

# International Seismic Assets

Compilation of seismic capabilities around the world:  
A work in progress

# Australian & European Capabilities



R/V Sonne



R/V Hesperides



R/V James Clark Ross



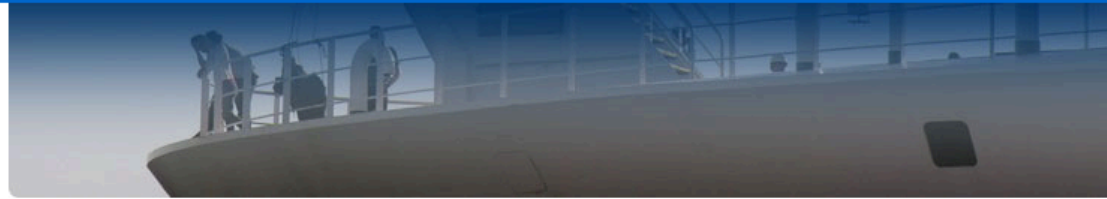
R/V Investigator



**OFEG**

**OCEAN FACILITIES EXCHANGE GROUP**

A BOTTOM-UP APPROACH TOWARDS RESEARCH FLEET CO-ORDINATION AND HARMONIZATION



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9341 visitors

**INTRODUCING OFEG**

OFEG represents Europe's leading oceanographic research organisations and provides a forum to consider barter exchange and co-operation opportunities for the Global and Ocean Class research fleet. OFEG aims to maximise the overall scientific output using its state-of-the-art facilities in support of the worldwide oceanographic community. For further information on the history of OFEG and how it operates, visit the [about pages](#).

**LATEST OFEG NEWS**

15 Nov 2018  
**Kronprins Haakon**  
 first regular research cruise [\[read more\]](#)

15 Nov 2018  
**FAUCES I Cruise**  
 R/V Sarmiento de Gamboa. September 26-October 12, 2017. Leaders: D. Casas, G. Ercilla and B. ... [\[read more\]](#)

10 Aug 2018  
**German barter cruise on RV PELAGIA in August/September 2018**  
[\[read more\]](#)

<b>News</b>	21 Jun 2017 German barter cruise will occur on the RV Pelagia
<b>Calendar</b>	





## EUROPEAN RESEARCH VESSELS INFOBASE

### EurOcean\_RV

Consult the [on-line statistics](#) of the Operating Research Vessels Infobase

EurOcean maintains a searchable database of the European research vessels (RVs) operating in Europe and abroad. It includes research vessels from the coastal to high seas ( $\geq 10$  meters).

Information on vessel specifications, contact information and the real time position of the large RVs is online for consulting. This information is regularly updated by the RV operators.

A list of the European research vessels planned and under construction and vessels out of service is also available.

If you are aware of any vessel that is not yet in this database or any other updates please contact [EurOcean](#) or [insert](#) yourself a new record and updates.

- OPERATING RVs
- PLANNED AND UNDER CONSTRUCTION RVs
- RVs OUT OF SERVICE

EurOcean <sup>™</sup>, EurOceanic

# JAMSTEC Fleet

## R/V YOKOSUKA

GT 4,439 t



Support vessel for  
"SHINKAI6500"

## R/V MIRAI

GT 8,687 t



Large vessel able to perform  
observation over wide areas

## R/V KAIREI

GT 4,517 t



Surveys the structure of sub-bottoms  
mainly with MCS

## R/V KAIMEI

GT 5,747t



Multipurpose research vessel for  
wide-area seabed research

## R/V HAKUHOMARU

GT 3,991 t



Multipurpose research vessel  
with long-term cruise

## R/V SHINSEIMARU

GT 1,629 t



Operation from 2013  
Multipurpose R/V focusing on  
the survey off the coast of Tohoku region

## D/V CHIKYU

GT 56,752 t



Drilling vessel with world-class  
scientific drilling capacity

JAMSTEC fleet is operated by private companies.

GT: Gross tonnage

# Seismic Imaging

- R/V *KAIREI* and R/V *KAIMEI* have seismic survey capability.
- R/V *KAIREI*
  - 444 channel, 6,000 m streamer cable
  - 4 x 1,950 cu. Inch (7,800 cu. inch total) tuned alloy air-guns
  - Working about 250 days/year, mainly for MCS.
  - Currently not much available window exists due to working for geohazard survey around Japan as governmental request.
  - Geoscience Australia contract with JAMSTEC to use her for LHR seismic survey in 2016 (and 2017)
  - R/V *KAIREI*'s function will move to R/V *KAIMEI* in 2018.

# Current situation

- JAMSTEC currently re-organizing fleet, since some of our vessel become older and the balance between budget and number of vessels should be seriously re-considered.
- JAMSTEC understood necessity and demand for seismic imaging for scientific ocean drilling.
- Possible option could be collaboration survey with already scheduled cruise OR hire vessel for a specific research cruise (e.g., GA).

### Countries with Seismic facilities

Country	contacted?	lists provided?
Denmark	x	x
Norway	x	x
Germany	x	x
France	x	
UK	x	
Spain	x	
The Netherlands	x	x
Australia	x	
New Zealand		
Korea	x	
Japan	x	
China		
Canada		
Taiwan		

If you know of others, please send me contact info (jrh@gues.dk)



# Two categories defined:

- Fixed equipment (compressors etc.)
- Portable equipment

## Ships with fixed equipment

Country	Name of ship	Compressor capacity	Streamer info	Source array info	Access possibilities	Contacts	Notes
Norway	GO Sars	11000 L/min				roy.aage.klepsvik@hi.no	Capable of using 3 km streamer and crustal scale air-gun array.
Norway	Kronprins Haakon	11000 L/min				baard.erik.bentzen@hi.no	Capable of using 3 km streamer and crustal scale air-gun array.
Germany	FS SONNE	48 m <sup>3</sup> /min == 4 x Sauer Compressors with 12 m <sup>3</sup> /min each, with max. 200 bar (3000 PSI)			generally only within approved research projects	gpf@dfg.de	
Germany	FS Maria S. Merian	36 m <sup>3</sup> /min == 3 x Sauer Compressors with 12 m <sup>3</sup> /min each, with max. 200 bar (3000 PSI)			generally only within approved research projects	gpf@dfg.de	
Germany	FS Polarstern	31 m <sup>3</sup> /min == 1 x LMF Compressor with 31m <sup>3</sup> /min with max. 150 bar (2000 PSI)			generally only within approved research projects	polarstern-coordination@awi.de	
Japan					Limited to Pacific work?		
Korea	Tamhae II					KIGAM	3D?
Korea	Tamhae III					KIGAM	3D, expected to built by 2022

# UNOLS VESSELS

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<b>Ships/Facilities</b>
UNOLS Vessels
Small Research Vessel Inventory
UNOLS-Designated Facilities
Other Facilities
UNOLS Equipment Inventory
Greening the Fleet Initiative

OPERATING INSTITUTION	SHIP	OWNER	LENGTH (FT)
<b><u>GLOBAL CLASS SHIPS</u></b>			
University of Washington	THOMAS G. THOMPSON	Navy	274
Scripps Institution of Oceanography	ROGER REVELLE	Navy	274
Woods Hole Oceanographic Institution	ATLANTIS	Navy	274
University of Alaska Fairbanks	SIKULIAQ	NSF	261
Lamont-Doherty Earth Observatory	MARCUS G. LANGSETH	NSF	235

Can this information be hosted and maintained by UNOLS on the web site?