

The Second Seminar on Pigment Systems and Reaction Centers of Photosynthetic Bacteria

(Jun. 10, 1994, NIBB, Okazaki)

Opening remarks K. Matsuura (Tokyo Metropol. Univ.) (9:00-9:05)

Session I. Reaction center Chairperson S. Itoh (NIBB)

M. Miller (Odense Univ.) (9:05 - 9:35)
Low-temperature spectroscopy of RC-FMO complex from *Chlorobium tepidum*.

N. Kusumoto (Waseda Univ.) (9:35 - 9:40)
Some properties of reaction center from the green sulfur bacterium *Chlorobium tepidum*.

H. Oh-oka (Osaka Univ.) (9:40 - 9:50)
Characterization of the *Chlorobium limicola* reaction center complex which consists of two subunits.

M. Yoshida (Tokyo Metropol. Univ.) (9:50 - 10:00)
Photo-oxidation of RC-bound low potential cytochrome *c* in *Rhodospseudomonas viridis* under physiological conditions.

J. Miyake (NAIR) (10:00 - 10:10)
Orientation of RCs for photo-electric responses.

J. Goc (NAIR) (10:10 - 10:15)
Reconstitution of RC and BChl for Artificial PRU.

Coffee break (10:15 - 10:40)

Chairperson K. Shimada (Tokyo Metropol. Univ.)

Y. Shimada (Tokyo Inst. Tech.) (10:40 - 10:55)
Regulation of the *puf* operon expression in *Rhodobacter sphaeroides*.

K. Inoue (Kanagawa Univ.) (10:55 - 11:10)
Redox responding sensory transduction components responsible for controlling photosystem in *Rhodobacter capsulatus*.

K.V.P. Nagashima (Tokyo Metropol. Univ.) (11:10 - 11:20)
Horizontal transfer of photosynthetic genes in purple bacteria.

General Discussion (11:20 - 11:45)

Lunch (11:45 - 13:00)

Session II. Pigment system Chairperson T. Nozawa (Tohoku Univ.)

R. P. Cox (Odense Univ.) (13:00 - 13:30)
Bacteriochlorophyll *c* homologs in *Chloroflexus aurantiacus*: Distribution and possible function.

K. Uehara (Osaka Prefecture Univ.) (13:30 - 13:45)
Formation and photoenergy transfer of higher aggregates of bacteriochlorophyll *c* in the presence of carotenoids.

K. Matsuura (Tokyo Metropol. Univ.) (13:45 - 13:55)
Spectral forms of bacteriochlorophyll *c* in chlorosomes and artificial pigment-lipid aggregates.

Z.-Y. Wang (Tohoku Univ.) (13:55 - 14:15)
Solid state high resolution NMR study on the structure of chlorosomes and bacteriochlorophyll *c* aggregates.

Y. Koyama (Kwansei Gakuin Univ.) (14:15 - 14:30)
Transient Raman and absorption spectroscopy of BChl *a*: solvent effects.

Coffee break (14:30 - 14:50)

Chairperson Y. Koyama (Kwansei Gakuin Univ.)

M. Kobayashi (Tohoku Univ.) (14:50 - 15:10)
Interaction between photosynthetic pigments analyzed by absorption and magnetic circular dichroism spectra of reaction center, antenna pigment and pigment aggregates.

K. Shimada (Tokyo Metropol. Univ.) (15:10 - 15:20)
Reconstitution of carotenoids in LH1 complex of purple bacteria.

K. Iida (Nagoya Inst. Tech.) (15:20 - 15:30)
Reconstitution of polypeptides-bacteriochlorophyll (LH-Bchl *a*) in the light-harvesting complex of photosynthetic bacteria.

S. Takaichi (Nippon Medical School) (15:30 - 15:45)
Novel carotenoids from photosynthetic bacteria.

M. Mimuro (NIBB) (15:45 - 15:55)
Physical basis for function of carotenoids in photosynthesis.

General discussion (15:55 - 16:20)

Closing remarks M. Mimuro (NIBB)