Program of the 10th Annual Meeting of the Nano Biomedical Society

The 10th Annual Meeting of the Nano Biomedical Society

Date: March 9-10, 2015

Venue:

EcoTopia Science Institute, Nagoya University

President at the meeting:

Prof. YAGI, Shinya (EcoTopia Science Institute, Nagoya University)

March 9 (Mon)

○Keynote lecture 1
Paramecium, a eukaryotic unicellular organism:
Do their marvelous cellular functions open a new field in nanotechnology?
Prof. Nobuyuki Haga (Senshu University of Ishinomaki)

○Keynote lecture 2
Biofunctionalization of metals by control of surface and structure in nano-meter level
Prof. Takao Hanawa (Tokyo Medical and Dental University)

○Young special lecture
Application of oxide nanotubes with controlled higher-order structures
Dr. Hisakata Nishida, Tohru Sekino (Osaka Univetsity)

Oral Presentation 1
Poster Presentation

Get-together Party (8F Meeing Room of EcoTopia Science Institute)

March 10 (Tue)

Planning lecture 1
Planning lecture 2
Oral Presentation 2

Keynote lecture 1

Paramecium, a eukaryotic unicellular organism:
Do their marvelous cellular functions open a new field in nanotechnology?

Nobuyuki Haga
Senshu University of Ishinomaki

Young special lecture

Application of oxide nanotubes with controlled higher-order structures

○Hisakata Nishida, Tohru Sekino
Osaka Univetsity

Keynote lecture 2

Biofunctionalization of metals by control of surface and structure in nano-meter level

Takao Hanawa
Tokyo Medical and Dental University

Oral presentation 1

O1-1

Three dimentional culture of iPS cells (253G1) under pseudo-microgravity by RWV bioreacter

○Toshimasa Uemura[1], Yui Onomura[1], Mizuki Tayama[1], Hanhsiu Hsu[1], Takashi Tsumura[2]

[1]Nanosystem Res. Inst, AIST, [2]J-TEC Co., Ltd.

O1-2

Agene structure of ciliary memraine protein essentian for sexual cell recognition in *Paramecium caudatum*

Yuta Chiba, ○Nobuyuki Haga

Senshu University of Ishinomaki

O1-3

Development of A-B effect phase and obsevation of biological sample

○Hirohisa Niimi[1], Takayoshi Tanji[2], Jiro Usukura[3]

[1]Graduate School of Engineering, Nagoya University, [2]EcoTopia Science Institute, Nagoya University, [3]Graduate School of Science, Nagoya University

O1-4

Design of photoresponsive microcapsule made by DNA in conjuction with azobenzene modification

○Yukiko Kamiya[1,2], Yoshinobu Yamada[1], Takahiro Muro[1], Kazunori Matsuura[3], Hiroyuki Asanura[1]

[1,2] Nagoya University, [2]Tottori University

Poster presentation

P-1

Cell viability of nanomaterial-mixed conditions
-Zinc oxide nanoparticles and Bis-GMA-

○Tsubasa Shirai, Koichi Imai
Osaka Dental University

P-2

Effect of PC modification for adsorption reaction between Au Nanoparticles and L-cysteine

○Chie Tsukada[1], Takuma Tsuji[1], Koichi Matsuo[2], Toyokazu Nomoto[3], Takaaki Mural[4].
Galif Kutluk[2], Hirofumi Nameki[4], Satoshi Ogawa[1,3], Tomoko Yoshida[3,5], Shinya Yagi [2,3,5]
[1]Nagoya University, [2]Hiroshirtla University, [3]AichiSR, [4]Aichi Prefecture, [5]Nagoya University

P-3

Visible-light regtllation of gene Expression by DNAzyme

○Hideaki Ooi[1], Toshiki Takagi[1], Yukiko Kamiya[1,2], Hiroyuki Asanuma[1]
[1]Graduate School of Engineering, Nagoya University, [2]Eco Topia Science Institute, Nagoya University

P-4

Osteconductivity improvement by surface modification of organic biomaterials

○Kenta lgarashi[1], Kensuke Kuroda[2], Masazumi Okido[2]
[1]Dept. of Mater. Sci. & Eng., Nagoya Univ., [2]EcoTopia Sci. lnst., Nagoya Univ.

