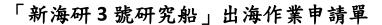


□國科會計畫 NSTC Project

國立中山大學 NSYSU





Cruise Application Form for R/V NOR3

□海上實習 Oceanographic Cruise Practice

□建教委託計畫 Government or Industry Commissioned Project □其他 Other					
航次編號	申請單位		申請日期		
Cruise No.	Affiliation (PI)		Apply date		
計畫主持人	計畫名稱				
PI	Project title				
領隊	服務單位/職稱		電話/手機		
で	Affiliation/Title		Phone / Mobile phone		
Cruise leader	(Cruise leader)				
電子郵件					
Email					
國科會計畫人員 (Pa	rticipants sponsored by NSTC pro	ojects):			
非國科會計畫人員 (Participants not sponsored by NSTC projects):					
學生 (Students):					
備用人員(國科會/非國科會計畫人員/學生) (Step-in personnel):					
新海研 3 號探測人員 (Surveyors):廖允強、林澔暐、徐建成 (filled by the R/V NOR3 Office)					
探測海域(Survey area):					
□Yes □No 超過臺灣 24 海浬 (beyond 24 NM from Taiwan)					
探測作業時間 (Survey time):□24 小時輪班 (24 hours)					
☐06:00-24:00 (the shifts will be organized by the Senior Surveyor)					
自備探測儀器 (Own instruments):					
預定作業期間	From YYYY 年 MM 月 DD 日	hh 時 離高雄港 (Le	aving Kaohsiung Port)		
Cruise time	To YYYY 年 MM 月 DD 日 hh 時 靠高雄港 (Arriving at Kaohsiung Port)				
共計 (For a total of)日 (days)					
當(返航)日備晚餐	☐Yes ☐No	特殊需求	素 (Vegan), 豬 (no pork), 牛		
Dinner upon arrival		Special request	(no beef)		

Application Instructions

Before the cruise

- 1. PI or the cruise leader should submit the application form to the R/V NOR3 Office at least 14 days before departure.
- 2. When combining commissioned projects with others, the allocated ship time should be clearly stated.
- 3. Eligible cruise leaders for NSTC-funded cruises are assistant professors, research vessel technicians, or

individuals holding equivalent or higher positions.

- 4. The maximum number of boarding personnel for one-day round trips and overnight voyages is 9.
- 5. Due to customs clearance scheduling, personnel changes are not accepted within 5 working days before departure (for example, if departing on a Friday, changes are not accepted starting from the previous Friday). It is recommended to have step-in personnel for flexible arrangements.
- 6. It is mandatory to use the C-Planner, a tool provided by the ODB, for cruise planning: http://odbwms.oc.ntu.edu.tw/odbintl/rasters/cplan/
- 7. Students joining the cruise for the course of "Oceanographic Cruise Practice" must complete the "Checklist of Safety Instructions for Water Activity, College of Marine Science, NSYSU" and have it endorsed by the department chairman before submitting it to the R/V NOR3 Office.

During the cruise

- 1. Scientists working on the aft deck must wear helmets, life jackets, and closed-toe work shoes at all time in accordance with the safety regulations of the research vessel.
- 2. If the survey area encounters conditions such as wind force reaching level 7, large waves (with wave heights of 3 m or higher), total swaying exceeding 45°, or other special circumstances, the decision to proceed with operations will be determined through discussion between the Master and the Senior Surveyor.
- 3. Changes of navigation plans or survey operations:
 - (1) If the changes deviate from the content of the cruise application, including adjustments of station sequence, adjustments to survey areas, deployment of the work boat, diving, or any high-risk operations, the Master must complete the Onboard Risk Assessment Form (OR3C-07-11), which requires signatures from both the Master and the cruise leader.
 - (2) If the changes involve adjustments to station sequence and survey area, the cruise leader must provide reasons for the changes, the revised cruise plan, and the adjusted station coordinates to the Master as attachments for risk assessment.
 - (3) The Onboard Risk Assessment Form and attachments must be submitted to the R/V NOR3 Office for record-keeping before execution.
 - (4) In cases where sensitive/overlapping areas are not involved and the risk is low or manageable, the Master makes the final decision on whether to proceed.
 - (5) If changes involve sensitive/overlapping areas, besides the notification process to the R/V NOR3 Office, the documents mentioned in (2) must be submitted 24 hours in advance to the Master, who shall initiate the communication process outlined in the "Response Protocol for Operation Safety of Research Vessels," notifying the NSTC and forwarding to the Ocean Affairs Council for record-keeping.

П	I have car	efully rea	d the inst	ructions an	d agree to	ahide hy	the regulations.
	I Have cal	CIUIIV I Ca	u uie iiisi	i uctions an	u aziee u	, abiue by	uie regulations.

Contact information

- 1. R/V NOR3 Office: Tel: (07)5255007, Email: or3@mail.nsysu.edu.tw
- 2. R/V NOR3: Tel: 0932-747-541, shipboard communication: VHF-16, SSB frequency: 2182; satellite phone: 009870-773-504-159.

