









(A statutory Professional Body Chartered by Act No. 12 of 2003 of the National Assembly)

**Ibadan Office**: Samonda-Sango/U.I. Road, P. O. Box 9764, U. I. Post Office Ibadan, Oyo State, Nigeria **Abuja Office**: Jabi Airport Road, beside NOUN, opposite EFCC, adjacent Federal Medical Centre, Abuja Nigeria.





### **BRIEF ON THE INSTITUTE**

The Nigerian Institute of Science Laboratory Technology (NISLT) was established by Act 12 of 2003 of the National Assembly and made a parastatal of the Federal Ministry of Science and Technology. The Institute was hitherto known as the Nigerian Institute of Science Technology (NIST) founded in 1971 saddled with responsibility of "advancing science laboratory technology profession and ensure through its registered members effective and efficient management and administration of science laboratories in Nigeria".

Over the years, the Institute has put in place human resources and infrastructure to enable it fulfil its mandate through the establishment of Multipurpose Science Laboratory at its national Secretariat, Ibadan, Oyo State, equipped with modern and computerized science equipment for the conduct of training, routine laboratory services and research using new technologies. Participants for the training workshops will have the opportunity to use the equipment and thus acquire relevant knowledge and skills in their applications to enhance their performances at work.

Resource persons for the workshops are experienced Scientists drawn from Universities, Research Institutes and the Private Sector.

### TRAINING METHODOLOGY

The workshops will be conducted through combination of lectures, discussions, case studies, simulation exercises, multimedia presentations and practical exercises.

In view of the above we are pleased to announce the under listed workshops and training programmes scheduled for the year 2021.



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### **1.** WORKSHOP ON ENTREPRENEURIAL DEVELOPMENTS, LABORATORY EQUIPMENT, CHEMICAL AND REAGENTS SUPPLY

**FOR:** Laboratory Technologists/Scientists, Laboratory Managers, Laboratory Equipment suppliers, Laboratory Chemicals and Reagents suppliers, practicing laboratory Technologists/Scientists planning to retire from public service and interested members of the public.

**OBJECTIVE:** The main objective of this workshop is to expose the participants to the requirements for an effective and result oriented Entrepreneurial skills, Laboratory Equipment, Chemicals and Reagents Supply.

### **COURSE CONTENT:**

- The Role of NISLT in Management of Laboratory Equipment, Chemicals and Reagents in Nigeria.
- Introduction to entrepreneurship and Career Development Potentials in science laboratory technology practice
- Steps in planning, funding and starting a business, Financial Management and Business budgeting Procedures
- Legal framework and Basic requirements for registration of Laboratory Equipment, Chemicals and Reagents suppliers. Laws relating to entrepreneurship
- Equipment listing, Qualification, Specification requirements and Procurement Procedure
- Procedures for Selecting and acquiring equipment
- Equipment Installation, Calibration, Repairs, Maintenance and after sales services
- Regulatory Policy Requirements in Chemical and Reagents Purchases, listing, selection, storage and Transportation
- Ethics of Science Laboratory Profession. Ethics/Strategies for business sustainability and management
- Chemical and Reagents stock/inventory, basic record keeping and accounting for Business
- NISLT and other regulatory agencies registration Procedures for Laboratory Equipment, Chemical and Reagent suppliers.

DURATION:	7 days
DATE:	22 <sup>nd</sup> - 26 <sup>th</sup> March, 2021
ARRIVAL:	21st March, 2021
DEPARTURE:	27 <sup>th</sup> March, 2021
FEE:	<del>N</del> 60, 000.00
VENUE:	Ibadan Office of the Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

# NOTE: Early bird registration on or before Monday 8<sup>th</sup> March 2021 to enjoy 10% reduction.

This training Certificate is a requirement for the registration of Private Science Laboratory and Vendor of Laboratory Equipment, Chemical and Reagent Suppliers.





## 2. QUALITATIVE RESEARCH METHODS, STATISTICAL ANALYSIS OF LABORATORY QUALITY DATA, THESIS AND SCIENTIFIC RESEARCH PAPER WRITING

FOR: Scientists, Technologists, Research Officers, Scientific Officers, Project Managers and Students in Tertiary Institutions, Research Institutes, Government Agencies, Industries, NGOs etc.

**OBJECTIVES:** The objectives of this workshop are to broaden the participants' understanding and appreciation of qualitative research approach as well as exposing the participants to methods and tools of conducting qualitative research through the design, data collection, data management, analysis and report stages of the research process.

