

# **The 5<sup>th</sup> Kyoto University Southeast Asia Forum Conference of the Earth and Space Sciences Bandung, 7-8 January 2010**

## **Objective**

The objective of the conference is to provide a forum for researchers in the field of Earth and Space Sciences and its closely related fields. All participants (not restricted to Kyoto University alumni) are encouraged to present their works and to engage themselves in collaborations for advanced researches.

## **Scientific Sessions**

1. Geology
2. Geophysics
3. Geodesy
4. Mining
5. Petroleum
6. Oceanography
7. Agriculture
8. Atmospheric Science
9. Space Science
10. Astronomy
11. Other related topics

## **Opening Remark**

Prof. Dr. Hiroshi Matsumoto (President of Kyoto University)

## **Keynote Speakers**

1. Prof. Dr. Umar Anggara Jenie (Chairman of the Indonesian Institute of Sciences)
2. Prof. Dr. Kosuke Mizuno (Director of Center for Southeast Asian Studies)
3. Prof. Dr. Shuichi Kawai (Director of Research Institute for Sustainable Humanosphere, Kyoto University)

## **Invited Speakers**

1. Prof. Dr. Jim Mori (Kyoto University)
2. Prof. Dr. Sri Widiyantoro (Institut Teknologi Bandung)
3. Prof. Dr. Hiroyuki Yamamoto (Kyoto University)
4. Prof. Dr. Freddy P. Zen (Institut Teknologi Bandung)
5. Dr. Hakim L. Malasan (Institut Teknologi Bandung)
6. Prof. Dr. Ir. Supiandi Sabiham (Institut Pertanian Bogor)

## **Venue**

East Campus Center  
Institut Teknologi Bandung  
Ganesha 10 Bandung 40132  
Indonesia

## Program

---

### Thursday, 7 January 2010

0800 - 0830	Reregistration
<b>Opening</b>	
0830 - 0840	Chairman
0840 - 0855	Welcoming speech from Prof. Dr. Djoko Santoso (Rector of Institut Teknologi Bandung)
0855 - 0900	Greeting from Mr. Masaki Tani (Representative of Embassy of Japan)
0900 - 0920	Opening remark by Prof. Dr. Hiroshi Matsumoto (President of Kyoto University)
0920 - 0930	Photo Session
0930 - 1000	Coffee break
<b>Keynote Speeches</b>	
1000 - 1100	Prof. Dr. Umar Anggara Jenie (Chairman of the Indonesian Institute of Sciences)
	Prof. Dr. Kosuke Mizuno (Director of Center for Southeast Asian Studies)
	Prof. Dr. Shuichi Kawai (Director of Research Institute for Sustainable Humanosphere, Kyoto University) ( <i>teleconference</i> )
<b>Invited Speeches</b>	
1100 - 1200	Prof. Dr. Jim Mori (Kyoto University)
	Prof. Dr. Sri Widiyantoro (Institut Teknologi Bandung)
	Prof. Dr. Hiroyuki Yamamoto (Kyoto University)
1200 - 1330	Lunch break
<b>Contributed Papers</b>	
1330 - 1515	Session 1: 7 presentations; 15 minutes each
1515 - 1545	Coffee break
1545 - 1730	Session 2: 7 presentations; 15 minutes each
1900 - 2100	Official Dinner at <u><a href="#">Bumi Sawunggaling Hotel</a></u>

## Friday, 8 January 2010

### Invited Speeches

0830 - 0930	Prof. Dr. Freddy P. Zen (Institut Teknologi Bandung)
	Dr. Hakim L. Malasan (Institut Teknologi Bandung)
	Prof. Dr. Ir. Supiandi Sabiham (Insitut Pertanian Bogor)

*Coffee is available during all sessions*

### Contributed Papers

1000 - 1045	Session 3: 3 presentations; 15 minutes each
1045 - 1330	Friday Prayer & Lunch break
1330 - 1430	Session 4: 4 presentations; 15 minutes each
1430 - 1630	Business Meeting & Congress of HAKU
1630 - 1900	Free
1900 - 2130	Sayonara Party & Karaoke at <u>Bumi Sawunggaling Hotel</u>

*Last updated: January 5, 2010 11:19 WIB*

## Scientific Programs

---

## Day 1: Thursday, 7 January 2010

---

### Keynote Speeches

**Session: Plenary**  
**Chair: Prof. Dr. Sri Widiyantoro**

Time	Name	Title
1000 - 1100	Prof. Dr. Umar Anggara Jenie (Chairman of the Indonesian Institute of Sciences)	TBA
	Prof. Dr. Kosuke Mizuno (Director of Center for Southeast Asian Studies)	TBA
	Prof. Dr. Shuichi Kawai (Director of Research Institute for Sustainable Humanosphere, Kyoto University) ( <i>teleconference</i> )	TBA