P-5

Formation of titanate coatings with smooth surface on titanium and their Osteoconductivty

○You Saito, Kensuke Kuroda, Masazumi Okido
Nagoya university

P-6

Protein adsorptivity of titanium with various osteoconductivity and surface hydrophilicity

○Yuki Yamaguchi[1], Kensuke Kuroda[2], Masazumi Okido[2]
[1]Dept. of Mater. Sci. & Eng., Nagoya Univ., [2]EcoTopia Sci. Inst., Nagoya Univ.

P-7

Analysis of interaction between pre-miPNA and Dicer by usiing novel photoreactive group

○Kouki Tsuda[1], Kenji Yoshida[2], Tetsuya Doi[1], Yukiko Kamiya[1,2], Hiroyuki Asamura[1]

[1]Graduate School of Engineering, Nagoya University, [2]EcoTopia Science Institute, Nagoya University

P-8

A skill of XAFS measurement system with He-path mechanism

○Shinya Yagi[1,2,3,4], Chie Tsukada[2], Yosuke Menjo[2], Satoshi Ogawa[2], Galif Kutlik[3], Toyokazu Nomoto[4], Takaaki Murai4

[1]Nagoya University (EcoTopia), [2]Nagoya University, [3]Hiroshima University, [4]Aichi SR

Planning lecture 1

S01-1

Study for physical process of decomposition of hydrated deoxyribose by desorbing ion mass analysis

○Kentaro Fujii, Yudai Izumi, Akinari Yokoya

Japan Atomic Energy Agency

S01-2

Study on molecular adsorption reaction between Au nanoparticles and L-cysteine under water environment by using soft X-ray

○Chie Tsukada[1], Koichi Matsuo[2], Toyokazu Nomoto[3], Galif Kutluk[2], Hirofumi Nameki[3], Satoshi Ogawa[1], Tomoko Yoshida[4], Shinya Yagi[2, 4]

[1]Nagoya University, [2]Hiroshima University, [3]Aichi Prefecture, [4]Nagoya University

S01-3

Application of Rh nanoparticle for development of non-invasive screening kit of colom cancer

○Shinya Yagi[1], Kazue Yamagishi[2]

[1]Nagoya University (EcoTopia), [2]FAP Institute

Oral presentation 2

O2-1

Possibility of scaffolds utilization by marine collagen in regenerative medicine

○Koichi Imai, Tsubasa Shirai
Osaka Dental University

O2-2

Osteoconducyity and protein adsorption of valve metals and alloys using hydro-thermal treatment

○Kensuke Kuroda[1], Masazumi Okido[1], Yuki Yamasgami[2]
[1]EcoTopia Sci. Inst., Nagoya Univ., [2]Dept. of Mater. Sci. & Eng., Nagoya Univ.

O2-3

p53 dependent bystander effects on the generation of mutagenic long-Iived radicals

○Jun Kumagai[1], Tomoyuki Yano[2], Genro Kashino[3]
[1]Nagoya University, [2]Oita University

O2-4

Solid-phase humic substances electrochemically enhancing various Rrducing reactions by anaerobic bactreria

Dongdong Zhang, Chunfang Zhang, Takanori Awata, ○Arata Katayama
Nagoya University

Planning lecture 2

S02-1

in-situ XAFS measurement under atmospheric pressure in soft X-ray region

○Shinya Yagi[1,2,3,4], Chie Tsukada[2], Satosh Ogawa[2], Galif Kutluc[3], Toyokazu Nomoto[1], Takaaki Murai[1]

[1]Nagoya University (EcoTopia), [2]Nagoya University, [3]Hiroshima University, [4]Aichi SR

S02-2

Structual and electronic state analysis of nitrogen doped TiO_2 samples

○Tokiko Yoshida[1], Satoshi Niimi[1], Toyokazu Nomoto[2], Shinya Yagi[1]

[1]Nagoya University, [2]Aichi SR

S02-3

XAFS analysis of the biological samples using Ee-path and transfer vessel

○Satoshi Ogawa[1], Chie Tsukada[1], Toyokazu Nomoto[2], Tomoko Yoshida[1,3], Shinya Yagi[1,3]

[1]Nagoya University, [2]Aichi Center for Industry and Science Technology, [3]EcoTopia Science Institute