#### **COURSE CONTENT:**

- Introduction to laboratory documentation and data management
- Theoretical approaches to scientific research, Research Methodology and Methods of writing research proposals
- Defining Research Problem, Research designs, Sampling Design, Measurement/Scaling Techniques and qualitative tools for scientific research
- Methods of data collection, data reporting and management for scientific research.
- Processing, Sampling Fundamentals, Data Analysis, Statistical measures and descriptive statistics with SPSS, Excel and Ms-Word
  - Graphical Techniques: histogram, bar charts, scatters plots, graphical representation of lab results. Measurement of Central Tendency, interval estimates, accuracy, precision, further concepts of method validation such as sensitivity, specificity, selectivity and linearity
- Testing of Hypotheses- I & II (Parametric or Standard Tests of Hypotheses and Nonparametric or Distribution-free Tests)
- SPSS, Multivariate Analysis Techniques, Interpretation and Report Writing
- Procedures for Technical Paper, Thesis and Scientific Research Paper Writing
- Basic computer applications, use of ICT tools for research development
- Referencing and Ethics of research, Use of library resources and methods of Research publications

<b>DURATION:</b>	7 days
DATE:	19 <sup>th</sup> -23rd <sup>h</sup> April, 2021
ARRIVAL:	18 <sup>th</sup> April, 2021
DEPARTURE:	24 <sup>th</sup> April, 2021
FEE:	₽70, 000.00
VENUE:	Headquarters of the Nigerian Institute of Science Laboratory Technology, Jabi Airport Road, beside NOUN, opposite EFCC, adjacent Federal Medical Centre, Abuja, Nigeria.

**REQUIREMENT**: Participants are required to come with their laptops

NOTE: Participation in the training workshop on scientific research methods, qualitative research, data management and reporting is a pre-requisite for the award of FELLOW of the Nigerian Institute of Science Laboratory Technology. Subsequently, all applications for upgrading to Fellow of the Institute should be accompanied with a certificate of attendance of the Training workshop on scientific research methods, qualitative research and data management.

#### NOTE: Early bird registration on or before Monday 5<sup>th</sup> April, 2021 to enjoy 10% reduction.







### 3. SPECIALIZED TRAINING WORKSHOP ON SCIENCE EQUIPMENT, MAINTENANCE, REPAIR AND MANAGEMENT OF EQUIPMENT USED IN BIOLOGICAL AND CHEMICAL LABORATORIES

**FOR:** Laboratory Technologists/Scientists, Instrumentation Technologists, Equipment Engineers, Technicians, Laboratory Equipment Suppliers and Technologists in the field of Physics/Electronics, Engineering Production and other users of laboratory equipment.

**OBJECTIVES:** The training workshop is designed to expose participants to the techniques of maintenance and repair of laboratory equipment involving the use of sophisticated fault detection and diagnostic methods. This is a hand-on practical training for instrument technologists who are mostly in the biological laboratory. Participants will be exposed to maintenance skills required to keep the equipment functional. The participants shall be exposed to preventive maintenance troubleshooting, repairs, selection and procurement of appropriate spare parts, professional and technical skills of handling equipment and safety techniques in equipment maintenance.

#### **COURSE CONTENT:**

- Basic electronics and electricity
- Introduction to the use of Electronic Design software
- Equipment Qualification
- Basic Soldering Techniques
- Electronic design and programming
- Procurement procedures
- Instrumentation of selected laboratory equipment
- Maintenance, Repairs and management of
- Basic use of ICT tools in interface with laboratory equipment

	Biological		Chemistry	
i.	Centrifuge	i.	Atomic Absorption Spectrophotometer	
ii.	Shaker	ii.	UV-Vis Spectrophotometer	
iii.	Microscope	iii.	High Performance Liquid Chromatograph	
iv.	PCR	iv.	Flame Photometer	
v.	Eliza micro plate reader	v.	Heating Devices	
vi.	Autoclave	vi.	Cooling Devices	
vii.	Gel electrophoresis	vii.	Centrifuges etc	
viii.	Heating and cooling devices etc			

<b>DURATION:</b>	7 days
DATE:	3 <sup>rd</sup> - 7 <sup>th</sup> May, 2021
ARRIVAL:	2nd May, 2021
DEPARTURE:	8 <sup>th</sup> May, 2021
FEE:	<del>N</del> 80, 000.00
VENUE:	Ibadan Office of the Nigerian Institute of Science Laboratory Technology,
	Samonda, Ibadan, Oyo State.

**REQUIREMENTS:** Working tools and laboratory coats/work overall

Tools kits will be provided free during the training.

### **NOTE:** Early bird registration on or before Monday 19<sup>th</sup> April, 2021 to enjoy 10% reduction.





## WORKSHOP ON EFFECTIVE LABORATORY QUALITY MANAGEMENT, ADMINISTRATION AND GOOD LABORATORY PRACTICE

**FOR:** Laboratory Scientists/ Technologists, Laboratory Managers/Supervisors, Users of laboratory Equipment and Laboratory Equipment Procurement Officers. Chief Executives of science based Institutions are also invited.

