#### The Eighth Tripartite Presidents Meeting among NIES, NIER and CRAES

#### **Opening Address**

Dr. OHGAKI Shinichiro President, National Institute for Environmental Studies November 21, 2011



Good morning everybody. I am very happy to welcome all the delegates from NIER and CRAES, in particular President PARK and President MENG to Okinawa for the Eighth Tripartite Presidents Meeting among NIES, NIER and CRAES (TPM8). I would like first to express, on behalf of the Japanese people, my sincere thanks to your government and your people for helping us during and after the disaster of March 11.

Many of you will already be familiar with these details, but I would like to give an overview of the recent changes and current situation at our institute. The NIES charter, was decided five years ago. In the charter it states that NIES will protect the environment and health for present and future generations. This indicates that the mission of NIES is quite wide-reaching.

NIES was established in 1974: about 37 years ago. We restructured in 2001 as an incorporated administrative agency and started the first five-year plan. We have already completed two five-year plans. In 2011 we started the third five-year plan under the new structure of our institute. There are 247 permanent staff, including 192 researchers. There are 537 contract staff with 153 contract researchers. This amounts to about 350 researchers at NIES.

The new structure of the institute has eight research centers which relate to the eight research fields: global environment, material cycles and waste management, environmental risk, regional environment, environmental biology and ecosystems, environmental health, social and environmental systems, and environmental measurement and analysis. Regional environment is a newer field which relates to water pollution, soil pollution, air pollution and so on, across regions. NIES is now organized

into eight corresponding research centers. These research centers represent our obligation to long-term research and also relate to our research programs and to capacity building. Each center fulfills a main function within the institute. We have a variety of research programs under the third five-year plan. In all there are ten programs. These are mainly based on the needs of governmental or national and social scientific bodies including urgent topics. Others are implemented across centers. Eco-city systems and basin ecosystem functions are two examples of cross-cutting programs. Many researchers are involved in one or more of these ten programs.

In regards to international research cooperation including bilateral agreements, we have Memorandums of Understanding with Korea, China, and other Asian countries, as well as across the globe. Moreover, our research facilities are designed such that our main campus in Tsukuba city is augmented by many observation sites and facilities from the furthest points north and south, including those located here in Okinawa.

I would like to say a few words about the nuclear accident, with relation to water quality. My specialty is water quality and I am in charge of the Expert Committee on Water Quality Management at the Ministry of Health, Labor and Welfare. Tsukuba city is located to the north of Tokyo, and the south of Fukushima nuclear power plant. The distance between Tsukuba and Fukushima nuclear power plant is about 150 kilometers. You can find the latest figures on the NIES website. The dose and atmospheric concentrations of radioactive materials were also recorded from March 16 to 24. The materials were first sampled by NIES and then analyzed by the High Energy Accelerator Research Organization (KEK), an institute of the Ministry of Education. From these analyses, we can see the types of radioactive materials present in water, including iodine-131 (half-life: 8 days), cesium-137 (half-life: 30 years), and cesium-134 (half-life: 2 years). The radiation level of tap-water in Fukushima Prefecture was monitored from March 18. The iodine concentration was quite high, but cesium was at non-detectable levels at first. We also have data regarding the radiation levels at a typical water purification plant in Tokyo. These indicate that there is no radiation present in the drinking water. In terms of our work relating to the Great East Japan Earthquake, and to the radioactivity monitoring, we are conducting surveys of the solid waste in Fukushima City.

Finally I believe that TPM8 - including the parallel workshop and study tours – will be a great success. I would like to take this opportunity to wish our old and new friends a nice stay in Okinawa.

Thank you very much!

*The 8<sup>th</sup> Tripartite Presidents Meeting (NIES, NIER and CRAES) November 20-24, 2011 Okinawa, Japan* 

# Welcome to Okinawa

OHGAKI, Shinichiro National Institute for Environmental Studies (NIES)

# National Institute for Environmental Studies (NIES)





http://www.nies.go.jp/

# Charter

**The National Institute for** 

Environmental Studies (NIES) strives to contribute to society through research that fosters

and protects a healthy environment for present and future generations.

Proud to work at NIES and keenly aware of our individual responsibilities, we will pursue high level research based on a firm understanding of the interaction between nature, society, and life on our planet.

## **NIES Vision**

NIES Logo



## **History of NIES**



Personnel



# CONTRACT (537)

Contract Researchers 153

Assistant Staff 384

# **Research Centers and Fields**



## **Research programs for the third five-year plan (2011-15)**





# **International Research Cooperation**



**Promotion of International Research Collaborations** 

Orange: Number of bilateral agreements Red: Number of memorandums of understanding Blue: Number of research aimed at using GOSAT data (Postings) (in addition to the above we conduct surveys and research in every region of the globe)

## **NIES External Research Facilities**



#### Map of Fukushima nuclear power plant



Formation mechanism of air pollution







Page of Tohoku Region Pacific Coast Earthquake, NIES http://www.nies.go.jp/shinsai/index.htmlurtesy of Dr.Ohara, NIES)

