

## **11<sup>th</sup> Annual Meeting of Nano Biomedical Society**

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“Reconstruction from Giant East Japan Earthquake Disaster and contribution of nano,  
bio, environmental technology”

URL: < <http://www.nanobio.jp/> >  
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Date: Oct. 31(Sat)-Nov. 1(Sun), 2015

Place: Ishinomaki Senshu University

Ishinomaki, Miyagi, 986-8580 Japan

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Conference Chair: Nobuyuki HAGA

Professor

Department of Biological Sciences, Ishinomaki Senshu University  
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The 11<sup>th</sup> Annual Meeting of Nano Biomedical Society will be held in Ishinomaki, which suffered from East Japan Giant Earthquake and the following Tsunami (big tide wave) disaster on March 11, 2011.

Ishinomaki is now under reconstruction for the revival but daily life is still in severe condition. The city struggles to realize the new society with the full education and high standard of medical care system in the natural environments and the economic zone available for the stable job chances in the future several tens of years.

The meeting aims to seek the role of nano, bio, and environmental technology to contribute to the reconstruction from disaster and set the special symposium open for citizens including students, in addition to the general presentations.

The researchers are welcome, not only from the fields of nano, bio, environments, but also all the other areas ranging from fundamentals to applications.

On the 2<sup>nd</sup> day, the optional tour is organized to inspect the tsunami-suffered area. This will give you the opportunity to watch the results of disaster, which might be the occasion to reconsider the research, objectives, contributions or voluntary tasks.

The attendance of all the people interested in these subjects and programs is highly welcome.

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**Schedule**

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Oct. 31: General session (oral) / Ishinomaki memorial symposium / Banquet

Nov. 1: General session (oral and posters) / Optional tour of the disaster-stricken district by tsunami

## **Program of the 11th Annual Meeting of Nano Biomedical Society**

**31 Oct.**

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General Session 1 (13:00-13:40)

O1-1

Rapid biofiesel fuel production from wet microalgae using the microwave irradiation technique

Yuichi Nosaka<sup>1</sup>, Tomoya Hasegawa<sup>2</sup>, Ryosuke Makabe<sup>1, 3</sup>, Ayanobu Sai<sup>1</sup>,  
Takashi Ota<sup>2</sup>, Hiroshi Sasaki<sup>2</sup>  
<sup>1, 2</sup> Ishinomaki Senshu University, <sup>3</sup> National Institute of Polar Research

O1-2

Electric current switching and nanotechnology

Noboru Wakatsuki  
Ishinomaki Senshu University

(Coffee Break)

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Symposium (14:00-16:30)

Ishinomaki Memorial Symposium (open to citizens and general people)

Greeting of the Conference Chair

Prof. Nobuyuki Haga (Ishinomaki Senshu University)

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S-1-1 (14:10-14:40)

Interaction of nanoparticles and biological body: Shadow and light

Fumio Watari  
Hokkaido Univ, Profresser Emeritus

S-1-2 (14:40-15:10)

Toward creative reconstruction from great east Japan earthquake

Hiroshi Kameyama  
Mayor of Ishinomaki city

(Coffee Break, 15:10-15:20)

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S-2-1 (15:20-15:50)

Regulation of cell differentiation by mitochondria: Possible application to cancer therapy

Yasuo Maeda  
Tohoku University

S-2-2 (15:50-16:20)

The cytoskeleton regulating the motility and the shape of cell.  
Jiro Usukura

Structural Biology Research Center, Graduate School of Science, Nagoya University

Discussions (16:20-16:30)

(Coffee Break, 16:30-16:40)

General Session 2 (16:40-17:20)

O2-1 (16:40-17:00)

Embryotoxicity test of biomaterials including human metabolic factor

Koichi Imai, Tsubasa Shirai, Hiroki Ishikawa  
Osaka Dental University

O2-2 (17:00-17:20)

Spectroscopic characterization of nano-structured materials

Akira Toshihara  
Ishinomaki Senshu University

Postor Session 1 (17:20-18:00)

P1

Establishment of new oral surgery treatment with the phototoxicity test

Hiroki Ishikawa, Koichi Imai  
Osaka Dental University

P2

Regenerative effects of scaffold applied with TCP nanoparticles

Hirofumi Miyaji<sup>1</sup>, Akihito Kato<sup>1</sup>, Kosuke Ogawa<sup>1</sup>, Erika Nishida<sup>1</sup>, Shusuke Murakami<sup>1</sup>,  
Saori Miyata<sup>1</sup>, Kohei Kawamoto<sup>1</sup>, Hiroko Takita<sup>1</sup>, Bunshi Fugetsu<sup>2</sup>,  
Toshihiro Iwanaga<sup>1</sup>, Masamitsu Kawanami<sup>1</sup>  
<sup>1</sup>Hokkaido University, <sup>2</sup>The University of Tokyo

Banquet (18:30-)

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1 Nov.

