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sonance spectrum of 6-O-(3-acetamido-3,6-dideoxy-α-d-glucopyranosyl)-N,N′-diacetyl-
deoxystreptamine which was prepared from mono-O-tosylated derivative via de-
oxyiodo derivative.

The relationship between the structural and biochemical characteristics of these
aminoglycosides were discussed.

**Grafting of Vinyl Monomer onto Natural Polymer**

Takatoshi KURATSUJI (倉 辻 孝 俊)

The main purpose of this research is the preparation of grafted starch in the
form of latex.

A mixture of potato starch to water treated at 100°C was heated for one hour
in an autoclave at 145°C and ethyl acrylate—methyl methacrylate mixture (EA-
MMA) was added to this solution. Polymerization was carried out under nitrogen
using ceric salt as an initiator. On polymerization for two hours, over 98% con-
version was obtained. The average particle size of the latex thus prepared was
about 0.08 μ and the latex was found to be of a good storage stability.

The relation between the film forming ability of the latex and the three com-
ponents of the latex polymer was examined. The resulting latices gave continuous
films under the drying temperature of 20°C. The films were neither completely
dissolved nor remained unaffected with water, acids, alkalis and many organic
solvents, except in dimethyl sulfoxide. The extractants with hot water and with
acetone were found to be free starn and ungrafted EA-MMA copolymer, respec-
tively. The analytical data showed the existence of the graft copolymer in the
latex. The latex films were very fragile, so the mechanical properties of the
latex films were deduced from those of the paper coated with the latex.

The present study was proved successful in an attempt to prepare a latex of
modified starch having new properties which were found neither in starch nor in
EA-MMA copolymer latex.

**Study on Electro-Conductivity of Plastic Films**

Shintaro KUSUMI (久 住 真 太 郎)

It is well known that cellulose acetate possesses a good electrical insulating
property and film forming nature, but it shows electro-conductivity on the addition
of inorganic salts.