**Invited Speeches**

**Session: Plenary**  
**Chair: Prof. Dr. Freddy P. Zen**

Time	Name	Title
1100 - 1200	Prof. Dr. Jim Mori (Kyoto University)	Can We Predict the Next Great Earthquake?
	Prof. Dr. Sri Widiyantoro (Institut Teknologi Bandung)	Earthquake Tomographic Imaging: Subducting Slab Structure beneath the Sunda Arc
	Prof. Dr. Hiroyuki Yamamoto (Kyoto University)	TBA

**Contributed Papers**

**Room 1, Session 1: Geophysics, Geodesy, and Oceanography**  
**Chair: Nining Sari Ningsih**

Time	Speaker	Title	Paper ID
1330 - 1345	Hasanuddin Z. Abidin	Land Subsidence in Jakarta Basin: Characteristics, Causes and Impacts	1-R1-S1-1

1345 - 1400	Irwan Meilano	Coseismic displacement and intensity distribution of the 2009 West Java Earthquake	1-R1-S1-2
1400 - 1415	Rukman Nugraha	Analyzing Geomagnetic and Gravity Data Possible Earthquake Precursors Linked with Significant Seismic Activity in Sumatera and Java	1-R1-S1-3
1415 - 1430	Susanna Nurdjaman	Numerical Modeling of Cooling Water Circulation around Gresik Power Plant, East Java	1-R1-S1-4
1430 - 1445	Dwi Fajar Saputri	Study on the Run-up and Inundation Caused by Tides in The Northern Coast of Jakarta (Case Study: the 24-27 November event)	1-R1-S1-5
1445 - 1500	Evie H. Sudjono	Current Velocity at Kuaro Estuary, Adang Bay East Kalimantan: preliminary result	1-R1-S1-6
1500 - 1515	Lizalidiawati	Vertical Profile of Current Velocity and Temperature in The Lombok Strait	1-R1-S1-7

## Room 1, Session 2: Oceanography, Earth Science and other related topic

Chair: Supiandi Sabiham

Time	Speaker	Title	Paper ID
1545 - 1600	Masyhur Irsyam	Indonesia Spectral Hazard Map at Ground Surface for Earthquake Resistance Building Design	1-R1-S2-1
1600 - 1615	Shuhei Kimura	Memorizing Earthquake: a comparative study of commemoration in Turkey and Taiwan	1-R1-S2-2
1615 - 1630	Bagus Endar B. Nurhandoko	Application of large scale computing system for tomography based on inverse scattering wave	1-R1-S2-3
1630 - 1645	Arzyana Sunkar	Resource Management in Karst Landscape	1-R1-S2-4
1645 - 1700	Mohamad Nur Heriawan	Estimation and Simulation of Bedrock Zone by Ordinary Cokriging and Sequential Gaussian Simulation Methods, Case Study of Lateritic Nickel Deposit at Pakal Island, East Halmahera	1-R1-S2-5
1700 - 1715	Eddy Z. Gaffar	Detail Bathymetry Data From Kaiyo and Natsushima Cruise in Off Northwest Sumatera: Preliminary Result	1-R1-S2-6
1715 - 1730	Achmad Sopandi	Earth Color: Reinvention of Batik, When Art Meets Science and Technology	1-R1-S2-7

## Room 2, Session 1: Atmospheric Science

Chair: Dhani Herdiwijaya

Time	Speaker	Title	Paper ID
1330 - 1345	Arief Suryantoro	Analysis of Vertical Profiles of Liquid Water Content and Ice Water Content in Connection with the Clouds and the Latent Heat of Condensation is Released in the Atmosphere over Several Airports in Indonesia	1-R2-S1-1
1345 - 1400	Dessy Gusnita	Konsentrasi Nitrogen Oksida di Troposfer Akibat kebakaran Hutan di Indonesia dari data satelit Aura OMI	1-R2-S1-2

1400 - 1415	Didi Satiadi	Impact of a Revised Convective Triggering Mechanism on Regional Climate Simulation	1-R2-S1-3
1415 - 1430	Eddy Hermawan	Perilaku Gelombang Kelvin di atas Kototabang, Sumatera Barat Pada Saat Musim Basah dan Musim Kering Hasil Analisis Data EAR	1-R2-S1-4
1430 - 1445	Erma Yulihastin	Contribution of Shallow Rain to Develop Local Rainfall Type over Maritime Continent Based on TRMM PR Observation	1-R2-S1-4
1445 - 1500	Indah Susanti	Spatial Analysis of Atmospheric Aerosol Impact on Shortwave Radiation over Indonesia	1-R2-S1-6
1500 - 1515	Juniarti Visa	Pemanfaatan Data EAR dalam Mengkaji Terjadinya Monsun di Kawasan Barat Indonesia	1-R2-S1-7