**OBJECTIVE-** The main objective of this workshop is to acquaint participants with the principles of laboratory policies and management administration, good laboratory practices, equipment management, procurement procedures and safety management procedures in the laboratory

### COURSE CONTENT

- o Good Laboratory Policies, Management and administration
- o Introduction, Objectives and key Requirements of Laboratory Management
- o Application of Laboratory Management to Good Laboratory Practice
- Strengthening Laboratory Management Towards Accreditation
- o Laboratory Accreditation, Audits and Technical Requirements
- Quality Assurance of Test Results
- o Laboratory Documentation and Document Control
- o Modern Laboratory Design/Management and Maintenance
- o Preparation, Review and standardization of standard operating procedures
- Internal Audits
- Applications of Laboratory Information Management System
- Effective laboratory safety management
- Equipment qualification and management
- o Laboratory Quality Manual: Design and Implementation

<b>DURATION:</b>	7 days
DATE:	17th – 21st May, 2021
ARRIVAL:	16th May, 2021
DEPARTURE:	22 <sup>nd</sup> May, 2021
FEE:	<del>N</del> 80, 000.00

VENUE:Ibadan Office of the Nigerian Institute of Science Laboratory Technology,<br/>Samonda, Ibadan, Oyo State.

**REQUIREMENT:** Participants are advised to come with their Laptops.

NOTE: Early bird registration on or before Monday 3<sup>rd</sup> May 2021 to enjoy 10% reduction.





### 5. ENVIRONMENTAL SAMPLE ANALYSIS USING ATOMIC ABSORPTION SPECTROPHOTOMETER (AAS, HPLC, FTIR) IN COLLABORATION WITH SHEDA SCIENCE AND TECHNOLOGY COMPLEX, ABUJA

**FOR:** Laboratory Scientists, Technologists, Chemical Analysts, Quality Control Managers in Tertiary Institutions, Research Institutes, and the industrial sectors.

#### **OBJECTIVE: -**

This workshop is designed to expose and impact practical knowledge to participants on environmental sample analysis. In addition, the practical use of analytical equipment such as AAS, HPLC & FTIR Spectrophotometer will be demonstrated, not excluding equipment trouble shooting and maintenance.

#### COURSE CONTENT

- The role of NISLT in Science Laboratory Policy and Management.
- Basic and advanced concepts of Atomic Absorption Spectrophotometer, Flame photometer and UV-Visible Spectrophotometer
- Basic calculations in spectrophotometric analysis
- Different methods of sample and standard preparations for environmental spectrophotometric analysis
- Principles, operations and applications of AAS, HPLC & FTIR spectrophotometer for environmental analysis
- Calibration of AAS, HPLC & FTIR spectrophotometer with standards
- Environmental analysis
- The use of AAS, HPLC & FTIR Spectrometer for sample analysis
- Good Laboratory Practice
- Validation and Data Interpretation
- Trouble shooting and maintenance of AAS, HPLC & FTIR Spectrophotometer.
- Installation methods for AAS etc.
- Operational techniques for AAS, etc.

7 days
21st – 25 <sup>th</sup> June, 2021
20th June, 2021
26 <sup>th</sup> June, 2021
<del>N</del> 80, 000.00
Abuja – (SHESTCO, SHEDA)

**REQUIREMENT**: Participants are advised to come with their Laboratory Coats and laptops.

**NOTE:** Early bird registration on or before Monday 7<sup>th</sup> June, 2021 to enjoy 10% reduction.





### 6. WORKSHOP ON MICROBIOLOGICAL ANALYSIS OF PHARMACEUTICAL PRODUCTS, FOODS, FRUITS AND WATER

**FOR:** Laboratory Scientists/Technologists, Food Analysts, Microbiologists from various institutions of Government, Private Sectors, Industries and NGOs. This is also for young graduates of Microbiology with minimal experience in Microbiological activities.

### **OBJECTIVE:-**

This workshop is designed to provide further knowledge in the area of Microbiological analysis of pharmaceutical products, food, fruits and water.

### **COURSE CONTENT**

- Sources of microbial contamination
- General aspects of microbiological safety of food and agricultural produce
- Microflora of processed foods
- The trends in food borne disease.
- Hazard Analysis of Critical Control Point (HACCP)
- Microbial load determination
- Mechanism of contamination of fruits and vegetables
- Spoilage, Pathogenic and useful organisms
- Decontamination Methods currently used to ensure Microbiological food safety of fresh produce
- Control of microorganism in food

<b>DURATION:</b>	7 days
DATE:	12 <sup>th</sup> – 16 <sup>th</sup> July, 2021
ARRIVAL:	11 <sup>th</sup> July, 2021
DEPARTURE:	17 <sup>th</sup> July, 2021
FEE:	<del>N</del> 70, 000.00
VENUE:	Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo
	State.

