## German Research Vessels POLARSTERN • SONNE • METEOR • MARIA S. MERIAN **POSEIDON • ALKOR • HEINCKE • ELISABETH MANN BORGESE**



launched:	1982
length:	118 m
beam:	25 m
crew/science:	44/53

- Renewal of 4 lifeboats and adaptions according to Polar Code.
- Renewal of scientific cold stores and maintenace work in view of the
- age of the vessel.
- Preparation for MOSAiC project.
- Arctic and antarctic expeditions with supply of German Neumayer-Station III in Antarctic.
- Ongoing shipyard tender process for built of POLARSTERN II.



## **RV METEOR**



- launched: length: beam:
- Overhaul of all four main engines, steering gear, retractable bowthruster and propeller shaft.
- Conversion of the refrigeration systems to a climate-friendly refrigerant (GWP<1400/1800).
  - Renewal of EM710 RX-transducer and clean seawater pump.
  - Various steelworks and overhauls of hull and tank coatings as

## **RV SONNE**

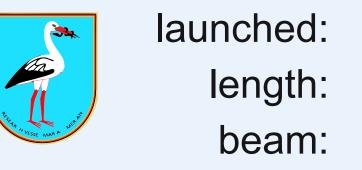
	launched:	2014
	length:	116 m
	beam:	21 m
Cre	ew/science:	32/40

Planned drydock in July 2019 (Singapore), incl.:

- Overhaul of two main engines and both rudder engines.
- Cleaning and overhaul of hull and tank coatings.
- Final processing of guarantee-claims.
- Condition assessment after first five years of operation. • First class renewal.



## **RV MARIA S. MERIAN**



### Planned drydock in Sept/Oct 2019 including:

- Overhaul of two main engines and all main drive inverters.
- Exchange of one pod-drive against an overhauled one.
- Blasting of hull and some tanks and renewal of the coating.
- Hard- and Softwareupgrade on the DP-System.
- Clean seawater system overhaul.

#### crew/science: 33/30

1986

98 m

16 m

well as on the interior, hydraulic and electrical systems.

#### crew/science: 23/23

2006

95 m

19 m

1990

55 m

12 m

12/12

• EA600 transducer installation.



## **RV POSEIDON**

launched:	1976
length:	61 m
beam:	11 m
crew/science:	15/11

crew/science:

## • Overhaul of diesel generators (12.000 hours service).

- Welding of pittings in the bilge of the engine room.
- Renewal of the probe container for the fluorometer, sound velocity and temperature probe.
- Repair works at the main crane.
- Decommissioning planned for 2020.
- One single new research vessel is supposed to replace both **RV POSEIDON and RV METEOR.**







launched:

crew/science:

length:

beam:

**RV HEINCKE** 

# ... $\sim$ $\sim$ $\sim$ $\sim$ $\sim$

- Extensive renovation of all cabins, corridors and wet cells.
- Renewal of the deck's coating.
- First big overhaul of the exhaust treatment (particle filter + SCR).
- Installation of new fiber optic gyro compass to comply with the new Polar Code.
- Video encoder installed for video streaming inside of ship's network.
- Overhaul of all three main engines.



## **RV ALKOR**

- launched: 1990 length: 55 m beam: 12 m crew/science: 11/12
- Overhaul of the main crane. • Extension of the function of the radar equipment. • Renewal of the navigation system. • Overhaul of the fresh-water tanks. • Repair works at the heating system.
  - · Repair works at the trawl winches.

## **RV ELISABETH MANN BORGESE**

launched: 1987 length: 56 m beam: 11 m crew/science: 11/12

- Disassembly of R2Sonig multibeam for repair by manufacturer.
- Renew of DOLOG.
- Partial renovation of drinking water pipes.
- Short docking for class renewal (1 week) in January 2019.
- Bigger overhaul planned at the end of 2019.