## Room 2, Session 2: Atmospheric Science

### Chair: Sarmoko Saroso

Time	Speaker	Title	Paper ID
1545 - 1600	Lely Qodrita Avia	Rainfall variability in Indonesia based on Geostationary Satellite Data	1-R2-S2-1
1600 - 1615	Novita Ambarsari	Ozone, CO, and Temperature Profile in Bandung Based on MLS/AURA Observation	1-R2-S2-2
1615 - 1630	Nur Febrianti	The Drought Index Prediction Area of West Java In 2020	1-R2-S2-3
1630 - 1645	Nurzaman Adikusumah	The influence of the SST anomaly maritime towards the variability (strong-weak) of Australian monsoon	1-R2-S2-4
1645 - 1700	Sinta Berliana Sipayung	Analysis of Drought Based on Satellite Meteorological Over Indonesia	1-R2-S2-5
1700 - 1715	Suci Dewi Anugrah	The Temporal and Spatial Analysis of The tropical cyclones historical in the south of Indian Ocean	1-R2-S2-6
1715 - 1730	Teuku Abdullah Sanny	Kirchoff Depth Migration Seismic Using Attribute CRS Stack Velocity Model	1-R2-S2-7

## Room 3, Session 1: Space Science and Astronomy

### Chair: Chatief Kunjaya

Time	Speaker	Title	Paper ID
1330 - 1345	Anwar Santoso	Study of The Impact of Geomagnetic Storm to Power Grids Transformer in Indonesia as Initial Effort to Understanding its Existence	1-R3-S1-1
1345 - 1400	Sri Ekawati	Ionospheric TEC Anomalies Associated with Earthquakes $M \geq 6.3$	1-R3-S1-2
1400 - 1415	L. Muhammad Musafar K.	Pc3 Magnetic Pulsations Observed at Biak station during October 2003	1-R3-S1-3
1415 - 1430	Sarmoko Saroso	Studies on Large Geomagnetic Storms during Solar Cycles 22-23	1-R3-S1-4

1430 - 1445	Bambang Setiahad	Helmet Streamer Animation Through Magnetohydrodynamics Computer Simulation Output: Space Early Warning Pre-cursor	1-R3-S1-5
1445 - 1500	Jalu Tejo Nugroho	Evaluation of Solare, the LAPAN's Solar X-Ray Flare Prediction Software	1-R3-S1-6
1500 - 1515	Sukandi Nasir Rohili	Key Factors in Double Base Propellant Development in LAPAN	1-R3-S1-7

## Room 3, Session 2: Astronomy

Chair: Hakim L. Malasan

Time	Speaker	Title	Paper ID
1545 - 1600	Bachtiar Anwar	Automatic Determination of the Sky-Projected Speed of Coronal Mass Ejection	1-R3-S2-1
1600 - 1615	Dhani Herdiwijaya	On the Prediction of Solar Cycle 24	1-R3-S2-2
1615 - 1630	Tiar Dani	Design of Solar X-Ray Flare Prediction Based on Sunspot Physical Parameters Using Neural Network	1-R3-S2-3
1630 - 1645	Budi Dermawan	Orbital Dynamics of Earth-like-Orbit Asteroids	1-R3-S2-4
1645 - 1700	Suryadi Siregar	Orbital evolution of 3552 Don Quixote	1-R3-S2-5
1700 - 1715	Mochamad Ikbal Arifyanto	Red Clump Giants in the Thick Disk	1-R3-S2-6
1715 - 1730	Yayan Sugianto	The Study of Colour and Morphology of Galaxies in Clusters of Galaxies	1-R3-S2-7

## Day 2: Friday, 8 January 2010

---

### Invited Speeches

**Session: Plenary**  
**Chair: Dr. Wahyu Dwianto**

Time	Name	Title
------	------	-------



0830 - 0930	Prof. Dr. Freddy P. Zen (Institut Teknologi Bandung)	Physics in Extra Dimensions
	Dr. Hakim L. Malasan (Institut Teknologi Bandung)	Spectroscopic observations of Be stars at Bosscha Observatory: "To Be or not to Be"
	Prof. Dr. Ir. Supiandi Sabiham (Institut Pertanian Bogor)	Peatlands in Indonesia: The Science Case for Conservation and Sound Management

