

Special lectures

1. Archaeological Remains from Fujinoki Kofun

Michio MAEZONO

2. Study on Conservation Science of Cultural Properties

Masaaki SAWADA

Articles

1. Alteration of the Biological Activities of Coagulase-negative Staphylococci Resulted from Storage by Freezing and Freeze-drying

Toshichika OHTOMO, Tetsuo YAMADA and Kosaku YOSHIDA

2. Damage of Cell Membrane of *Aquaspirillum metamorphum* as a Result of L-drying and a Role of Ethylenediamine as a Protectant

Takeshi SAKANE

3. Sensitivity to Freezing Storage of *Pseudomonas aeruginosa* Phage 24 (IFO 20050)

Ko IMAI

4. Studies on Mechanism of Freezing Injury by Cryo-scanning Electron Microscope and Freeze-replica

Seizo FUJIKAWA, Toshiaki SUZUKI and Shigekata SAKURAI

5. Extracellular Glass Formation Explains Cryoprotection by Polymers

Tsuneo A. TAKAHASHI, Sadayoshi SEKIGUCHI, Allen G. HIRSH, Robert J. WILLIAMS and Eric F. ERBE

6. The Effect of Surface Active Agents on the Hydration of Protein

Naofumi HANAFUSA

7. The Physico-chemical States of Salts in the Freeze- concentrated Phosphate Buffer Mixtures

Norio MURASE and Felix FRANKS

Lectures presented at the Seminar of Japanese Society for Research of Freezing and Drying: "Maintenance of Biological Genetic Resources"

General View

1. The Role and the Function of Culture Collections

Kazuo KOMAGATA

Microorganism

1. Microorganism Gene Bank, Ministry of Agriculture, Forestry and Fisheries

Kazuo MATSUMOTO

2. Preservation of Plant Pathogenic Bacteria and Fungi

Etsuji HAMAYA

3. Preservation of Microorganisms in National Institute of Animal Health

Takayasu TAKIZAWA

4. The Preservation of Patent Microorganisms

Yoshihiro NAKAMURA

5. Maintenance of Algae

Makoto M. WATANABE

6. Antimicrobial Test of Pharmaceutical Products with Frozen and Stored Inocula

Itaru SAKAI, Shigenori YAMADA, Kana SATO, Yutaka YOSHIDA and Naosuke SETO

7. Preservation of Protozoan Cultures

Mihoko TAKAHASHI

Animal

8. Study on Cryopreservation of Pig Embryos

Toshiyuki KOJIMA, Kenji ENDO, Yukio UZISATO, Yukihiro FUJINO, Tsuneo TOMIZUKA and Norihiko OGURI

9. Preservation of Cultured Animal Cells

Tadao OHNO

10. The Establishment of Well-defined Laboratory Primates as Genetic Resources

Keiji TERAOKA and Shigeo HONJO

Plant

11. Induction of Freezing Tolerance in Plant Cells

Masaya ISHIKAWA

12. Storage and Conservation of Medicinal Plants

Motoyoshi SATAKE

13. Plant Collection and Conservation in Botanical Gardens

Syo KUROKAWA