**REQUIREMENT**: Participants are advised to come with their laptops.

**NOTE:** Early bird registration on or before Monday 28<sup>th</sup> June 2021 to enjoy 10% reduction.





### SPECIALIZED MANDATORY WORKSHOP ON LABORATORY QUALITY MANAGEMENT AND ACCREDITATION

**OBJECTIVES:** TO ACQUAINT THE PARTICIPANTS ON LABORATORY QUALITY MANAGEMENT SYSTEM, NISLT AND ACCREDITATION PROCEDURES FOR INSTITUTIONS OFFERING SCIENCE LABORATORY TECHNOLOGY (SLT)

#### **COURSE CONTENT:**

- Strengthening Laboratory Management Towards Accreditation
- Laboratory Quality Management System
- Good Laboratory Practise/High Level Overview of ISO 17025 Technical Requirements
- ISO 17025 Laboratory Management Requirements/Quality Control Charts
- Quality Assurance Of Test Results
- Laboratory Internal Audits
- Factors Responsible For Successful Accreditation
- NBTE/NUC Accreditation Procedures
  - Benchmark Minimum Academic Standard
  - Self Study forms
  - o Laboratory and Equipment Requirements
- NISLT Accreditation Procedures
- Application of Laboratory Information Management System
- Procedures for Selecting, Ordering and acquiring equipment, Equipment listing, Qualification, Specification requirements and Procurement Procedure
- Ethics of Science Laboratory Technology Profession.

DURATION:	5days
FEE:	<del>N</del> 60, 000.00
DATE:	26 <sup>th</sup> – 30 <sup>th</sup> July, 2021
ARRIVAL:	25 <sup>th</sup> July, 2021
DEPARTURE:	31 <sup>st</sup> July, 2021

**VENUE:** Ibadan Office of the Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

TRAINING BENEFITS: THE ATTENDEES WILL BE USED AS NISLT ACCREDITORS/NISLT REPRESENTATIVES AT ORGANISED ACCREDITATION PROGRAMMES

### **NOTE:** Early bird registration on or before Monday 12<sup>th</sup> July 2021 to enjoy 10% reduction.



### 8. QUALITATIVE RESEARCH METHODS, STATISTICAL ANALYSIS OF LABORATORY QUALITY DATA, THESIS AND SCIENTIFIC RESEARCH PAPER WRITING

**FOR:** Scientists, Technologists, Research Officers, Scientific Officers, Project Managers and Students in Tertiary Institutions, Research Institutes, Government Agencies, Industries, NGOs etc.

**OBJECTIVES:** The objectives of this workshop are to broaden the participants' understanding and appreciation of qualitative research approach as well as exposing the participants to methods and tools of conducting qualitative research through the design, data collection, data management, analysis and report stages of the research process.

#### **COURSE CONTENT:**

- Introduction to laboratory documentation and data management
- Theoretical approaches to scientific research, Research Methodology and Methods of writing research proposals
- Defining Research Problem, Research designs, Sampling Design, Measurement/Scaling Techniques and qualitative tools for scientific research
- Methods of data collection, data reporting and management for scientific research.
- Processing, Sampling Fundamentals, Data Analysis, Statistical measures and descriptive statistics with SPSS, Excel and Ms-Word
  - Graphical Techniques: histogram, bar charts, scatters plots, graphical representation of lab results. Measurement of Central Tendency, interval estimates, accuracy, precision, further concepts of method validation such as sensitivity, specificity, selectivity and linearity
- Testing of Hypotheses- I & II (Parametric or Standard Tests of Hypotheses and Nonparametric or Distribution-free Tests)
- SPSS, Multivariate Analysis Techniques, Interpretation and Report Writing
- Procedures for Technical Paper, Thesis and Scientific Research Paper Writing
- Basic computer applications, use of ICT tools for research development
- Referencing and Ethics of research, Use of library resources and methods of Research publications

DURATION:	7 days
DATE:	9 <sup>th</sup> – 13 <sup>th</sup> August, 2021
ARRIVAL:	8 <sup>th</sup> August, 2021
DEPARTURE:	14 <sup>th</sup> August, 2021
FEE:	<del>N</del> 70, 000.00
VENUE:	Ibadan Office of the Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo State.

**REQUIREMENT**: Participants are required to come with their laptops

NOTE: Participation in the training workshop on scientific research methods, qualitative research, data management and reporting is a pre-requisite for the award of FELLOW of the Nigerian Institute of Science Laboratory Technology. Subsequently, all applications for upgrading to Fellow of the Institute should be accompanied with a certificate of attendance of the Training workshop on scientific research methods, qualitative research and data management.

#### NOTE: Early bird registration on or before Monday 26<sup>th</sup> July, 2021 to enjoy 10% reduction.





## 9. SPECIALIZED MANDATORY WORKSHOP ON LABORATORY QUALITY MANAGEMENT AND ACCREDITATION

**OBJECTIVES:** TO ACQUAINT THE PARTICIPANTS ON LABORATORY QUALITY MANAGEMENT SYSTEM, NISLT AND ACCREDITATION PROCEDURES FOR INSTITUTIONS OFFERING SCIENCE LABORATORY TECHNOLOGY (SLT)

#### **COURSE CONTENT:**

- Strengthening Laboratory Management Towards Accreditation
- Laboratory Quality Management System
- Good Laboratory Practise/High Level Overview of ISO 17025 Technical Requirements
- ISO 17025 Laboratory Management Requirements/Quality Control Charts
- Quality Assurance Of Test Results
- Laboratory Internal Audits
- Factors Responsible For Successful Accreditation
- NBTE/NUC Accreditation Procedures
  - o Benchmark Minimum Academic Standard
  - Self Study forms
  - o Laboratory and Equipment Requirements
- NISLT Accreditation Procedures
- Application of Laboratory Information Management System
- Procedures for Selecting, Ordering and acquiring equipment, Equipment listing, Qualification, Specification requirements and Procurement Procedure
- Ethics of Science Laboratory Technology Profession.

