FOREWORD

On behalf of the local organizing committee, I would like to welcome you all to the 2nd International Conference of Indonesian Society for Remote Sensing (ICOIRS) to be organized from 17 to 20 October 2016 in Yogyakarta, Indonesia. This year’s ICOIRS is also the 22nd of the Yearly Scientific Meeting of Indonesian Society for Remote Sensing (PIT MAPIN XXII). The main theme of the 2nd ICOIRS is “Remote Sensing for a Better Governance”. As we all know that remote sensing has become a part of our daily life; from simply viewing the streets from mobile phones to selecting the evacuation route and shelters when a disaster strikes or monitoring the extend of forest fire. These examples corroborate the need to discuss the strategic position of remote sensing in today’s national and global governance issues. Therefore, this conference aims to elaborate the advantages and challenges of remote sensing as an essential element in the current governance through sharing the knowledge among the participants. Over 100 papers and 300 participants are expected in this conference.

ICOIRS 2016 (PIT MAPIN XXII) would not have been possible without the many people who have worked with us in planning and organizing the technical program, exhibition, and social events. We thanks to MAPIN for its tremendous guidance and support on organizing the event; special thanks to the local organizing committee members who have all work extremely hard to make this conference happen.

Yogyakarta is one of the foremost cultural centers of Java. This region is located at the foot of the active Merapi volcano and borders with Indian Ocean at the south lowest part. The city itself has a special charm, which seldom fails to captivate the visitor. It is renowned as a center of education (Kota Pelajar), making it the right place for exchanging ideas, engaging discussions and enriching knowledge. While you’re here, take time to have fun and find memories with the various attractions that Yogyakarta has to offer.

Finally, I would like to ask all of you to attend this exciting conference by presenting papers, discussing technical issues, exchanging ideas, and enjoying the city of Yogyakarta together. We are looking forward to see you all at ICOIRS 2016 in Yogyakarta.

Drs. Projo Danoedoro, M.Sc., Ph.D.
ICOIRS 2016(PIT MAPIN XXII) Chairman
The Special Region of Yogyakarta is widely known as the centre of Javanese culture as well as the centre of learning. Its designation as a center of learning is marked by the existence of 120 state and private education institutions, with a student population of over 300,000. The Special Region of Yogyakarta has 3,400,000 inhabitants, 511,000 of whom reside in the city of Yogyakarta. The city is the second tourist destination of Indonesia. It is renowned as a centre of classical Javanese fine art and culture such as batik, ballet, drama, music, poetry, and puppet shows. Most tourists come to Yogyakarta for its strong Javanese culture and tradition. This makes it prominent among other Javanese cities. Yogyakarta was the Indonesian capital during the Indonesian National Revolution from 1945 to 1949. There are two seasons in Yogyakarta; wet and dry season. The weather in rainy season is often unpredictable, the sun still shines during the day and it will rain in the afternoon. The city features a lengthy wet season running from October until June and a short dry season that only covers the months of July, August and September. The city averages roughly 2200 mm of precipitation annually. Yogyakarta experiences particularly heavy rainfall from November through April. In the dry season, the weather is quite comfortable and sometimes could be very hot. However, temperatures remain relatively constant throughout the course of the year, with average high temperatures at around 30 degrees Celsius and average lows at around 22 degrees Celsius. For further information, please visit http://www.visitingjogja.com/ or http://www.indonesia-tourism.com/yogyakarta/.
Universitas Gadjah Mada (internationally known as Gadjah Mada University; abbreviation: UGM) is an Indonesian public research university located in Yogyakarta, Indonesia, founded on December 19, 1949. UGM is the oldest and largest institution of higher learning in Indonesia. The 360-acre university comprises of 18 Faculties, 1 Graduate School, 1 Vocational School, 68 undergraduate study programs, 23 diploma study programs, 104 master and specialist study programs, and 43 doctorate study programs. It has approximately 55,000 students, 1,187 foreign students, 2,240 employees, and 2,273 lecturers. For further information, please visit http://ugm.ac.id/en.

