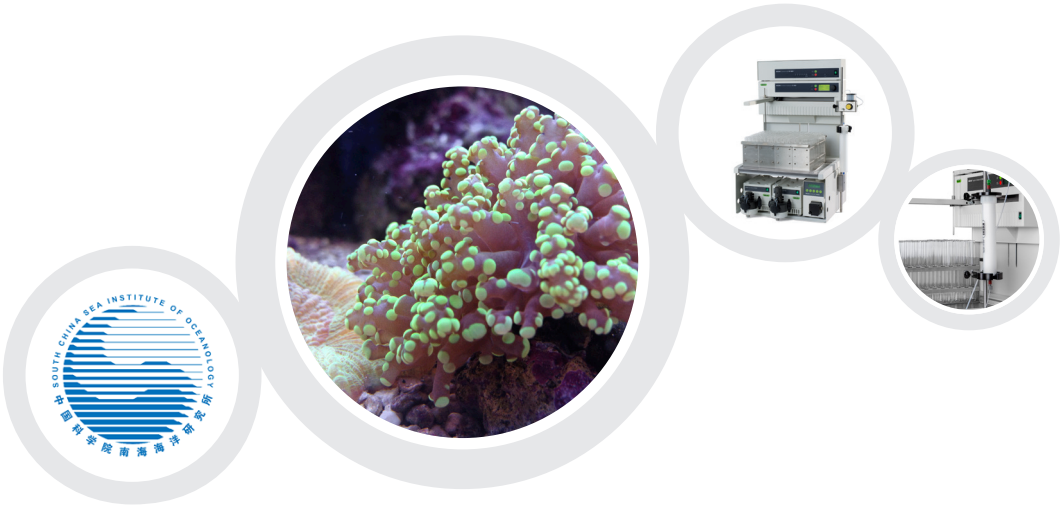
Case Study
Discovery and development of sea drugs



Customer: South China Institute of Oceanology, China

The South China Sea Institute of Oceanology (SCSIO) is one of the largest marine research institutes in China and one of the knowledge innovation institutes under the Chinese Academy of Sciences (CAS). The research at SCSIO focuses on the interaction among hydrosphere, lithosphere, atmosphere and biosphere as well as their structures and evolutions in the tropical marginal seas to understand their environment and to exploit their marine resources.

Application: Separation and purification of natural compounds

Several compounds isolated from various marine organisms (microorganisms, algae, fungi, invertebrates, and vertebrates) are currently under study at an advanced stage of clinical trials, either directly or in the form of analogues deduced from structure-activity relationships. Some of them have already been marketed as drugs. The goal is to efficiently separate and purify different natural compounds from marine organisms to find components with high biological activity.

Equipment: Sepacore®

For highly effective separation and purification of natural compounds from marine substances, the filling ODS 50 um YMC was used, but the pressure could be very high. BUCHI Sepacore® can provide 50 bar solutions help us solve this problem. Flexible injection systems can load up to 100g of sample.

Benefit / Conclusion: Unsupervised work, robust and durable

Compact design, high degree of flexibility, preparative detectors, easy to operate, no down-time, good visibility, wide range of flow rates, flexible injection systems, variety of column sizes. BUCHI Sepacore® can be used to achieve results in a variety of separation and purification processes.

"The easier, more flexible, unsupervised instrument requires less time and manpower to do efficient research."
Dr. XianWen Yang, Professor of South China Institute of Oceanology, China

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