



**Sea & Sun Technology GmbH**  
 Erfurter Strasse 2  
 D-24610 Trappenkamp, Germany  
 Tel.: +49 (0) 4323/91 09 13  
 Fax: +49 (0) 4323/91 09 15  
 E-mail: email@sea-sun-tech.com  
 www.Sea-Sun-Tech.com

**AMT Analysenmesstechnik GmbH**  
 Joachim-Jungius-Strasse 9  
 D-18059 Rostock, Germany  
 Tel.: +49 (0) 381/40 59 380  
 Fax: +49 (0) 381/40 59 200  
 E-mail: amt-gmbh@t-online.de  
 www.amt-gmbh.com



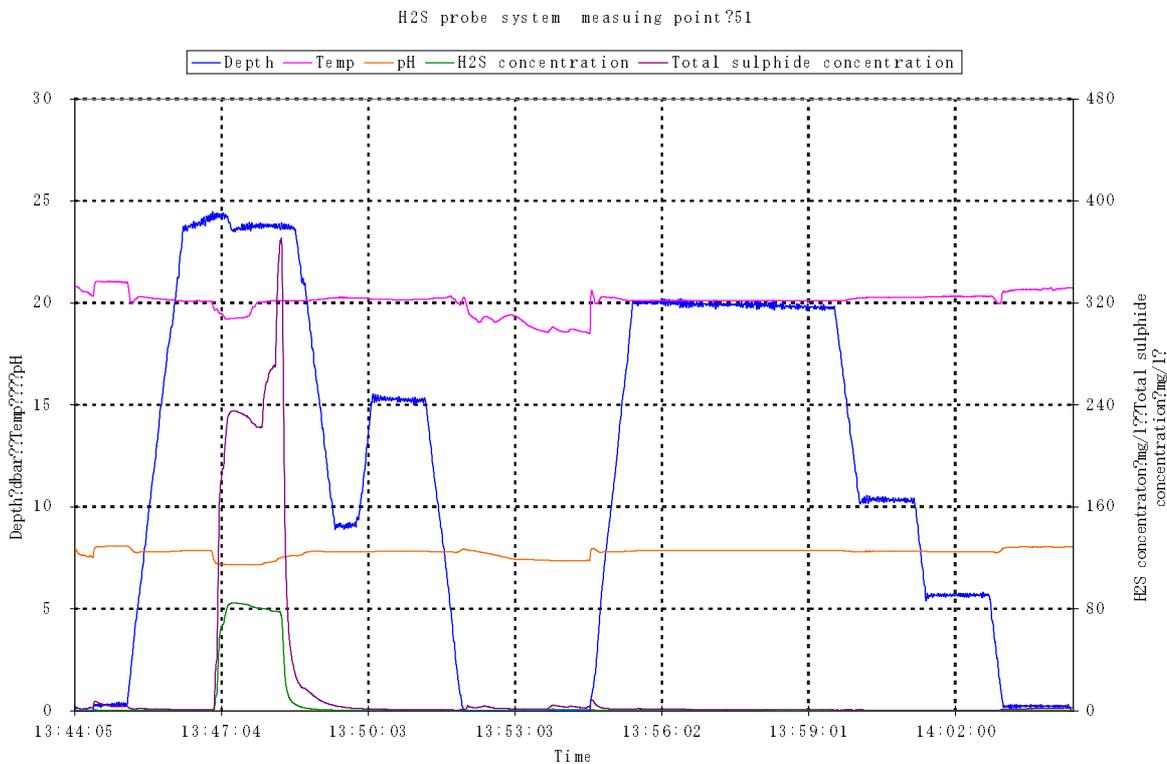
## In-situ Determination of H<sub>2</sub>S/Sulphide in the Bay of Tokyo

The determination of **total dissolved sulphide** (sum of dissolved H<sub>2</sub>S, HS<sup>-</sup> and S<sup>2-</sup>) is one of the most important parameters for the analysis of **natural waters** and **waste water** in industry, as for instance in the Bay of Tokyo.

It is necessary to observe the total sulphide concentration, dissolved in water, to avoid any danger because of the evaporation of the very toxic H<sub>2</sub>S. H<sub>2</sub>S is able to block oxygen transporting enzymes leading to the death because of inner suffocation. On the other hand, the total dissolved sulphide concentration is an interesting parameter for scientists of several scientific departments. They use this parameter for the assessment of natural lakes, but also for instance to understand volcanic activities.

But due to a lot of the hydrogen sulphide's inconvenient chemical properties (e.g. high chemical reactivity, oxidation in the presence of oxygen, fast concentration exchange between the liquid sample and the gaseous phase above), the determination is difficult. Even though the sampling and the determination have been done very carefully, the results are uncertain and mostly disappointing.

All these disadvantages could be avoided, if the **Submersible H<sub>2</sub>S/Sulphide Probe** is used for accurate and reliable *insitu* determination in depths of up to 100 m. The probe was tested in 2002/2003 for a long time in the Bay of Tokyo in Japan with good results as presented by our Japanese customer TOHO Mercantile Co. Ltd.



### Special Features:

- Sensors for H<sub>2</sub>S, T, pH and depth
- 3 types of H<sub>2</sub>S sensor available
- Very easy sensor exchange
- Windows based software for display
- Free selection of displayed parameters
- Titanium made housing and protection cage
- Subconn titanium connector
- Small dimensions (48 mm x 450 mm)
- Low weight of 1 kg
- Direct reading or memory probe
- Low running costs for sensor replacement