DURATION:	7 days
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*FEE:* <del>N</del>60, 000.00

DATE:  $23^{rd} - 27^{th}$  August, 2021

ARRIVAL: 23<sup>rd</sup> August, 2021

DEPARTURE:28th August, 2021VENUE:Headquarters of the Nigerian Institute of Science Laboratory Technology, Jabi<br/>Airport Road, beside NOUN, opposite EFCC, adjacent Federal Medical Centre,<br/>Abuja, Nigeria.

TRAINING BENEFITS: THE ATTENDEES WILL BE USED AS NISLT ACCREDITORS/NISLT REPRESENTATIVES AT ORGANISED ACCREDITATION PROGRAMMES

# NOTE: Early bird registration on or before Monday 9<sup>th</sup> August 2021 to enjoy 10% reduction.



## 10. TRAINING WORKSHOP ON MICROCONTROLLER AND PRINTED CIRCUIT BOARD DESIGN SYSTEM

**FOR:** Laboratory Technologists/Scientists, Instrumentation Technologists, Equipment Engineers, Technicians, Laboratory Equipment Suppliers and Technologists in the field of Physics/Electronics, Engineering Production and other users of laboratory equipment.

**OBJECTIVES:** The training workshop is designed to expose participants to the techniques of designing, fabrication, maintenance and repair of laboratory equipment involving the use of sophisticated fault detection and diagnostic methods. This is a hand-on practical training for instrument technologists who are mostly in the Physical laboratory. Participants will be exposed to skills required to keep the equipment functional.

#### **COURSE CONTENT**

- The role of NISLT in Science Laboratory Policy and Management.
- Introduction to basic digital logic
- Introduction to Circuit development
- Introduction to Circuit design using Proteus
- Soldering and Desoldering Techniques
- Printed Circuit Board etching techniques
- Printed Circuit Board frill techniques
- PCB Circuit components laying, troubleshooting and fabrication methods
- Introduction to Electronics programming using Arduino
- Systems Automation using Arduino platform
- Debugging

<b>DURATION:</b>	7days
Date:	6 <sup>th</sup> – 10 <sup>th</sup> September, 2021
Arrival:	5 <sup>th</sup> September, 2021
Departure:	11 <sup>th</sup> September, 2021
FEE:	<del>N</del> 80, 000.00
<b>VENUE:</b>	Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo
	State.

**REQUIREMENT**: Participants are advised to come with their Laboratory Coats and laptops.

NOTE: Early bird registration on or before Monday 23<sup>rd</sup> August 2021 to enjoy 10% reduction.





### 11. ENVIRONMENTAL SAMPLE ANALYSIS USING ATOMIC ABSORPTION SPECTROPHOTOMETER (AAS) FLAME PHOTOMETER AND ULTRA-VIOLET/VISIBLE SPECTROPHOTOMETER

**FOR:** Laboratory Scientists, Technologists, Chemical Analysts, Quality Control Managers in Tertiary Institutions, Research Institutes, and the industrial sectors.

### **OBJECTIVE:-**

This workshop is designed to expose and impact practical knowledge to participants on environmental sample analysis. In addition, the practical use of analytical equipment such as AAS, FLAME & UV Visible Spectrophotometer will be demonstrated, not excluding equipment trouble shooting and maintenance.

### **COURSE CONTENT**

- Basic and advanced concepts of Atomic Absorption Spectrophotometer, Flame photometer and UV-Visible Spectrophotometer
- Basic calculations in spectrophotometric analysis
- Different methods of sample and standard preparations for environmental spectrophotometric analysis
- Principles, operations and applications of AAS, flame photometer and UV/Visible spectrophotometer for environmental analysis
- Calibration of AAS, flame photometer and UV/Visible spectrophotometer with standards
- Environmental analysis
- The use of AAS, flame photometer and UV-Vis Spectrometer for metal oxides analysis e.g. Fe<sub>2</sub>O<sub>3</sub>, MgO, P<sub>2</sub>O<sub>5</sub> etc
- Good Laboratory Practice
- Validation and Data Interpretation
- Trouble shooting and maintenance of AAS, flame and UV/Visible Spectrophotometer.
- Installation methods for AAS etc.
- Operational techniques for AAS, etc.

