

ALL-ATLANTIC OCEAN RESEARCH ALLIANCE

Creating an Atlantic Ocean Community
by Implementing the Galway
and Belém Statements

PROGRAMME OVERVIEW

ALL-ATLANTIC TRAINING PLATFORM

Training for Technicians Working Onboard Research Vessels

TIME	SUNDAY 11 DEC 2022	MONDAY 12 DEC 2022	TUESDAY 13 DEC 2022	WEDNESDAY 14 DEC 2022	THURSDAY 15 DEC 2022	FRIDAY 16 DEC 2022
9:00	ARRIVALS	LECTURES	LECTURES	PRACTICAL EXERCISES AT SEA • SAFETY ASPECTS • CONNECTING TO SHIP'S INFRASTRUCTURE • FAILURE DETECTION	PRACTICAL EXERCISES AT SEA • SAFETY ASPECTS • CONNECTING TO SHIP'S INFRASTRUCTURE • FAILURE DETECTION	WRAP-UP
10:00						
11:00						
12:00		LUNCH	LUNCH			BREAK
13:00						
14:00	LECTURES	LECTURES	FAREWELL LUNCH			
15:00						
16:00						
17:00	ICEBREAKER / GET TOGETHER	BREAK	BREAK	BREAK		
18:00						
19:00		WORKING DINNER	WORKING DINNER		WORKING DINNER	WORKING DINNER

PROGRAMME DAY 1

12 Dec 2022 | ASHORE | EAST PIER

ALL-ATLANTIC TRAINING PLATFORM

Training for Technicians Working Onboard Research Vessels

TIME	LECTURE TITLE	CONTENT	DETAILS	INSTRUCTORS
9:00 - 10:00	IINTRODUCTION TO AANChOR Project CRUISE PLANNING	Principles and basics for planning and preparing a cruise	<ul style="list-style-type: none">• Preparing/testing equipment before the cruise• Establish a list of material needed for work at sea• Spare parts to be taken on the cruise	Keshnee Pillay Werner Ekau
10:00 - 11:00	CTD SYSTEM AND WATER COLLECTION BOTTLES	Theoretical background of a CTD	<ul style="list-style-type: none">• Functioning of CTD and bottles• Calibration routines before going onboard	Herman Engel
11:00 - 12:00		Practical Excersises at CTD	<ul style="list-style-type: none">• Mounting sensors and bottles• Checking functionality• Testing connection CTD - computer• Calibration measurements	
12:00 - 13:00	OCEAN OBSERVING INFRASTRUCTURE AND DATA NETWORKS	Technologies that can be deployed from vessels, instrumentation that inputs data into the Global Telecommunications System	<ul style="list-style-type: none">• Overview of instruments used as part of Go-Ship (CTD), Ocean SITES (Moorings), Argo floats, drifters, vessels of opportunity, etc.• Where freely available data are housed	Tammy Morris
13:00 - 14:00	LUNCH BREAK			
14:00 - 15:00	PLANKTONNETS	Hydrobios vertical/oblique bongo; Hydrobios Multinet system; RMT	<ul style="list-style-type: none">• Mounting and testing the nets• Check connection net - computer• How to repair a net• Gear selection	Marco Worship Werner Ekau
15:00 - 16:00		Continuous Plankton Recorder; NEUSTON CATAMARAN		
16:00 - 17:00	DATA STORAGE AND MANAGEMENT	What data are provided by the ship and the different devices?	<ul style="list-style-type: none">• What data quantities, qualities are needed?• Data collection intervals?	Isa Olegbede
17:00 - 18:00	WORKING DINNER			

PROGRAMME DAY 2

13 Dec 2022 | ASHORE | EAST PIER

ALL-ATLANTIC TRAINING PLATFORM

Training for Technicians Working Onboard Research Vessels

TIME	LECTURE TITLE	CONTENT	DETAILS	INSTRUCTORS
9:00 - 10:00	SDS - SCIENTIFIC DATA SERVER	Station data - Overview of underway navigational; meteorological; TSG; Light sensors (SPAR) and acoustic data and storage	<ul style="list-style-type: none">Types of data provided by the ship and how it is stored, managed and utilized	Herman Engel
10:00 - 11:00	GLIDERS AND AUTONOMOUS DEVICES	Introduction to new technologies	<ul style="list-style-type: none">Robotic platforms – overviewSurface platforms – Wave Glider, Sail Drone & Sail BuoyDiving platforms (Buoyancy gliders) – Seaglider & Slocum GliderIridium communications with remote platformsBenthic photography system – SkiMonkey	Andre Hoek Josh Huysamen
11:00 - 12:00	HYDRO-ACOUSTIC SURVEYING	TECHNICAL ASPECTS OF HYDRO-ACOUSTIC SYSTEM INSTALLATION, OPERATION, DATA COLLECTION AND CALIBRATION	ACOUSTIC DEVICES: 75 KHZ RDI ADCP; SIMRAD ES70 ACOUSTIC SYSTEM (WITH 120; 200 AND 38KHZ TRANSDUCERS) 18KHZ ECHOSOUNDER	Johann Rademan
12:00 - 14:00	LUNCH BREAK			
14:00 - 15:00 15:00 - 16:00	UNDERWAY SYSTEMS	Flow-through systems for temperature/salinity Meteorological probes, pCO2 (General Oceanics)	Operational on FRS Algoa	Fabian Hüge
16:00 - 17:00	CHEMICAL OCEANOGRAPHY: SAMPLING, METHODOLOGY AND PROTOCOLS	Chemical parameters, Sampling strategy, Oceanographic instruments	<ul style="list-style-type: none">Physicochemical parametersInorganic nutrientsOrganic compoundsMicrobiological indicatorTrace metalsEmerging contaminants	Camila Marin
17:00 - 18:00	NETWORKING DINNER			