## Contributed Papers

### Room 1, Session 3: Agriculture Chair: Supiandi Sabiham

Time	Speaker	Title	Paper ID
1000 - 1015	Abimanyu Dipo Nusantara	Assessing the Effectiveness of Seedling Preparation Method and Mycorrhizal Inoculants for Enhancing Teak Seedling ( <i>Tectona grandis</i> Linn. F) Growth and Soil Biological Activities	2-R1-S3-1
1015 - 1030	Edy Nasriadi Sambas	Vegetation structure and species composition of Mount Endut Gunung Halimun Salak National Park, Banten	2-R1-S3-2
1030 - 1045	I Putu Gede Ardhana	The Act No. 19 of 2004 in the Perspective Sustainability of Forest Resources	2-R1-S3-3
1045 - 1100	Bambang Subiyanto	The Development of Green Building Materials from Organic Material and Wastes as Alternative Low Emission Construction Materials	2-R1-S3-4

### Room 1, Session 4: Agriculture and Other related topics Chair: Cecep Kusmana

Time	Speaker	Title	Paper ID
1330 - 1345	Sri Rahayu	Population Distribution of <i>Hoya multiflora</i> Blume (Asclepiadaceae) at Gunung Gede Pangrango National Park	2-R1-S4-1
1345 - 1400	Cahyo Wibowo	Utilization of Mangrove Tree Species Api-api ( <i>Avicennia</i> spp.) as Materials for Medicine	2-R1-S4-2
1400 - 1415	Cecep Kusmana	The Growth of Mangrove Seedlings Planted on Guludan Technique in the Coastal Area of Jakarta	2-R1-S4-3
1415 - 1430	Jarwadi B. Hernowo	Population and Habitat Analysis of the Javan Green Peafowl ( <i>Pavo muticus muticus</i> ) Linnaeus 1758 at Baluran and Alas Purwo National Park East Java	2-R1-S4-4

**Room 2, Session 3: Other related topics**  
**Chair: Wahyu Dwianto**

Time	Speaker	Title	Paper ID
1000 - 1015	Fani Deviana	Application of Eco-housing Concept towards Sustainable Settlements on Upper Cimanuk River Basin	2-R2-S3-1
1015 - 1030	Anita Firmanti	Model on the Implementation of Holistic Eco-settlements Concept for Rehabilitation of Upper River Area (Case study in Upper Cimanuk River in Garut District, West Java)	2-R2-S3-2
1030 - 1045	Eddy Z. Gaffar	Detail Bathymetry Data From Kaiyo and Natsushima Cruise in Off Northwest Sumatera: Preliminary Result	2-R2-S3-3
1045 - 1100	Noor Fachrizal	Pengembangan dan Aplikasi Teknologi Bioenergi: Pencapaian dan Prospek Pengembangan di Balai Besar Teknologi Energi Serpong	2-R2-S3-4

**Room 2, Session 4: Other related topics**  
**Chair: Wahyu Dwianto**

Time	Speaker	Title	Paper ID
1330 - 1345	Dadang A. Suriamiharja	Nature and Culture-based development of tourism in South Sulawesi	2-R2-S4-1
1345 - 1400	Slamet Syamsudin	Communication Frequency Between Two Fixed Location Through Ionospheric Layer	2-R2-S4-2
1400 - 1415	Muslimin Mustafa	The Impact of Global Climate Change on Food Production in Indonesia	2-R2-S4-3
1415 - 1430	Habirun	Determination Prediction Model of Daily Variation of Short Period Geomagnetic	2-R2-S4-4

**Room 3, Session 3: Astronomy**  
**Chair: Dhani Herdiwijaya**

Time	Speaker	Title	Paper ID
1000 - 1015	Thomas Djamaluddin	Solar Activity Affecting Meteoroid and Space Debris	2-R3-S3-1
1015 - 1030	Eka Puspita Arumaningtyas	Visibility of Lunar Crescent Using Contrast Parameter	2-R3-S3-2
1030 - 1045	Moedji Raharto	Metonic Cycle and Contrast of the First Lunar Crescent Visibility after Conjunction	2-R3-S3-3
1045 - 1100	Muh. Ma'rufin Sudibyo	Evaluation of The Danjon and Sultan Crescent Length Models with The 1427–1430 AH (2997 - 2009 CE) Young/Old Crescent Observations From Indonesia	2-R3-S3-4

**Room 3, Session 4: Astronomy**  
**Chair: Dhani Herdiwijaya**

Time	Speaker	Title	Paper ID
1330 - 1345	Chatief Kunjaya	Asinh Magnitude as a Hope for Detecting Fainter Celestial Objects in an Increasingly Light Poluted Environment	2-R3-S4-1
1345 - 1400	Puji Irawati	Preliminary Result on The Population Synthesis of Cataclysmic Variable Star	2-R3-S4-2
1400 - 1415	Irma I. Hariawang	On The Hypothesis Of Borobudur's Main Stupa As A Gnomon	2-R3-S4-3
1415 - 1430	Putri Siti Rahma	Membership and Physical Parameters Determination of Pleiades (Melotte 22) by using Astrometric and Photometric Database	2-R3-S4-4