<b>DURATION:</b>	7days
Date:	20 <sup>th</sup> – 24 <sup>th</sup> September, 2021
Arrival:	20 <sup>th</sup> September, 2021
Departure:	25 <sup>th</sup> September, 2021
FEE:	<del>N</del> 80, 000.00
VENUE:	Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan, Oyo
	State.

**REQUIREMENT**: Participants are advised to come with their Laboratory Coats and laptops.

NOTE: Early bird registration on or before Monday 6<sup>th</sup> September 2021 to enjoy 10% reduction.





### 2. ADVANCED TRAINING ON MOLECULAR TECHNIQUES / BIOTECHNOLOGY

**FOR:** Scientists, Technologists, Research Officers, Scientific Officers, Project Managers and Students in Tertiary Institutions, Research Institutes, Government Agencies, Industries, NGOs etc.

**OBJECTIVE:** The purpose of this workshop is to provide further practical knowledge in the area of molecular/biotechnology techniques. This course is meant for those that are working in the specified area and needs further training and exposure. Newcomers to the field are also encourage to come

### **COURSE CONTENT**

- Principle of molecular biology techniques
- DNA Molecular Techniques
- Southern Blotting
- RNA/DNA Technologies, isolation and characterization
- Northern Blotting
- Application of Molecular Biotechnology
- Restriction digestion
- Detection of antibodies resistance gene in bacteria
- Polymerase Chain reaction (PCR)
- DNA sequencing
- Primer design
- DNA library construction
- Bio-informatics etc.

<b>DURATION:</b>	7days
DATE:	4 <sup>th</sup> – 8 <sup>th</sup> October, 2021
ARRIVAL:	4 <sup>th</sup> October, 2021
DEPARTURE:	9 <sup>th</sup> October, 2021
FEE	₩80, 000.00
VENUE:	Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan,
	Oyo State.

**REQUIREMENT:** Participants are advised to come with their Laboratory Coats.

**NOTE:** Early bird registration on or before 20<sup>th</sup> September 2021 to enjoy 10% reduction.



# **13.** ISO 17025:2017 MANDATORY TRANSITION TRAINING FOR LABORATORY TECHNOLOGISTS/ SCIENTISTS

**WHO SHOULD ATTEND:** This course is for all Laboratory staff who participates in the operation of the Laboratory Quality System including:

- Conducting Testing or Calibration
- Supporting Laboratory Activities
- Managing the Laboratory Quality System
- Training Laboratory Staff
- Managing the Laboratory
- Laboratories seeking accreditation
- All private laboratories practitioners

#### **OBJECTIVES:**

The objectives of this workshop are to expose participants to gain understanding of what the ISO/IEC 17025:2017 standard requires. In addition, the participants will understand the major differences between ISO/IEC 17025:2005 and 17025:2017. Furthermore, participants will gain an understanding of the implementation of the management system based on the standard and also enhance their competence and productivity at their various positions.

COURSE CONTENT:

- Strengthening Laboratory Management towards Accreditation (SLAMTA)
- High level Overview of the difference between ISO 17025-2017 and ISO 17025-2005
- Important Quality and Technical Requirements
- The Quality Management System
- Transition Planning
- Understanding the key elements and importance of a gap analysis
- Laboratory Information Management System (LIMS) tools for effective laboratory management
- Laboratory documentation and document control
- Creation, Usage and Interpretation of Quality control charts

DURATION:	7days
DATE:	25 <sup>th</sup> – 29 <sup>th</sup> October, 2021
ARRIVAL:	25 <sup>th</sup> October, 2021
DEPARTURE:	30 <sup>th</sup> October, 2021
FEE:	<del>N</del> 80, 000.00
VENUE:	Headquarters of the Nigerian Institute of Science Laboratory Technology, Jabi Airport Road, beside NOUN, opposite EFCC, adjacent Federal Medical Centre, Abuja, Nigeria.

# NOTE: Early bird registration on or before Monday 11<sup>th</sup> October, 2021to enjoy 10% reduction.





# 14. LABORATORY SAFETY, RISK ASSESSMENT AND QUALITY ENGAGEMENT PROGRAMMES

**FOR:** Laboratory Managers, Quality Assurance Officers, Laboratory Scientists and Technologists, Laboratory Assessors in food, environmental, electronic, chemical, pharmaceutical, institutional and industrial laboratories.

**OBJECTIVES:** The training workshop is designed to train Laboratory Personnel and Laboratory Assessors on how to install, maintain and improve laboratory quality systems that meet the requirements of ISO/IEC17025:2017 and other standards. The course also gives essential knowledge required for Laboratory Quality Managers to prepare laboratories for accreditation and audit as well as improving their skills on bio risk engagement procedures in the laboratories.