計畫主持人 (PI)	船務 (R/V NOR3 Superintendent)	研究船管委會總幹事 (Manager, R/V NOR3 Management Committee)

Last update: March 113

國立中山大學 「新海研3號」出海作業申請單(附件)

NSYSU, Application Form for R/V NOR3 (Attachment)

預定探測航程作業大綱及航線規劃(包含各測站的預定抵達時間、探測作業內容、作業所需時數以
及離開測站時間等,請詳述於本頁或是另頁書寫。務必要使用 ODB 的出海規劃工具 cplan
http://odbwms.oc.ntu.edu.tw/odbintl/rasters/cplan/)
Please outline the survey operations and detailed navigation plan (including the expected arrival time at
each station, details of the survey operation, the required duration for each operation, the departure
time from each station, etc.) on this page or on separate pages. It is essential to use the C-Planner, a tool
provided by ODB, available at http://odbwms.oc.ntu.edu.tw/odbintl/rasters/cplan/
□本航次無敏感海域探測或採樣的點位。
There is no survey or sampling station in sensitive areas.
□本航次含敏感海域探測或採樣的點位,已通過海委會跨部會協商會議同意執行:
There are survey or sampling stations in sensitive areas. The stations have been approved by the
inter-agency consultation meeting at the Ocean Affairs Council.
預估進入敏感海域的位置 經度 ° E,緯度 ° N ,時間 。
Expect to enter the sensitive area at°'E,'N, at(time).
預估離開敏感海域的位置 經度 ° E,緯度 ° N ,時間 。
Expect to exit the sensitive area at°'E,'N, at(time).
測站位置(含站位經、緯度及圖):
Location of the stations (coordinates and maps):

Last update: March 113

本航次需隨船作業之須吊掛大型探測裝備器材清單及預計到達時間(□ <mark>是□否 安排吊掛作業</mark>):
範例: 鐵籠 x 2 大型機械 x 1 預計 109 年 2 月 30 日 下午五點到船邊
List of large survey equipment to be hoisted on board for this cruise, and the expected arrival time
(crane operation is is not needed):
Example: Cages x 2, Large equipment x 1, expected arrival time at pier: 5 pm, Feb 30, 2020

國立中山大學 新海研 3 號隨船儀器設備申請表				
• •	n Form for the Shipi	board Instruments, R/V NOR3		
申請單位		申請人		
Affiliation		Applicant		
電話/分機		電子郵件		
Phone/Ext.		Email		
計畫名稱				
Project Title				
□國科會計劃 NSTC Proje				
計畫類型	□學生實習 Oceanographic Cruise Practice			
Project Type	□建教委託 Government or Industry Commissioned Project			
	□其它 Other			
作業性質	□海洋物理 Phys. Oceand	ography 一海洋化學 Marine Chemistry		
Operation Type	□海洋生物 Marine Biology □海洋地球科學 Marine Geology			
орегиноп турс	□其它 Other			
預計作業期間	From YYYY 年 MM 月	DD 日 hh 時 離高雄港 (Leaving KH Port)		
	To YYYY 年 MM 月	DD 日 hh 時 靠高雄港 (Arriving at KH Port)		
Expected Op. time	共計 (For a total of)	日(days)		
隨 船	作業標準設備	Standard Shipboard Instruments		
✓ CTD (SBE 911 plus)		✓ 10 L Niskin bottles (24x)		
✓ sbADCP (RDI ADCP 75KHz	2)	✓ Milli-Q machine		
✓ Single beam Echosounde	r (EA640, 12/38/200 kHz)	✓ Deck PAR (Biospherical SPAR)		
✓ Multibeam Echosounder	(EM712)	✓ SCTD (SBE 21)		
✓ Weather station (air T, w	ind direction & speed)	✓ Surface transmissometer (C-star)		
✓ Motion sensor (Seapath 3	380/MRU-5, GPS/GLONASS)	✓ Surface fluorometer (WETstar)		
✓ Large Rosette sampler		✓ Shipek grab		
X USBL (HiPAP 502) (under	repair)	✓ 2m Gravity-Corercore liners		
គ <u>្</u> វី កា	言申請設備Instr	uments Needing Application		
LISST Holo (batteries covered by applicant)		Seapoint turbidity meter		
LISST-100X (batteries covered by applicant)		Self-recording CTD (incl. fluorometer)		
☐LISST-200X (batteries covered by applicant)		☐XBT (XBT probe covered by the applicant; contact the MIC,		
12L Go-Flo bottlesx (max. 24x) (default sampling		07-5252000#5008)		
bottles: 24x of 10-L Niskin bottles)				
特殊設備(*申請技術員協助或確認申請人會使用)				
Special Instruments (*require support from the technician or experienced users)				
☐MicroRider-1000*		core liner		
□ VMP-250 * (under repair)		☐6m Gravity corer *core liner		
☐McLane Pump WTS-LV* (batteries covered by applicant)		☐DGPS (contact the MIC for availability, 07-5252000#5008)		
☐60 cm Multicorer MC600*		☐SBP (Edgetech 3300) (causing interference with other		
□L-ADCP*		shipboard acoustic instruments)		

	Sediment microsensor system*		
	Underway pCO₂ analyzer (AS-P3) * (testing)		
Not	e:		
1.	. Please submit application for instrument or personnel support at least 14 days prior to departure to facilitate the scheduling of technicians and testing of equipment.		
2.	The insurance coverage of R/V NOR3 does not include instruments deployed without tethering. Applicants are responsible for any associated risks.		

- The NSTC-funded cruises have a maximum of 10 free liners for the gravity corer. Applicants of non-NSTC-funded 3. cruises are required to cover the costs of liners.
- After using the Go-Flo bottles, users must disassemble the sampling mechanism and rinse them with fresh 4. water (not just rinsing the interior of the bottles) on board or at port before the end of the cruise. This is to prevent salt buildup and erosion within the sampling mechanism. Failure to comply with this regulation will result in rejection of the request to use Go-Flo bottles.

技術員簽章	貴儀主持人簽章		
Signature by the technician	Signature by the PI of the MIC project		