#### Dose rate and atmospheric concentration of radionuclides

(High Energy Accelerator Research Organization) (sampling by NIES)



### Radiation Level of Tap water in Fukushima Pref.

#### 134**CS** 137**CS** 131

飲用水(水道水)環境放射能測定結果(暫定值) (第48報

モニタリング	4(#	用水
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	6回日	1/300	6/	ND	ND
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	1回日	9:00	17	ND	ND
3月20日(日)	2回目	14:00	19	ND	ND
	3回目	18:00	28	ND	ND
3月21日(月)	1回目	8:00	23	ND	ND
3月22日(火)	1回目	11:00	19	ND	ND
3月23日(水)	1回目	11:30	23	ND	ND
3月24日(木)	1回目	11:00	14	ND	ND
3月25日(金)	1回目	11:10	11	ND	ND
3月26日(土)	1回目	11:30	12	ND	ND
3月27日(日)	1回目	11:00	15	ND	ND
3月28日(月)	1回目	11:00	12	ND	ND
3月29日(火)	1回目	11:00	10	ND	ND
3月30日(水)	1回目	11:00	7	ND	ND
3月31日(木)	1回目	11:00	7	ND	ND
4月1日(金)	1回目	11:00	9	ND	ND
4月2日(土)	1回目	11:00	6	ND	ND
4月3日(日)	1回目	11:00	4	ND	ND
4月4日(月)	1回目	11:00	ND	ND	ND
4月5日(火)	1回目	11:00	8	ND	ND
4月6日(水)	1回目	11:00	6	ND	ND
4月7日(木)	1回目	11:30	6	ND	ND
4月8日(金)	1回目	11:40	27	ND	ND
4月9日(土)	1回目	11:00	ND	ND	ND
4月10日(日)	1回目	11:00	6	ND	ND
4月11日(月)	1回目	11:00	ND	ND	ND
4月12日(火)	1回日	11:00	ND	ND	ND
4月13日(水)	1回日	11:00	ND	ND	ND
4月14日(木)	1回日	11:00	ND	ND	ND
4月15日(金)	198	11:00	ND	ND	ND
4月16日(土)	1回日	11:00	ND	ND	ND
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[参考]

「原子力施設等の防災対策について(原子力安全委員会)」飲食物の摂取制限に関す る指標に基づく飲料水の基準 放射性ヨウ素-131:300Bq/kg以上、放射性セシウム: 200Bq/kg以上ですので、この水は安全です。

【その他】 1 探水場所…福島県原子力センター福島支所(福島市方木田地内) 2 測定機関…福島県原子力センター福島支所 3 分析装置…ゲルマニウム半導体検出器 4 測定方法…緊急時におけるガンマ線スペクトル解析法(放射能測定法マニュアル(文部科学者))

(注) 3月21日(月)の測定より、測定回数が1回/日となっています。

ND: 输出限界值未満

Data on the Radiation Level at Water Purification Plants of Tokyo Waterworks Data on the Radiation Level at Water Purification Plants of Tokyo Waterworks

Monitering point	Radioactive Iodine	Radioactive Cesium	Radioactive Cesium
(purification plant)	(Iodine 131)	(Cesium 134)	(Cesium 137)
Kanamachi	ND	ND	ND
	(Detection Limit 6)	(Detection Limit 7)	(Detection Limit 7)
Asaka	ND	ND	ND
	(Detection Limit 8)	(Detection Limit 7)	(Detection Limit 9)
Ozaku	ND	ND	ND
	(Detection Limit 7)	(Detection Limit 7)	(Detection Limit 8)
Higashi-murayama	ND	ND	ND
	(Detection Limit 2)	(Detection Limit 2)	(Detection Limit 3)

1 Latest Results (Sampling date : 2011/04/20)

(2011/04/20)

(Bq/kg)

- %1 Sampling time : 6:00 A.M.
- 32 We have emphasized quick announcement of radiation level on purified water thus far.

Under the recent situation that the radiation level remains equal or less than 20Bq/kg, we shifted the emphasis to precision and extended the testing time from April 15, 2011. We announce the detection result with the detection limit.

2 Previous Results

## **Activities related to the Great East Japan Earthquake**

http://www.nies.go.jp/shinsai/index-e.html

 Contribution to disaster waste management and related research
Modeling transport of radioactive materials from the Fukushima Daiichi Nuclear Power Plant





Survey of radioactivity in the debris in Fukushima City (June 8, 2011)

## **Disaster Waste Categories**

- Wastes generated by the quakes ("quake wastes")
- Wastes genrated by the tsunami ("tsunami wastes")
- Tsunami deposits (mud, sand, sludge, sediment)
- Evacuation waste
- Fish waste
- Wastes contaminated with radionuclides (i.e., <sup>137</sup>Cs)

# Survey of radioactivity in the debris in Fukushima City (June 8, 2011)



## Shinjuku Station, Tokyo, 2011 April (courtesy of Mr. Mitake, JWWA)



Ichigaya, Tokyo , 2011 April (courtesy of Mr. Mitake, JWWA) 

Thank you