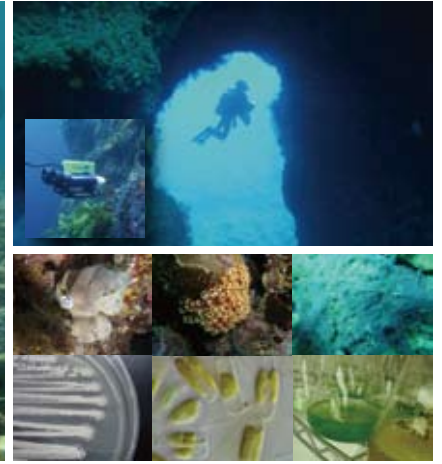
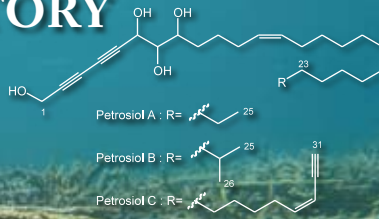


# Screening Service using Marine Bioresources

## Challenges of OPBIO FACTORY using Marine Bioresources



## Bioprospecting

### Refined techniques for bioresource sampling accumulated through marine survey

- OP BIO FACTORY was established as a spin-off from a marine survey company, Ocean Planning.
- Sampling is conducted based on the techniques accumulated through marine survey.
- Prompt supply of fresh samples are available.

### Distinct and Divergent Marine Bioresources

1. Macroorganisms (poriferans, soft corals and other invertebrates; macroalgae)
2. Microbes (actinobacteria, bacteria, lactic acid bacteria, filamentous fungi, and yeast)
3. Microalgae (eukaryotic microalgae and cyanobacteria)
4. Natural compounds derived from marine macro/microorganisms

### ON-TIME SCREENINGS



Various assay systems in pharmacy, cosmetic, food, chemical, and environmental areas

In addition to our bioresource libraries, freshly-isolated marine microbes are used for screenings.

- On-time supply of fresh isolation sources
- 10000 to 25000 isolates/day are evaluated by various assays.
- Positive screenings
- Compounds purified from cultures of the strains are rapidly identified using in-house and AIST' s databases.

**Maximum throughput: 1 million/year**

Our refined marine survey techniques realized the high throughput screenings!

### Flow of Research & Development

Collection & Selection of Bioresources

Incubation, Extraction

Sample preparation for screening

Assay

Isolation & Identification of Compounds



Ishigaki Lab.

Uruma Lab.



We meet client' s needs of seed survey in pharmacy, cosmetics, food, chemicals, environment, energy, and other areas (source supply, funded/joint researches).

### Steps of the Screening Service

- Hearing → Research plan proposal → Agreement → Establishment of assay system → Screening → Submission of products/report



Okinawa Natural Products  
**OP BIO Factory**