### **COURSE CONTENT:**

- Laboratory Quality management
- Effective leadership and personnel management principles
- Chemical laboratory safety and security
- Quality assurance of test results
- Laboratory Information Management Systems (LIMS)
- Equipment qualification
- Laboratory risk assessment
- Design and application of Laboratory Quality Manual
- Laboratory infrastructure and work place design
- Laboratory Documentation
- General Biosafety Overview
- Occurrence management
- The 14 Core Biosafety Elements
- Dealing with hazards in the labs
- Proper Use and Maintenance of Biological Safety Cabinets
- Donning and Doffing Personal Protective Equipment
- Hazard, Risk and Threat

<b>DURATION:</b>	7days
DATE:	1 <sup>st</sup> – 5th November, 2021
ARRIVAL:	31 <sup>st</sup> October, 2021
<b>DEPARTURE:</b>	6 <sup>th</sup> November, 2021
FEE:	<del>N</del> 70, 000.00
VENUE:	Nigerian Institute of Science Laboratory Technology, Samonda, Ibadan,
	Oyo State.

**REQUIREMENT:** Participants are advised to come with their Laboratory Coats.

### NOTE: Early bird registration on or before 18<sup>th</sup> October, 2021 to enjoy 10% reduction.





### 1. VENUE

Most of the lectures will be held at the NISLT Office, Samonda, Ibadan, except otherwise indicated specifically at NISLT proposed Headquarter in Abuja. In-house training of staff can be arranged for Institutions/Organizations on request. Interested Institutions/Organizations should contact the Registrar/CEO for further information.

### 2. ACCOMODATION

Participants will be responsible for their accommodation during the workshops. However, there are suitable hotels and guest houses with facilities which are affordable around the Institute. Arrangements for accommodation can be made on request to the Institute.

### 3. APPLICATIONS

Interested candidates, Institutions and Organizations should apply formally indicating their title(s) of interest to reach the Institute at least two weeks before the commencement date. Late applications or arrival for the respective workshops may not be entertained. Participants who wish to make payments in advance can pay online into the **TSA named Nigeria Institute for Science Laboratory Technology** in any of the commercial banks and present the teller during registration.

### 4. REQUIREMENTS

Since some of the training workshops involve laboratory sessions, participants are mandated to come with **LABORATORY COATS, NOSE MASKS** in compliance with Laboratory Safety Regulations. ALL COVID-19 protocols will the observed.

FOR APPLICATIONS, COMPLETE THE ATTACHED FORM AND FORWARD IT

TO:

**The Director-General/Registrar/CEO** NIGERIAN INSTITUTE OF SCIENCE LABORATORY TECHNOLOGY P.O.BOX 9764, U.I .POST OFFICE SAMONDA, IBADAN, OYO STATE TEL: 08062117814, 08030787747





## THE NIGERIAN INSTITUTE OF SCIENCE LABORATORY TECHNOLOGY (NISLT)

### CORPORATE NOMINATION FORM FOR 2021 SHORT-TERM TRAINING PROGRAMME

Name of Organization:
Address
Telephone No
Course/Workshop applied for

Names of Nominees	Position in Establishment
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Amount Enclosed
Name and Signature of Nominating Officer





