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## Articles

1. Carolimetric Studies on Water Absorption on Low Moisture Foods Teruyuki FUJITA and Kisook KIM

2. Effect of Water State on Freezing and Ice Crystal Formation in Food Osato MIYAWAKI and Toshimasa YANO

 Compounds Protecting L- Dried Cultures from Mutation (III) : Effect of Cysteine on Prevention of Mutation in L-Dried E. coli Cells
Takeshi SAKANE, Ko IMAI and Isao BANNO

 Impedance and Conductance Methods for Determining Acid-Producing Activity of Lactic Acid Bacteria and Study of Effect of Freeze-Drying on the Activity
Toshiki MORICHI, Tokuzo KITADA, Ichiro SUZUKI, Keiko S. YOSHIDA and Misao HARUTA

5. Viability of *Xanthobacter autotrophicus* after Freezing and Freeze-drying Kazuo KIMURA, Kaname SAIDA and Yoshihiro NAKAMURA

6. Preservation of Heterotrophic Bacteria Isolated from Activated Sludge Kazuo KIMURA and Eiichi MIKAMI

7. Preservation of Plant Pathogenic Fungi by Drying and Freezing Methods Yukio TSUCHIYA

8. Technique for Long-Term Preservation of Protoplasts of Fungi in Liquid Nitrogen Teruyoshi HASHIBA, Yasuyuki TETSUKA and Takahito SUZUI

## Seminar on "Freezing and Freeze-Drying and its Applications II"

## **Special Lecture**

• Cryosurgery : State of the Art, Trends and Prospects Shigeo TANAKA

Articles 1. Cryogenic Crushing Toshihiko MATSUBARA 2. Natural and Artificial Antifreeze Proteins : Their Structures and Functions Soichi ARAI

3. New Foodstuff Developments by Freeze-Drying Methods Toshio SAKUMA

4. Mechanisms of Stable Maintenance of Plasmid in Bacteria Sota HIRAGA

5. Accelerated Test for Stability of Freeze-Dried Bacteria Mitsuo TAKANO