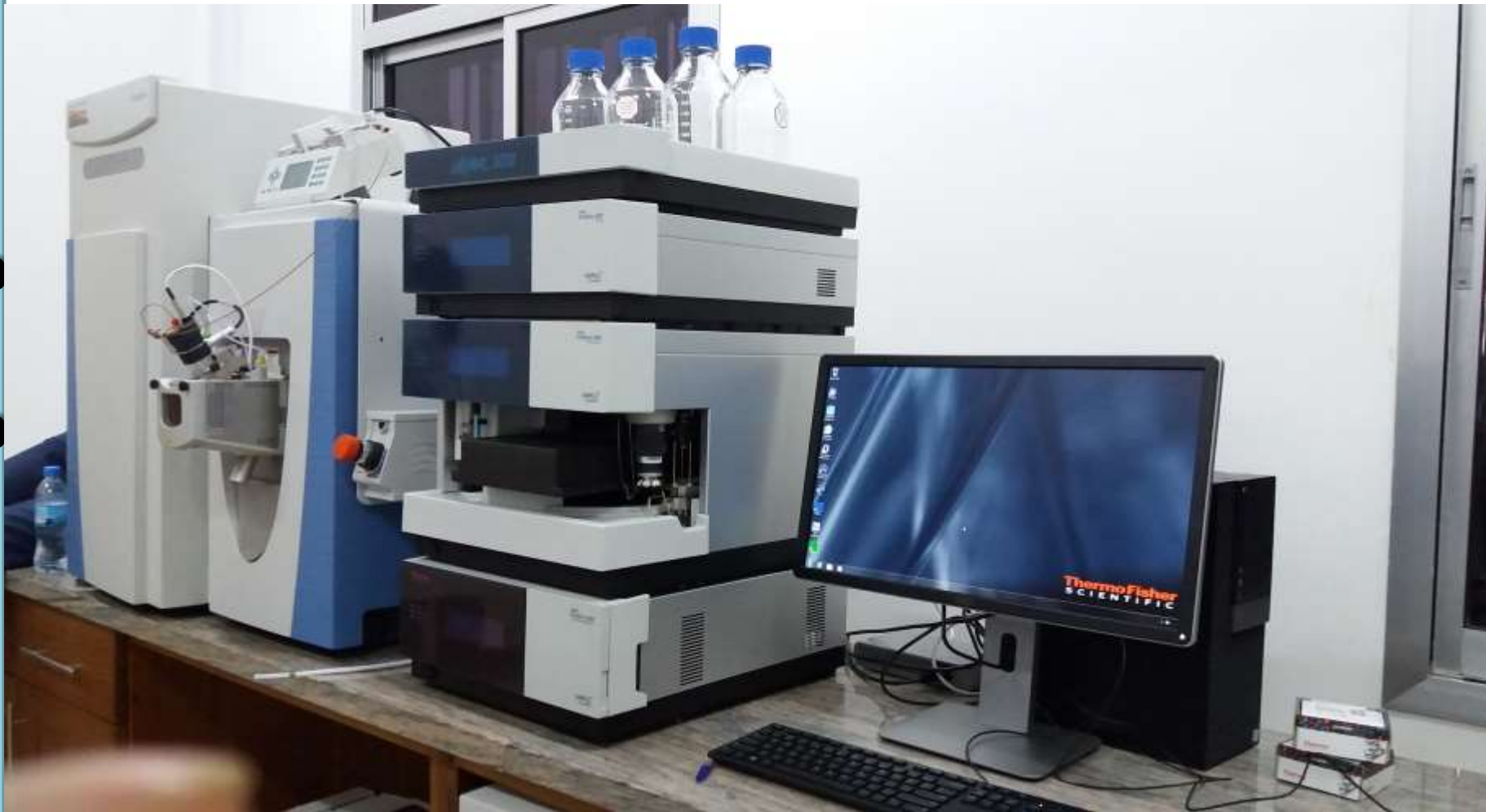
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ICP - EOS.



## 3.0 ACHIEVEMENTS...



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### LC-MSMS



# 3.0 ACHIEVEMENTS...

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AAS



## 3.0. ACHIEVEMENTS...

f) GCLA has developed systems for provision of its services. These systems include:

- Laboratory Information Management system(LIMS)
- Customer Chemicals Management Portal (CCMP)
- Biometric Attendance System
- Expert Witness information System

Video teleconferencing and virtual courts



# THANK YOU FOR LISTENING