PROGRAMME DAY 3

14 Dec 2022 | ONBOARD | FRS Algoa

ALL-ATLANTIC TRAINING PLATFORM

Training for Technicians Working Onboard Research Vessels

TIME	LECTURE TITLE	CONTENT	DETAILS	INSTRUCTORS
9:00 - 10:00	SAFETY BRIEF AND TOUR OF SHIP	Safety talk, introduction to all ship's equipment, securing equipment, SDS	<ul style="list-style-type: none">Welcome and vessel overview/ tour - Marcel / CNOVessel safety talk and muster stations drill - CNO	Ship crew Marcel vd Berg
10:00 - 11:30	LEAVE PORT FOR STATION 1	Set up of underway systems i.e. TSG and Acoustics, meteorological systems, trouble shooting and maintenance	<ul style="list-style-type: none">Start up underway scientific water supply and adjustment of flowrates to multiple usersOpen cruise on SDS system and start data recordingStart data recording on all underway systems	Marcel vd Berg Fabian Hüge
11:30 - 12:30	LUNCH BREAK			
12:30 - 14:00	CTD STATION	Preparing CTD for deployment, CTD cast, sampling from CTD (including calibration)	<ul style="list-style-type: none">Overview of items listed in column 'Content'Complete CTD cast(s) with bottle samples takenSampling protocols and demonstrations(no analysis planned i.e. oxygens etc)	Marcel vd Berg
14:00 - 15:00	CTD STATION	CTD sample processing (eg oxygen, salinity, chlorophyll, etc), CTD maintenance, trouble shooting, probe care and maintenance, securing CTD	<ul style="list-style-type: none">Overview of items listed in column 'Content'Storage and cleaning of CTD after use	Marcel vd Berg
15:00 - 16:00	RETURN TO PORT	Shutting down of flow through systems and acoustics, data retrieval and storage, securing of equipment	<ul style="list-style-type: none">STOP DATA RECORDING OF UNDERWAYSYSTEMS SHUTTING DOWN AND CLEANING/ FLUSHING OF TSG SYSTEM AND SEAWATER SUPPLIES	Marcel vd Berg
16:00 - 17:00	WORKING DINNER			

PROGRAMME DAY 4

15 Dec 2022 | ONBOARD | FRS Algoa

ALL-ATLANTIC TRAINING PLATFORM

Training for Technicians Working Onboard Research Vessels

TIME	LECTURE TITLE	CONTENT	DETAILS	INSTRUCTORS
9:00 - 10:00	BRIEFING	Activity briefing, review of previous activities	<ul style="list-style-type: none"> Same as listed in column 'Content' Questions from previous days operations 	Ship crew Marcel vd Berg
10:00 - 11:00	LEAVE PORT FOR STATION 2	SET UP OF UNDERWAY SYSTEMS (TSG AND ACOUSTICS, METEOROLOGICAL SYSTEMS) TROUBLE SHOOTING AND MAINTENANCE	<ul style="list-style-type: none"> Start up underway scientific water supply and adjustment of flowrates to multiple users Open cruise on SDS system and start data recording Start data recording on all underway systems 	Marcel vd Berg Fabian Hüge
11:00 - 13:00	PLANKTON SAMPLING	Preparation of bongo net, deployment, sampling and sample processing, securing of net Net deployments	<ul style="list-style-type: none"> Net preparation, deployment, retrieval, sampling Sample processing and preservation, maintenance 	Marco Worship
13:00 - 14:00	LUNCH BREAK			
14:00 - 15:00	PLANKTON SAMPLING	Net and CPR deployments	<ul style="list-style-type: none"> Multi-net set up procedure, deployment, sample Sample processing and preservation, maintenance 	Marco Worship
15:00 - 18:00	RETURN TO PORT	Shutting down of flow through systems and acoustics, data retrieval and storage, securing of equipment, (offloading of equipment?)	<ul style="list-style-type: none"> STOP DATA RECORDING OF UNDERWAY SYSTEMS SHUTTING DOWN AND CLEANING/ FLUSHING OF TSG SYSTEM AND SEAWATER SUPPLIES 	Marcel vd Berg
18:00 - 19:00	WORKING DINNER			

PROGRAMME DAY 5

16 Dec 2022 | HOTEL

ALL-ATLANTIC TRAINING PLATFORM

Training for Technicians Working Onboard Research Vessels

TIME	LECTURE TITLE	CONTENT	DETAILS	INSTRUCTORS
9:00 - 12:00	WRAP-UP	Informal feedback session	Feedback from participants and instructors , open questions	various TBC
13:00 - 14:00	BREAK			
13:00 - 14:00	FAREWELL LUNCH			



**BUILDING AN ALL ATLANTIC
OCEAN COMMUNITY**
Implementing the Belém Statement



AANCHOR is a Coordination & Support Action project aimed to support the implementation of the Belém Statement. It has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 818395.