

JAMAICA AND THE DEEP SEA

THE ROLE OF THE ISA IN CAPACITY DEVELOPMENT FOR
JAMAICA.

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FORMER ISA TRAINEE



AGENDA

ISA CAPACITY BUILDING
PROGRAMS

BENEFITS AS A TRAINEE

BENEFITS AS A SPONSORING
STATE

THE ISA'S CONTRACTOR TRAINING PROGRAM

- THE INTERNATIONAL SEABED AUTHORITY PROVIDES TRAINING OPPORTUNITIES FOR YOUNG PROFESSIONALS ANNUALLY
- PARTNERSHIP WITH CONTRACTORS
- TRAINING : MARINE SCIENCES, LEGAL & INTERNATIONAL AFFAIRS, ENGINEERING, ECONOMICS, INFORMATION TECHNOLOGY, GEOSCIENCES and ENVIRONMENTAL SCIENCES

BENEFITS OF A TRAINEE



INCREASES
AWARENESS



EXPOSURE AND
EXPERIENCE



NETWORKING AND
CULTURAL
EXCHANGE

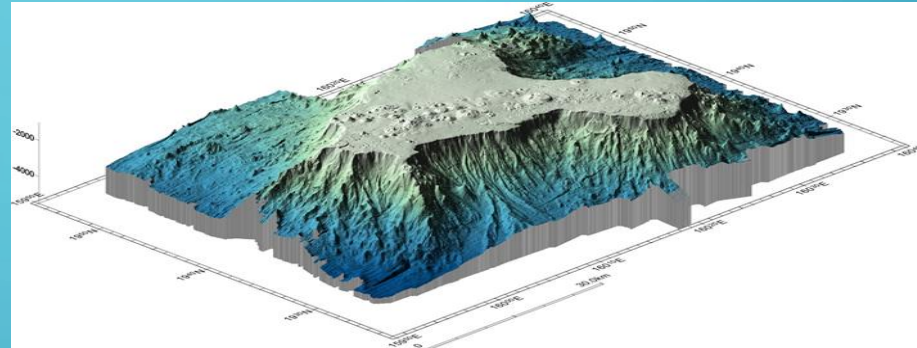
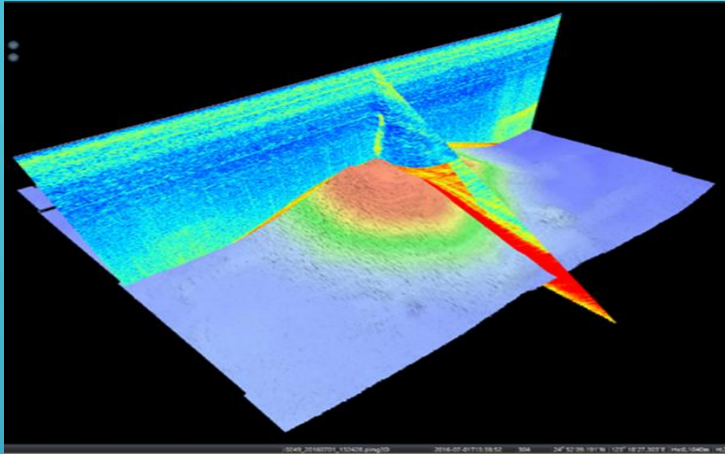


CAPACITY BUILDING



CAPACITY BUILDING
THROUGH THE ISA'S
CONTRACTOR
TRAINING
PROGRAM

Multi-Beam Echo Sounder (MBES): Observe bathymetry and back-scattering strength of the survey area. Below are examples of the 3D model imagery produced from such survey.



FDC: Take movies along the seafloor

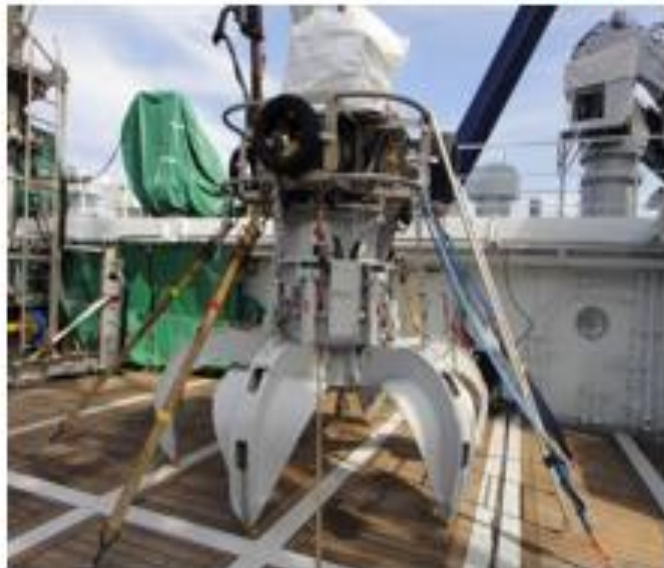




Research Vessel "Hakurei"



BMS(Benthic Multi-coring System)



Finder-installed Power Grab (FPG)



Deep-towed TV Camera (FDC)



Remotely Operated Vehicle (ROV)

Mooring System:

