



**National Institute of Ocean Technology (NIOT), Chennai
(Ministry of Earth Sciences)**



PROFORMA FOR CRUISE PROPOSAL

April 2013- March 2014

(For Sagar Nidhi, Sagar Kanya, Sagar Manjusha, Sagar Paschimi & Sagar Purvi. The brief details on facilities available onboard above vessels are enclosed)

1.	Major Project / Title:-
2.	Detailed Objectives & Work:-
3.	Name of the Principal Investigator, Organization, address, Tel / Mobile, Fax, e-mail:-
4.	Contact Person / Address with Tel / Mobile, Fax, e-mail details (if other than no.3 above):-
5.	Area of Operation (Note: Please attach proposed cruise track in A4 size) with preferred ports for embarkation / disembarkation:-
6.	Period of the Cruise:- <i>1st Preference : From _____ To _____ Total days: _____</i> <i>2nd Preference : From _____ To _____ Total days: _____</i>
7.	Does the cruise intend collecting time-series/seasonal data? If so, specify the best time required without compromise:-
8.	No. of Participants :-
9.	Details of time frame, source and amount of funding for the Project :-
10.	Does the Project forms part of MoES or National Thrust Programmes or other Departments / Ministries or an institutional R & D effort (Pl. give complete details):-

11.	Is there a commitment for providing ship time or funding the ship time costs by the project funding agency:-			
12.	Facilities / equipment required for your cruise (May see enclosed onboard facilities and provide your preference of vessel):-			
13.	Do you need any support from vessel for fixing the equipment which shall be brought by your team? Pls spell out in detail:-			
14.	Any provision made in the project for procurement of onboard equipment (specify the source & amount):-			
15.	Are there any other organizations involved in the programme. If so, please specify name, role and the name of the nodal agency:-			
16.	Foreign collaboration / priority status of the programme:-			
17.	Remarks:			
18.	Cruise /Feed back report for the previous mission has been submitted : Yes/NO			
19.	Has your Institutes/Director approved this request : Yes/No			
20.	Requisite cruise equipments (Other than the list enclosed) shall be brought by the cruise team			
	Sl No	Description	Weight	Power requirement
21.				
22.	Declaration:- <i>We hereby agree that we will deposit the raw data and samples to NIOT on completion of the cruise. I understand that NIOT shall protect the right of first use for us, who collected the data / samples, by releasing the data / samples to other interested scientists only after the period of two years.</i>			
(Principle Investigator)			<i>Forwarded</i> (Head of the Organization)	

Note :

- 1) The chief scientist of the cruise is requested to arrange
 - a) Ministry of Home Affairs clearance for all the foreign participants
 - b) Customs clearance for scientific materials & Immigration clearance through their agent or NIOT agent
 - c) All the requisite scientific equipments along with consumables (other than the list enclosed)shall be brought by the team

Sagar Nidhi



Endurance	: 45 days.
Average Speed	: 14 knots.
Accommodation	: 30 scientific personnel (2 reserved for AMC / Assts)
Length	: 103.6 meters

Major Facilities onboard:-

Geology / Geophysics:

1. Reson 7150 Deep Sea Multi beam Echo sounder with post-processing / plotting facilities.
2. Kongsberg EA600 Deep Sea Echo sounder (12 kHz / 38 kHz / 200 kHz)
3. Innomar Sub-Bottom Profiler
4. PDS2000 Online/Offline
5. Benthos Altimeter

Chemical / Biological Oceanography:

6. Zoo plankton net
7. pH Meter
8. Vaccum Pumps
9. Refrigerators / Deep Freezer
10. Ovens
11. Autoclave
12. Dosimat
13. UV Chamber
14. Four channel auto analyzer
15. Fluro imager
16. Autosal

Physical Oceanography / Meteorology:

17. Idronaut CTD (with winch)
18. SBE CTD
19. 12-bottles Rossette Sea-water Sampling facility
20. 5 litres capacity water samplers
21. SBE 21 Thermograph
22. RDI Acoustic Doppler Current Profiler
23. Vaisala Automatic Weather Station etc
24. SVP 25 Sound Velocity Profiler

Others / General:

25. Kongsberg Dynamic Positioning System
26. Hull-mounted Hi-Precision Acoustic Positioning System / Transponders
27. CCTV System monitoring facility for scientific operations
28. Drop Keel Facilities
29. Deck machineries to facilitate the sampling operations
30. Active Heave Compensation for Winch
31. Conference facilities / LCD / Slide / Overhead Projectors
32. Computing / Printing / Scanning / CD-DVD writing facilities
33. Interconnectivity to all labs through LAN for data transfer
34. Marine Data Management System
35. E-mail / Fax / Phone through Satellite.
36. Intercom system which connects all the decks, scientists, officer and laboratories
37. Talkback system for laboratories
38. State-of-the-art positioning / navigation systems
39. Cathode Ray Oscilloscope

Winches:

40. CTD Winch up to 7000m
41. Hydrographic Winch
42. Off shore crane - 10 T @19 m
43. Active Heave Compensated deep sea winch

Cranes:

44. A-Frame 10T and 60T
45. Deck Cranes - 3 Tons SWL: 2nos
46. Deck Cranes - 1 Ton SWL: 2nos
47. Traction winch - 30 T SWL

Sagar Purvi & Sagar Paschimi:



Length overall	: 30.15 m
Length BP	: 27.50 m
Speed	: 8 knots
Fresh water capacity	: 27 ton
Fuel oil capacity	: 17KL
Draft	: 1.96 m
Endurance	: 10 days
Accommodation	: Scientific: 6 + 1

