

## **Research regarding estrogens substances in rivers.**

### **[ Point ]**

There is concern of endocrine-disrupting compound effect on human and other organisms; it is also a social issue. We examined the assessment method using genetically-modified yeast, as an effective assessment method of comprehensive estrogen effect in river water, as well as grasped the concentration level of estrogen-like activity and the actual condition, such as its seasonal changes. As a result, we verified that average estrogen-like activity rate was 17β, it equivalents to 0.8ng/L of estradiol activity rate, and also, some characteristics, such as, estrogen-like activity is high in wintertime, and low in summertime. Moreover, we examined contributory substances of estrogen-like activity, and clarified that regarding estrogen-like activity in river water, there are a lot of unexplainable things from the standard chemical of estrogen specific activity rate at present.

Keyword : environmental hormone , estrogen , genetically-modified yeast , estrogen-like activity , river water