

## **Relationship between Macrobenthic Fauna and Sediment Condition in the Seto Inland Sea**

**Kazuhito Murakami<sup>(1)</sup>, Hiroshi Takano<sup>(2)</sup>, Yasuo Katayama<sup>(2)</sup>, Yasuo Ogino<sup>(2)</sup>, Tadashige Mori<sup>(2)</sup>, Osamu Nagafuchi<sup>(3)</sup>, Yukio Komai<sup>(4)</sup> and Tohru Seiki<sup>(5)</sup>**

*<sup>(1)</sup> Chiba Institute of Technology, 2-17-1 Tsudanuma, Narashino, Chiba 275- 8588 Japan Tel +81-47-478 0452 Fax +81-47-478 0474*

*e-mail: QZF14776@nifty.ne.jp / sany3@ce.it-chiba.ac.jp*

*<sup>(2)</sup> Okayama Prefectural Institute for Environmental Science and Public Health, 739-1 Uchio, Okayama, Okayama 701-0298 Japan*

*<sup>(3)</sup> Fukuoka Institute of Health and Environment Science, 39 Mukaido, Mukaisano, Dazaifu Fukuoka 818-0135 Japan*

*<sup>(4)</sup> Hyogo Prefectural Institute of Environmental Science, 3-1-27 Yukihirocho, Kobe, Hyogo 654-0037 Japan*

*<sup>(5)</sup> Hiroshima Prefectural Institute of Public Health and Environment, 1-6-29 Minamimachi, Minami-ku, Horishima 734-0007 Japan*

### **Abstract**

This study was conducted to obtain the data about the quantity of macrobenthos in the Seto Inland Sea and to assess the sediment condition by the change of macrobenthic fauna in recent 10 years. As results, 1) The macrobenthos mainly observed in sediment samples, were recognized as the organic pollution indicator, 2) The species composition, the individual numbers, and the value of the diversity index of macrobenthos tended to become poor in these 10 years, 3) The Seto Inland Sea was considered to be in the state which environmental condition is shifting from polluted condition to further polluted condition, 4) From the viewpoint of the environmental assessment by macrobenthic fauna, the sediment condition of the Seto Inland Sea was considered to be rather getting worse, were made clear.