

# 第 12 回森林資源管理と数理モデル国際シンポジウム

## **Forest Resource Management and Mathematical Modeling** The 12<sup>th</sup> International Symposium

March 17 2012 (Sat) 10:00 - March 18 (Sun) 14:20 Date

Venue 50th Anniversary Memorial Hall

#### **President**

Yuei Nakama, Ph.D. (Univ. of of the Ryukyus)

#### **Committee Members**

Joosang Chung, Ph.D. (Seoul National Univ.)

Naoto Matsumura, Ph.D. (Mie Univ.)

Atsushi Yoshimoto, Ph.D. (ISM)

Toshiaki Owari, Ph.D. (Univ. of Tokyo)

Kenichi Kamo, Ph.D. (Sapporo Medical University)

Nophea Sasaki, Ph.D. (Univ. of Hyogo)

Yasushi Mitsuda, Ph.D. (FFRPI)

Masashi Konoshima, Ph.D. (Univ. of the Ryukyus)

Atsushi Takashima, Ph.D. (Univ. of the Ryukyus)

# Program & Abstract

Main Organizers: Risk Analysis Research Center (RARC), ISM

Forest Policy & Forest Planning Lab, University of the Ryukyus

Co-Organizer: Japan Society of Forest Planning

Tohoku University Ecosystem Adaptability Global COE



### FORMATH RYUKYUS 2012 Program: March 17 (Sat) - 18 (Sun)

Date	March 17, 2012		
9:00 ~10:00	Registration		
10:00 10:10	Opening Remarks	Yuei Nakama,	University of the Ryukyus
1.		Coordinator: Konoshima	
10:10 ~10:40	Dwellers Preference and Willingness to Pay for Conservation of Homestead Woodlands	Bixia Chen	United Nations University
10:40 ~11:10	Identifying the Drivers of Deforestation and Forest Degradation in Cambodia – A Case Study in Phnom Tbeng Protected Forests in Preah Vihear Province	Nophea Sasaki	University of Hyogo
11:10 ~11:40	Oak (Quercus suber L.) Woodlands	Nuno Ribeiro	Universidade de Evora
$11:40 \sim 12:45$	Lunch Break		
2.		Coordinator: Sasaki	
12:45 ~13:15	Optimal Forest Harvest Age Considering Carbon Sequestration in Multiple Carbon Pools: a Comparative Statics Analysis	Patrick Asante	University of Alberta
13:15 ~13:45	Impact of Emerging Markets for Forest	Puneet Dwivedi	Yale University
13:45 ~ 14:05	Coffee Break		
3.		Coordinator: Surovy	
14:05 14:35	Relationships Between the Abundance and Site Conditions of <i>Abies</i> sachalinensis Juveniles in Selection Forests in Central Hokkaido, Japan	Toshiaki Owari	University of Tokyo
14:35 ~15:05	Distribution on Simulations of the National-Scale Carbon Dynamics of Sugi Planted Forests	Yasushi Mitsuda	FFPRI, Shikoku
15:05 ~15:35	Spatial Distribution and Composition of Trees in an Aging Coppice Forest in Japan	Stanko Trifkovic	Kyoto University
15:35 ∼15:55	Coffee Break		
4.		Coordinator: Asante	
15:55 16:25	Evaluating Rare Wildlife Species Habitat on the Ryukyu Islands using an HSI model	Masashi Konoshima	University of the Ryukyus
16:25 ~16:55	Efficient Use of Point-Based Stock Data for Growth Projection within Spatially Constrained Harvest Scheduling for Sugi Forests in Jeju, Korea	Atsushi Yoshimoto	ISM
16:55 ~ 18:00	Poster Session		
	Open Discussion on the Issues Presented with Dinner provided with no charge	Coordinator: Konoshima	

Date	March 18, 2012		
5.		Coordinator: Owari	
10:00 ~10:20	Analysing Forest Road Slope Vegetation on Each Construction Methods. A Case Study Ookuni-rindou, Okinawa	Hattori Hiroyuki	University of the Ryukyus
10:20 ~10:40	A Study on the Water Reserved Protection Forest Mechanism in Okinawa	Rocky F. Roring	University of the Ryukyus
10:40 11:00	Coffee Break		
6.		Coordinator: Mitsuda	
11:00 11:20	Estimating the Sites Suitability of Forest Stands for Cultivated Mountain Ginseng (Panax ginseng) Using Geographically Weighted Regression	Ara Seol	Seoul National University
11:20 ~11:40	Assessment of Aesthetic Quality of Forest Areas Using Aerial Photograph Image Data	Peter Surový	ISM
$11:40 \sim 12:40$	Lunch Break		
7.		Coordinator: Konoshima	
12:40 ~13:10	Effect of Reduced Intermediate Demand for Electricity on the Patterns of Specialization	Yozaburo Ejiri	Iwaki Meisei University
13:10 ~13:40	Development of a Model to Estimate Annual Available Amounts of Forest	Kazuhiro Aruga	Utsunomiya University
13:40 ~14:10	How to Manage a Complex  Subtropical Forest in the Yambaru Area of Okinawa Island	Atsushi Takashima	University of the Ryukyus
$14:10 \sim 14:20$	Closing Remarks	Atsushi Yoshimoto	ISM
14:30 ~	Excursion		

## Poster Sessions

P01	Corrected version of Marrows' Cp criterion for selecting growth function	Kenichi Kamo	Sapporo Medical University
P02	Growth comparison by microtopography of useful treesartificial affrestation in Okinawa	Yoshikatsu Kato, Shiori Nishinaka, Shingo Taniguchi	University of the Ryukyus
P03	Study on runoff characteristics of the small watershed in the northern part of Okinawa island	Yuji Kawaharada <sup>1</sup> , Shoji Inoue <sup>1</sup> , Kyoichi Otsuki <sup>2</sup> , Atsushi Takashima <sup>1</sup>	<sup>1</sup> University of the Ryukyus, <sup>2</sup> Kyushu University
P04	Development of growth model for Korean major tree species using tree ring information of national forest inventory and climate data in South Korea	Moonil Kim	Korea University
P05	Development of an individual–tree/distance - independent stand growth simulator for <i>Crytomeria japonica</i> and its applications	Kibeom Kwon, Hee, Han, Hyejean Chung, Joosang Chung	Seoul National University
P06	Planning method for circular forest road networks considering geographical features based on water catchment area	Masashi Saito	Shinshu University
P07	Managing Forests and Grasses for Bioenergy Production in Cambodia	Shengxi Sun, Yuichi Abe, Nophea Sasaki	University of Hyogo
P08	Possible Application of Functional Structural Plant Model (FSPM) to Optimizing Management Regime	Peter Surovy, Yoshimoto, A	ISM
P09	Individual Tree Delineation using High Spatial Resolution Remote Sensing Imageries	Park Taejin	Korea University
P10	Bayesian modeling of tree competition in conifer-broadleaved mixed stands	Shinichi Tatsumi	University of Tokyo
P11	Support in Ehime-Pref. to the forest zoning in towns and villages does	Nobuyuki Toyota	Ehime Forest Research Center