The Faculty of Geography was established in 1963. Currently it has three departments: Geographic Information Science, Environmental Geography and Regional Development Department. The Faculty of Geography offers undergraduate and post graduate programs. The undergraduate program consists of three bachelor degree programs i.e. Bachelor in Geography and Environmental Science, Bachelor in Cartography and Remote Sensing, and Bachelor in Regional Development. The post graduate program offers 7 study programs with master degree, and a PhD program, including Master Degree programs in Geography, Remote Sensing, Coastal and Watershed Management and Planning, Environmental Science, Population Studies, Environmental Management, and Geo-Information for Spatial Planning and Risk Management, along with a Ph.D. program in Geography. For further information, please visit http://geo.ugm.ac.id/.
PUSPICS

PUSPICS is a national and regional center for remote sensing and integrated surveys. Initially it provided training and educational program for image interpretation and mapping for government officers, lecturers, private sectors or individuals. The program was developed in 1976 through cooperation between BAKOSURTANAL (now BIG) and the Faculty of Geography UGM. In the last 20 years, PUSPICS – in cooperation with BIG – held regular Training Cooperation for Developing Countries (TCDC) focusing on surveys and mapping. The participants came from Asian and Pacific countries such as Azerbaijan, Mongolia, Maldives, Afghanistan, Nepal, Cambodia, Myanmar, Laos, Philippines, Timor Leste, and Fiji. PUSPICS has strong research collaboration with national institutions such as BIG, LAPAN, Indonesian ministries and local governments, as well as international institutions such as World Bank, ITC, ACIAR, UNSW and UQ. These experiences and collaborations affirm the contribution of PUSPICS to the rapid development of geographic information sciences in Indonesia and Asia. For further information, please visit http://puspics.ugm.ac.id/.
KEYNOTE SPEAKER

Prof. Dr. Ir. Dewayan, M.AppSc.  
President of Indonesian Society for Remote Sensing (MAPIN), Indonesia

Prof. Dr. Hartono, DEA., DESS.  
Professor, Department of Geographic Information Science, Faculty of Geography, Universitas Gadjah Mada, Indonesia

Dr. Priyadi Kardono, M.Sc.  
Head of Indonesian Geospatial Information Agency (BIG), Indonesia

Prof. Alfredo Huete  
Professor, Department of Plant Functional Biology & Climate Change, University of Technology Sydney, Australia

Dr. Matthew Blackett  
Senior Lecturer Geography, Environment and Disaster Management, Faculty of Business, Environment, and Society, Coventry University, United Kingdom

Dr. Wataru Takeuchi  
Associate Professor, Graduate Program of Environmental Sciences, University of Tokyo, Japan

Prof. Chao-Hung Lin  
Professor, Department of Geomatics, National Cheng-Kung University, Taiwan

Dr. Rahman Syaifoei  
Indonesian Diaspora Network, The Netherlands
THE VENUE

REST ROOM  TULIP  ORCHID 3  ORCHID 2  ORCHID 1  EDELWEISS

STAIR UP  STAIR DOWN

STAIR DOWN  STAIR UP

1st Floor

CHRYSANT  CATTLEYE

NORTH
# SCHEDULE OF ICOIRS 2016 / PIT MAPIN XXII

| Time          | Monday, 17 October 2016 | Tuesday, 18 October 2016 | Wednesday, 19 October 2016 | Thursday, 20 October 2016 |
|---------------|-------------------------|--------------------------|---------------------------|---------------------------|
| 07.00 - 08.30 | Registration            |                          |                           |                           |
| 08.30 - 10.30 | Welcome & Opening Cor.  | Keynote 3,4 & 5          | Keynote 6, 7, & 8         |                           |
|               | Keynote 1 & 2           |                          |                           | Cultural or Natural Excursion |
| 10.30 - 11.00 | Coffee Break            |                          |                           |                           |
| 11.00 – 12.15 | M-APS1 M-APS2 M-APS3 M-APS4 | Poster Session        | W-APS1 W-APS2 W-APS3 W-APS4 |                           |
| 12.15 – 13.15 | Lunch Break             |                          |                           |                           |
| 13.15 – 14.30 | M-BPS1 M-BPS2 M-BPS3 M-BPS4 | T-BPS1 T-BPS2 T-BPS3 T-BPS4 | W-BPS1 W-BPS2 W-BPS3 W-BPS4 | Closing Ceremony          |
| 14.30 – 15.00 | Coffee Break            |                          |                           |                           |
| 15.00 – 16.15 | M-CPS1 M-CPS2 M-CPS3 M-CPS4 | T-CPS1 T-CPS2 T-CPS3 T-CPS4 |                          |                           |

M-APS1: day-**Monday**; time-**A (11-12.15)**; session-**Parallel Session**; location – **1 (Ball Room)**

Day: M- (Monday); T- (Tuesday); W- (Wednesday)

Time: A- (11.00-12.15); B- (13.15-14.30); C- (15.00-16.15)

Location: 1- (Ball room), 2- (Orchid1); 3- (Orchid2); 4- (Orchid3)