### THE NIGERIAN INSTITUTE OF SCIENCE LABORATORY TECHNOLOGY (NISLT)

### INDIVIDUAL APPLICATION FORM FOR 2021 SHORT-TERM TRAINING PROGRAMME

(a)       Date         (b)       Date         (c)       Date         PARTICULARS OF APPLICANT:       NAME:         NAME:       SEX:         SEX:       MARITAL STATUS:         ADDRESS & TELEPHONE NUMBER       (a)         Residential:       Tel:         (b)       Postal:         (c)       Office         (d)       Home Town:         C(d)       Home Town:         Tel:       ACADEMIC & PROFESSIONAL QUALIFICATIONS WITH DATES:         Do you want the Institute to book accommodation for you?       If yes? Indicate below:         Ranges of hotel you want       The amount in bank draft that you are sending down as deposit         The course fees paid with receipt/bank teller: N	I here	by apply to participate in the following course(s) of the Institute as advertised:
(c)       Date         PARTICULARS OF APPLICANT:         NAME:         SEX:       MARITAL STATUS:         ADDRESS & TELEPHONE NUMBER         (a)       Residential:	(a)	Date
PARTICULARS OF APPLICANT: NAME: SEX: MARITAL STATUS: ADDRESS & TELEPHONE NUMBER (a) Residential: Tel: (b) Postal: (c) Office	(b)	Date
NAME:	(c)	Date
SEX:	PAR	TICULARS OF APPLICANT:
ADDRESS & TELEPHONE NUMBER (a) Residential:	NAM	Е:
<ul> <li>(a) Residential:</li></ul>	SEX:	MARITAL STATUS:
Tel:       Tel:         (b)       Postal:         (c)       Office         (d)       Home Town:         Tel:       Tel:         ACADEMIC & PROFESSIONAL QUALIFICATIONS WITH DATES:         Do you want the Institute to book accommodation for you?         If yes? Indicate below:         Ranges of hotel you want         The amount in bank draft that you are sending down as deposit         The course fees paid with receipt/bank teller: N.	ADD	RESS & TELEPHONE NUMBER
(b)       Postal:         (c)       Office         (d)       Home Town:         Tel:       Tel:         ACADEMIC & PROFESSIONAL QUALIFICATIONS WITH DATES:         Do you want the Institute to book accommodation for you?         If yes? Indicate below:         Ranges of hotel you want         The amount in bank draft that you are sending down as deposit         The course fees paid with receipt/bank teller: N.	(a)	Residential:
(c)       Office         (d)       Home Town:         Tel:       ACADEMIC & PROFESSIONAL QUALIFICATIONS WITH DATES:         Do you want the Institute to book accommodation for you?       If yes? Indicate below:         Ranges of hotel you want       The amount in bank draft that you are sending down as deposit         The course fees paid with receipt/bank teller: N.       N.		
<ul> <li>(c) Office</li></ul>	(b)	
ACADEMIC & PROFESSIONAL QUALIFICATIONS WITH DATES: Do you want the Institute to book accommodation for you? If yes? Indicate below: Ranges of hotel you want The amount in bank draft that you are sending down as deposit The course fees paid with receipt/bank teller: N	(c)	
Do you want the Institute to book accommodation for you? If yes? Indicate below: Ranges of hotel you want The amount in bank draft that you are sending down as deposit The course fees paid with receipt/bank teller: N	(d)	Home Town: Tel:
Do you want the Institute to book accommodation for you? If yes? Indicate below: Ranges of hotel you want The amount in bank draft that you are sending down as deposit The course fees paid with receipt/bank teller: N	ACA	DEMIC & PROFESSIONAL QUALIFICATIONS WITH DATES:
Do you want the Institute to book accommodation for you? If yes? Indicate below: Ranges of hotel you want The amount in bank draft that you are sending down as deposit The course fees paid with receipt/bank teller: N		
If yes? Indicate below: Ranges of hotel you want The amount in bank draft that you are sending down as deposit The course fees paid with receipt/bank teller: N		
Ranges of hotel you want The amount in bank draft that you are sending down as deposit The course fees paid with receipt/bank teller: N		
The amount in bank draft that you are sending down as deposit The course fees paid with receipt/bank teller: N	•	
The course fees paid with receipt/bank teller: N	Ū	

Signature of Applicant





### SUMMARY OF THE 2021 SHORT TERM TRAINING

SN	Courses	Dates											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.	Entrepreneurial			22-26 <sup>th</sup>									
	Development,												
	Laboratory												
	Equipment Supply,												
	Chemical & Reagents												
2.	Qualitative Research				19 <sup>th</sup> -								
	Methods Statistical				23 <sup>rd</sup>								
	Analysis of												
	Laboratory Quality												
	Data, Thesis &												
	Scientific Research												
	Paper Writing												
	Workshop												
3	Specialized training	1			1	3 <sup>rd</sup> -7 <sup>th</sup>		1	1			1	
	workshop on science												
	equipment,												
	maintenance, repair												
	and management of												
	equipment used in												
	biological &												
	chemical laboratories												
4	Effective laboratory					17 <sup>th</sup> -							
	quality management,					21 <sup>st</sup>							
	administration and												
	good laboratory												
	practice												
5.	Environmental						21 <sup>st</sup> -						
	sample analysis using						25 <sup>th</sup>						
	Atomic Absorption												
	Spectrophotometer												
	(AAS), HPLC &												
	FTIR ( <i>SHEDA</i> )												
6.	Microbiological							12 <sup>th</sup> -					
	analysis of							16 <sup>th</sup>					
	pharmaceutical												
	products, foods, fruits												
	and water												
7.	Specialized							26 <sup>th</sup> -					
	Mandatory Workshop							30 <sup>th</sup>					
	on Laboratory												
	Quality Management												
	And Accreditation												
8.	Qualitative Research								9 <sup>th</sup> -				
	Methods Statistical								13 <sup>th</sup>				





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9.	Analysis of Laboratory Quality Data, Thesis & Scientific Research Paper Writing Workshop Specialized				23 <sup>rd</sup> -				
	Mandatory Workshop on Laboratory Quality Management And Accreditation				27 <sup>th</sup>				
10.	Microcontroller & Printed Circuit Board Design System					6 <sup>th</sup> - 10 <sup>th</sup>			
11.	Environmental Sample Analysis Using AAS, Flame Photometer & UV Visible Spectrophotometer					20 <sup>th</sup> - 24 <sup>th</sup>			
12	Advanced training course on Molecular Techniques/Biotechn ology						4 <sup>th</sup> -8 <sup>th</sup>		
13.	ISO 17025:2017 Mandatory transition training for laboratory Technologists / Scientists						25 <sup>th</sup> - 29 <sup>th</sup>		
13.	Laboratory Safety, Risk Assessment and Quality Engagement Programmes							1 <sup>st</sup> -5 <sup>th</sup>	