

HAWAII UNDERSEA RESEARCH LABORATORY  
QUICK LOOK REPORT MISSION NO. P5-101

## MISSION STATUS

Location: Kona, Hawaii  
Mission Date: Aug 29, 1988  
Maximum Depth: 890 m.  
Project Title: Secondary Metabolites of Deep Sea Invertebrates  
Project Leader: Paul H. Scheuer  
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Observers: Dr. Anthony Carroll, Mr. Kit Lee  
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Scientific Data Acquired : Prepare an abstract outlining your objectives, techniques, findings, etc.

In order to answer the question whether genetic or environmental factors determine the make-up and chemistry of invertebrate secondary metabolites we attempt to collect a broad spectrum of soft bodied animals, sponges, mollusks, coelenterates, tunicates, whose shallow water chemistry has become familiar to us.

The mission was all together unsuccessful, due to a power failure while we were at approximately 850 m. (suspected flooded batteries).

During the mission we were able to collect one species of sponge and one species of "nudibranch" which we were unable to retain. The major part of the dive was transversing drop-offs on which collecting was extremely difficult.

## MISSION EVALUATION:

## Limitations, failures, or operational problems noted:

The new lid for the collecting basket was a great success. It was easy to open and close and as a result we were able to collect free swimming organisms. However, a power failure at approximately 850 m. resulted in an emergency ascent which led to an uncontrolled surfacing. The impact of this surfacing resulted in the lid of the basket opening momentarily with the water surge, and all specimens were lost.

## Recommendations for corrective action or improvement:

Al suggested that if the collecting arm had been placed immediately on top of the basket lid the lid probably would have remained closed.

In your opinion, did the mission essentially achieve its purpose? Compare actual work accomplished with the work that was expected to be accomplished.

Since all specimens were lost, the mission did not achieve its purpose.

## List specimens or samples collected on the mission.

3 specimens of a glass sponge (collected at approximately 340 m.)

4 specimens of the purple "nudibranch" collected at approximately 800 m.)

All were lost at the surface.

## DATA RELEASE

Data may be retained by the project leader for up to 2 years after the mission date with the following exception. NOAA may request to use photos for publication or publicity purposes at any time.

Fill in the appropriate statement below and sign this form.

I hereby release the data archived by HURL for public consumption following mission P5-101  
(project title) held on Aug 29, 1988 (date) in the following way:

- a. CTD data by Sept 1, 1988 (date)
- b. voice transcripts, video, and still camera film by Sept 1, 1988 (date)
- c. other Sept 1, 1988 (date)
- d. I will give my written consent to individuals wishing to use these data prior to the above dates depending on the nature of the request(s).

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Project Leader