

# MARUM ROV Training Course

(2.4.2014 - 4.4.2014)

MARUM - University Bremen

Leobener Straße

28359 Bremen / Germany



**Volker Ratmeyer & Nicolas Nowald**

**Participants:**

**Roger Johansson, Hans Olsson, Helen Sjöde Veerman, Lisbeth  
Johnsson, Tom Leymann, Siefke Fröhlich, Till von Wahl, Vincent  
Vittori**

We will meet in **ROOM 0190** which is located on the ground floor. When you enter the MARUM entrance hall, pass the elevator on your right hand side. It is the last room to the right before the staircase.

Nico's mobile: 0049-176-52865914

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## **PROGRAM:**

### **Wednesday 2.4.2014, Room 0190**

Begin: 12:00

#### **Welcome**

Who is who  
Workshop Program

#### **MARUM activities / General Introduction**

Research  
Infrastructure  
Underwater vehicles and applications

#### **Examples for scientific ROV operations**

Cherokee 1000 m Observation class ROV (Observation & Light sampling (Gas sampling))  
QUEST 4000 m Work class ROV (Deep Sea Research, Elevator, 2-wire Operation, Cork Operation, Hydrothermal sampling)

#### **Discussion: Situation in Kristineberg, Expectations from Workshop**

**Movie:** HDTV Cinema Best of

ca. 15:00 Hall 2

coffee break

Arrange 4 groups each 2 persons

#### **Block 1: Tour through the MARUM II Maintenance Hall**

Groups 1-4	Short Infos about SEAL, H-ROV, MeBo
Group 1 & 2	Presentation of QUEST (VR)
Group 3 & 4	Presentation of Cherokee (NN), switch groups

End: ~18.00

### **Thursday 3.4.2014, Hall 2 and Room 2060**

Begin: 09:00

9-11:00 h Hall 2

#### **Block 2: Manipulation I**

Group 1 & 2	Practice with the 5 function Manips HLK-EH5 and ECA-CSIP ARM5 (NN)
Group 3 & 4	Practice with the Rigmaster, Orion 7R and 7P in the simulation (VR), switch groups

Coffee break

11-13:00 h

**Block 3: Manipulation II and Operation**

Group 1 & 2	Practice with the Orion 7R (Pushcore sampling, T-Lance) (NN)
Group 3 & 4	Training Mission in the QUEST-SIM (VR)

ca. 13:00 -14:00 lunch

14-16:00

**Switch groups Block 3**

coffee brake

16:30 – 18:00 Room 2060

**Block 4: Dive preparation, MOB & payload integration class workshop**

Group 1 -4 (NN)	Dive preparation, - Mission planning with the science party - Meeting with the bridge - Navigation Maps - Pre Dive Check - Dive and Sample Logging - Copyright agreement
Group 1-4 (VR)	MOB and operations at sea - Adaption and mobilization of a ROV System on a research vessel - Payload and Sensor integration - Team structure and shifts - Organizing onboard repairs, maintenance

End: ~ 18.00

**Friday: 4.4.2014, Hall 2, outside tank, Room 0190**

Begin: 08:00

**Block 5: Training dive and further training of choice**

Group 1 & 2	Cherokee Training dive in the outside tank (NN) Dive Preparation (Pay out tether, Pre-Dive Check) Deployment Mission: detect gas, mark position, sample gas Recovery
Group 3 & 4	Training of choice (SIM or Manip) (VR)

End: ~12.00