Facilities:

CTD Multi-parameter probe
Niskin water sampler 5lts
Devil Messenger
Van Veen Grab
Zoo Plankton Net
Flow meter
Corer
Sachi Disc
Trawl Net
Spectro photo meter
PH meter
Docimate - Auto dispensing unit
Vaccum pump
Manifold water filtration unit
Millipore water purification plant
Laminar flow
Water Quality Kit
BOD Incubator / Air Oven
Refrigerator / Freezer
Hull/Side mounted multi-beam echo-sounder systems
DGPS
MRU
SVP Probe
5KVA UPS online
Operator computer SIS/ 6042
Data Processing Computer (Neptune, C-floor etc)/ QINSy
Seamac winch, Payout Pulley with pay out indicator
Trawl winch A Frame
Microscope

Sagar Manjusha:



Length overall	: 59.905 m
Length BP	: 52.824 m
Breadth (Moulded)	: 10.987 m
Depth (Moulded)	: 5.004 m
Draft (Moulded)	: 3.00 m
Draft Scaling	: 3.20 m
GT	: 1065
NT	: 319
Speed	: 11.5 knots
Fresh water capacity	: 125 MT
Accommodation	: Scientific: 11 + Officers: 08 + Crew: 10 = 29

Facilities:

CTD Multi-parameter probe
Niskin water sampler 5lts
Devil Messenger
Van Veen Grab
Zoo Plankton Net
Flow meter
Corer
Sachi Disc
Trawl Net
Spectro photo meter
PH meter
Docimate - Auto dispensing unit
Vaccum pump
Manifold water filtration unit
Millipore water purification plant
Water Quality Kit
BOD Incubator / Air Oven
Refrigerator / Freezer
Seamac winch, Payout Pulley with pay out indicator
Trawl winch A Frame

Deck Support:

Basic seamen support for deck operations shall be provided for operating shipboard machineries etc. For any other requirement, the participating organization may bring manpower or give sufficient notice to NCAOR for arranging the same through shipping agents.

(may pls contact vmc@niot.res.in 044-66783500 for any more information / clarification)

ORV Sagar Kanya



Endurance	: 35 days.
Average Speed	: 10 knots.
Accommodation	: 31 scientific personnel (6 reserved for AMC / Assts).
Length	: 100.34 metres.

Major Facilities onboard:-

Geology / Geophysics:

1. SB 3012 Deep Sea Multibeam Echosounder with post-processing / plotting facilities.
2. Deep Sea Echosounder (Elac 12 kHz / 30 kHz)
3. Shallow-water Echosounder (Marimatech 60 kHz / 120 kHz)
4. G-882 Cesium Magnetometer*
5. Geoacoustics Sub-Bottom Profiler
6. L3 Side Scan Sonar
7. Multichannel Seismic System*
8. Gravimeter*
9. 18m Hydraulic Piston Corer
10. 6m Gravity Corer
11. 6m Gravity Square Box Corer
12. Spade Corer
13. Sediment Grabs
14. Chain Bag Dredges
15. Pipe Dredge
16. Core Splitting Machine
17. Rock Saw
18. Rock Mill
19. Sieves / Sieve Shaker
20. Agate Mortar / Pestle.
21. Deep Sea Winch / Cable / A-frame etc (18 Tonnes capacity) / CCTV System
22. Deck Cranes (Max capacity: 12 Tonnes)

Chemical / Biological Oceanography:

1. Skalar Autoanalyser.
2. Skalar M32 Flow-through Spectrofluorimeter (Fluo Imager - Chlorophyll Analyser)
3. Hydro-Bios Automatic Multi-Plankton Net
4. UV-Oxidation Unit
5. Titration Units
6. Quartz Distillation Unit
7. Millipore Water Purifying System
8. Vacuum Pumps
9. Elico pH Meter
10. UV Chamber
11. Rotary Shaker

Physical Oceanography / Meteorology:

1. Idronaut CTD (with winch)
2. 24-bottles Rosette Sea-water Sampling facility.
3. 1.7 litres to 30 litres capacity water samplers.
4. Seabird Deepsea Portable CTD.
5. Sippican Expendable Bathy Thermograph (XBT)
6. RDI 150 kHz Acoustic Doppler Current Profiler
7. Astra Automatic Weather Station etc.
8. Bucket Thermometer
9. Autosal Salinometer
10. Shipborne Wave Recorder*
11. Thermosalinograph*
12. Barometer
13. Barograph
14. RadioSonde
15. Weather Fax
16. Microtop II Sun Photometer

Others / General:

1. Kongsberg Dynamic Positioning System
2. Hull-mounted Hi-Precision Acoustic Positioning System / Transponders
3. Refrigerators / Deep Freezer
4. Ovens
5. Autoclave
6. Microscopes
7. Conference facilities / LCD / Slide / Overhead Projectors
8. Computing / Printing / Scanning / CD-DVD writing facilities.
9. Local Area Network (LAN)
10. E-mail / Fax / Phone through Satellite.
11. State-of-the-art positioning / navigation systems.

* Equipment are being replaced / upgraded / augmented.

Deck Support:

Basic seamen support for deck operations shall be provided for operating shipboard machineries etc. For any other requirement, the participating organization may bring manpower or give sufficient notice to NCAOR for arranging the same through shipping agents.

(may pls contact sagarkanya@ncaor.org or 0832-2525553 for any more information / clarification)