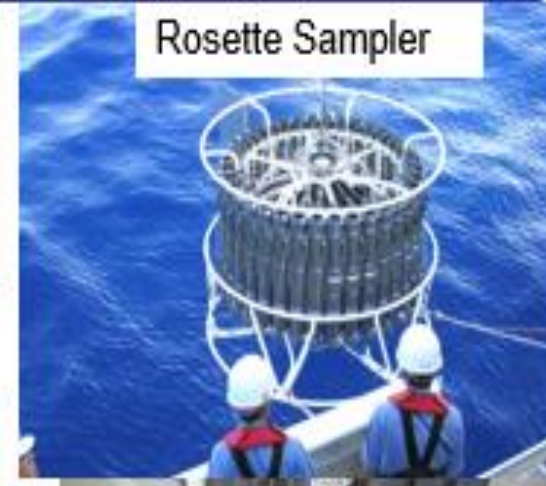
- ① **Sediment Trap (ST):**
Collect settling sediment particles in sea water
- ② **Current Meter (ADCP):**
Acquire information of ocean current

Rosette Sampler (RO):
Water sampling at many depths

Multiple Corer (MC):
Acquire seafloor sediments



Sediment Trap



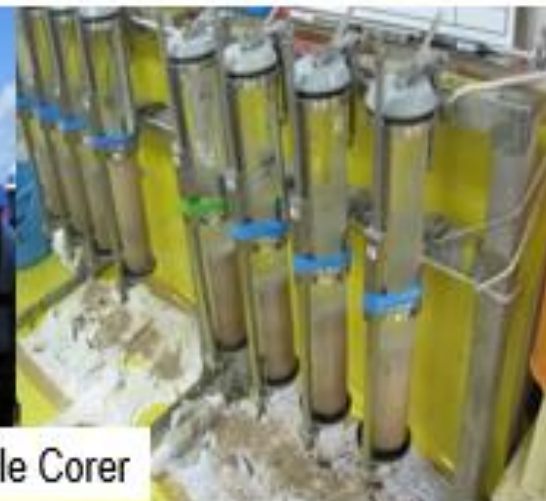
Rosette Sampler



ADCP Current Meter



Multiple Corer





BENEFITS OF MY TRAINING TO JAMAICA



CAPACITY BUILDING POST TRAINING

- INCREASE CAPACITY BUILDING AND KNOWLEDGE SHARING IN JAMAICA
 - CONDUCTING PRESENTATIONS
 - ATTENDING ISA's GENERAL ASSEMBLY & COUNCIL MEETING SESSIONS
 - PROMOTE AWARENESS
 - MARKETING OF THE ISA CONTRACTOR TRAINING PROGRAM

POST TRAINING CAPACITY BUILDING IN JAMAICA

- JAPAN DONATED SUBMARINE MINERAL SAMPLES TO THE MINES AND GEOLOGY DIVISION FOR THEIR 160TH ANNIVERSARY CELEBRATION.
- 3 TYPES OF SAMPLES
 - COBALT RICH CRUST
 - POLYMETALLIC NODULES
 - SEAFLOOR MASSIVE SULPHIDE.
- *Mr. Hikari Hino of JOGMEC (right) hands over submarine sample to the Commissioner of Mines, Mr. Roy Nicholson.*



DR. OKAMOTO PRESENTING ON DEEP SEABED MINING TO STAFFS AT THE MINES & GEOLOGY DIVISION



JAMAICA- A SPONSORING STATE

- IN JANUARY 2019, THE MINISTRY OF FOREIGN AFFAIRS AND FOREIGN TRADE, SIGNED AN AGREEMENT TO ACT AS A SPONSORING STATE OF BLUE MINERALS JAMAICA (BMJ) LIMITED IN ITS APPLICATION TO THE INTERNATIONAL SEABED AUTHORITY (ISA) FOR A CONTRACT TO EXPLORE THE POLYMETALLIC NODULES OF THE DEEP SEABED.
- ON MARCH 16, 2021, A 15-YEAR CONTRACT WAS SIGNED BY BMJ AND ISA FOR THE EXPLORATION OF POLYMETALLIC NODULES IN THE CLARION CLIPPERTON ZONE (CCZ) IN THE PACIFIC OCEAN.



BENEFITS OF A SPONSORING STATE

ACCESS TO DEEP-SEA MINERAL RESOURCES

CONTRIBUTION OF RESERVED AREAS FOR OTHER STATES TO APPLY TO ISA FOR EXPLORATION RIGHTS

INDUSTRIAL OPPORTUNITIES

ECONOMIC GROWTH AND DEVELOPMENT

BENEFITS TO JAMAICA

- IMPLEMENT POLICIES GEARED TOWARDS THE FUTURE DEVELOPMENT AND USE OF OUR MARINE RESOURCES IN OUR EEZ.
- INCREASE PUBLIC AWARENESS THROUGH SCIENCE AND RESEARCH FAIRS.
- ESTABLISHMENT OF PUBLIC PRIVATE PARTNERSHIPS (PPP)
- ECONOMIC GROWTH & STABILITY
- INTRODUCTION AND PROMOTION OF NEW CAREER FIELDS IN THE MARINE INDUSTRY.
- ADAPTATION OF A NEW MENTALITY THAT TAKES INTO CONSIDERATION THE BENEFITS OF THE FUTURE GENERATION.
 - OFFER INCENTIVES TO ENCOURAGE INVESTORS TO EXPLORE THE EEZ.
 - MAXIMIZATION OF THE BLUE ECONOMY – “THE NEW FRONTIER”.

THE END

**EXPLORING
THE DEEP**