Postor Session 2 (10:00-10:30)

P3

Change of cytotoxicity level by mixing condition of nanoo-zinc oxide and Bis-GMA

Tsubasa Shirai, Koichi Imai  
Osaka Dental University

General Session 3 (10:30-10:50)

O3-1

An analysis of the phenotype of Dictyostelium discoideum Dlarp4-cells

Toshuino Usui<sup>1</sup>, Tomoaki Abe<sup>2</sup>  
<sup>1</sup>Tohoku University, <sup>2</sup>Ishinomaki Senshu University

Optional tour of the disaster-stricken district by tsunami (11:00-)

## **History of the Nano Biomedical Society**

**Society Organizational Meeting**

Date: Feb 20 (Fri) - Feb 21 (Sat), 2009

Venue: Hotel "NIDOM", Tomakomai, Hokkaido

President at the Meeting: Prof. Fumio Watari

Department of Biomedical, Dental Materials & Engineering, Division of Oral Health  
Science, Graduate School of Dental Medicine, Hokkaido University, Sapporo

**1st Annual Meeting of the Nano Biomedical Society**

Date: July 18 (Sat), 2009

Venue: Hokkaido University

President at the Meeting: Prof. Fumio Watari

Department of Biomedical, Dental Materials & Engineering, Division of Oral Health  
Science,  
Graduate School of Dental Medicine, Hokkaido University, Sapporo

**2nd Annual Meeting of the Nano Biomedical Society**

Date: February 22 (Mon), 2010

Venue: Ichō Kaikan (Osaka University Medical School)

President at the Meeting: Prof. Nariaki Matsuura

Osaka University Graduate School of Medicine Division of Health Sciences, Osaka

**3rd Annual Meeting of the Nano Biomedical Society**

Date: September 17 (Fri), 2010

Venue: Tsurumi University Hall

President at the Meeting: Prof. Kazuhito Satomura

Tsurumi University, School of Dental Medicine, Kanagawa

**4th Annual Meeting of the Nano Biomedical Society**

Date: February 21 (Mon), 2011 - February 22 (Tue), 2011

Venue: Noyori Materials Science Laboratory, Higashiyama Campus, Nagoya University

President at the Meeting: Prof. Joro Usukura

Nagoya University, EcoTopia Science Institute Integrated Research Projects, Aichi  
Joint: EcoTopia Science Institute Graduate School of Medicine Global COE for Education  
and Research

**5th Annual Meeting of the Nano Biomedical Society**

Joint Conference of International Symposium

- SIB2011(3rd Int.Symp.Surface and Interface of Biomaterials 2011)

Date: July 12 (Sun) - 15, 2011 (Wed)

Venue: Hokkaido University

Joint Conference of International Symposium - SIB2011 (3rd Int. Symp. Surface and Interface of Biomaterials 2011)

President at the Meeting: Prof. Fumio Watari

Department of Biomedical, Dental Materials & Engineering, Division of Oral Health Science, Graduate School of Dental Medicine, Hokkaido University, Sapporo

5th Annual Meeting and SIB2011 --Satellite Symposium will be held in Kyoto--

Date : July 19 (Tue), 2011

Venue: Kyoto TERRSA (East Building)

President at the Meeting: Dr. Koichi Imai

Department of Biomedical, Osaka Dental University, Osaka

**6th Annual Meeting of the Nano Biomedical Society**

Date : July 9, 2012 (Mon) - July 10, 2012 (Tue)

Venue: Lecture Hall, Tsukuba Central 1

President at the Meeting: Dr. Toshimasa Uemura

National Institute of Advanced Industrial Science and Technology(AIST), Ibaragi

Joint Conference of "Mini-International Symposium with the 2nd symposium on "Carbon Nanoforms"

Joint Conference of 6th International Symposium on Nanotechnology

Date : October 28 (Mon) - October 31 (Thu), July 19 (Tue), 2011 (Tue), 2013

Venue: Nagoya Congress Center

President at the Meeting: Rrof. Gaku Ichihara

Nagoya University Graduate School of Medicine, Aichi

**7th Annual Meeting of the Nano Biomedical Society**

Date : January 24, 2013 (Thu)

Venue: Kyoto TERRSA

President at the Meeting: Dr. Koichi Imai

Department of Biomedical, Osaka Dental University, Osaka

Symposium of the Nano Biomedical Society and JSAAE

Alternatives to Animal Experiments using the in vitro evaluation

Date : Aug 24, 2013 (Sat)

Venue: Osaka Satellite Office, Doshisha University (Umeda Square Bldg.17F, Osaka)

President at the Meeting: Dr. Koichi Imai

Department of Biomedical, Osaka Dental University, Osaka

**8th Annual Meeting of the Nano Biomedical Society**

Date : May 2, 2014 (Friday)

Venue: Hotel Granvia Wakayama

President at the meeting: Prof. Shigeki Hontsu

Faculty of Biology-Oriented Science and Technology at Kinki University, Wakayama

**9th Annual Meeting of the Nano Biomedical Society**

in conjunction with the 15th International Symposium by the Institute of  
Tissue Regeneration Engineering

Date : Nov 28 (Fri), 2014 - Nov 29 (Sat), 2014

Venue: Lecture hall #114, College of Dentistry, Dankook University, Cheonan, Korea

President at the meeting: Prof. Hae-Won Kim

Director of Institute of Tissue Regeneration Engineering (ITREN), Dankook University,  
Korea

Emeritus Prof. Fumio Watari

Graduate School of Dental Medicine, Hokkaido University

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

Date : March 9 (Mon) - March 10 (Tue), 2015

Venue: EcoTopia Science Institute, Nagoya University

President at the meeting: Prof. Shinya Yagi

EcoTopia Science Institute, Nagoya University, Nagoya

**11th Annual Meeting of the Nano Biomedical Society**

Date : Oct 31 (Sat) - Nov 1(Sun), 2015

Venue: Ishinomaki Senshu University

President at the meeting : Prof. Nobuyuki Haga

Ishinomaki Senshu University, Miyagi