

**5<sup>th</sup> International Conference on  
GIS and Remote Sensing**

**September 16-17, 2019  
Rome, Italy**

**SCIENTIFIC PROGRAM**

## SCIENTIFIC PROGRAM

**Monday 16<sup>th</sup> September**

**DAY 1**

**Monday, 16<sup>th</sup> September**

08:30-09:00 **Registrations**

09:00-09:30 **Introduction**

**09:30-09:50 COFFEE BREAK**

09:50-11:50  
Meeting Hall 01 **KEYNOTE LECTURES**

	<b>MEETING HALL 01</b>	<b>MEETING HALL 02</b>
11:50-13:10	<b>Talks On:</b> <b>Remote Sensing and GIS</b> Geological remote sensing Satellite remote sensing Global positioning system Remote sensing in atmospheric modeling	<b>Talks On:</b> <b>GIS Techniques and Technology</b> Raster-to-vector translation Projections coordinate systems, and registration Data representation Data capture Resources assessment

**13:10-13:15 GROUP PHOTO**

**13:15-14:00 LUNCH BREAK**

	<b>MEETING HALL 01</b>	<b>MEETING HALL 02</b>
14:00-16:00	<b>Talks On: Remote Sensing in Urban Environment</b> Emerging imaging and sensing technology Digital image processing Remote sensing of clouds and atmosphere Weather forecasting High performance computing in geoscience	<b>Talks On: Web GIS and Web Mapping</b> Real-time and 3D with ArcGIS Mobile mapping Static web maps Traffic congestion maps 3D modeling from remotely sensed data

**16:00-16:20 COFFEE BREAK**

**MEETING HALL 01 (16:20-17:00)**

**Young Researchers**

**MEETING HALL 01 (17:00-18:00)**

**Workshop**

SCIENTIFIC PROGRAM

Tuesday, 17<sup>th</sup> September

**DAY 2**

Tuesday, 17<sup>th</sup> September

09:00-10:30  
Meeting Hall 01

**KEYNOTE LECTURES**

**10:30-10:50 COFFEE BREAK**

10:50-12:50

**MEETING HALL 01**  
**Talks On:**  
**Global Navigation Satellite System**

Global positioning system (GPS)

Global system for mobile communications (GSM)

Big data processing

Navigation and communication

**MEETING HALL 02**  
**Talks On:**  
**GIS & RS Applications in Forestry**

Land management

Agriculture

Deforestation

Biodiversity conservation

**12:50-13:35 LUNCH BREAK**

13:35-15:55

**MEETING HALL 01**  
**Talks On:**  
**Cartographic Modeling**

Decision support modeling

Analysis of mapped data

**MEETING HALL 02**  
**Talks On:**  
**Implications of GIS in Society**

GIS social practice

GIS & RS in climate change

**15:55-16:15 COFFEE BREAK**

**MEETING HALL 01 (16:15-17:00)**

**Poster Presentations**

**MEETING HALL 01 (17:00-18:00)**

**Workshop**

**conference series LLC Ltd**

5<sup>th</sup> International Conference on  
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**AGENDA**

**Title: Enhancements of airborne bathymetric lidar: mapping the submerged near-shore environment at 4 times the previous point density****Tim Webster**

The nearshore zone between the land and deeper water is highly productive, energetic and is challenging to map using traditional land or marine based techniques. Topo-bathymetric lidar (TB-lidar) sensors are well suited to survey this land-sea boundary and provide seamless elevation and imagery across this boundary. The Leica Geosystems Chiroptera II TB-lidar sensor is equipped with NIR and green lasers and 60 MPIX RGB+NIR camera, the Leica Geosystems Chiroptera II, and has been flown for research and commercial missions since September 2014.

**Title: Use of EOS geospatial data for earth science****Brandi Quam**

Climate change models have recently projected increased heavy rainfall events in both wet and dry regions. It is well established that heavy rainfall events are associated with increased risks of waterborne diseases (WD). However, there is a paucity of epidemiological evidence for how wet and dry regions influence the risk of WD due to heavy rainfall. In New Zealand, the annual total rainfall can differ by up to 3500mm in different locations.

**Title: Land use land cover impacts on coastal erosion in Krishna-Godavari Delta front coast, Andhra Pradesh, India-a remote sensing approach****P. Jagadeeswara Rao**

The world is facing coastal erosion and inundation of lowlying coastal areas is a major concern in recent years. It is a slow process, but may emerge as a major disaster unless it is not properly mitigated. Besides the impact of global and regional environmental issues, the human induced land use is also contributing area specific coastal erosion.

**SPEAKER SLOTS AVAILABLE**

**Title:** Geospatial analysis of the spatio-temporal growth of federal capital city, Abuja, Nigeria

**Benedine Akpu**

The movement of the Capital of Nigeria to Abuja in 1991 triggered the rapid urbanization process in the area and presently, it is said to be one of the fastest growing cities in the world. This rapid growth has mounted pressure on the city, and the surrounding settlements thereby threatening the limited resources. This paper therefore applied Remote Sensing, Geographic information Techniques and Shannon's Entropy model to analyze the spatio-temporal growth of the Federal Capital City, Abuja, Nigeria.

**Title:** An automatic georeferenced crop rows generator using aerial high-resolution images for precision agriculture in sugarcane crops

**Fabio Andres Herrera**

In this research, a crop rows generation in sugarcane crops will be addressed through image processing and computer vision techniques through a developed QGIS Plugin “Crop Rows Generator (CRG)”. CRG involves computer vision techniques and a high-performance computing approach which are capable of process high-resolution large images obtained by a Drone and on these images detect, generate and mapping crop rows in sugarcane fields, with a few clicks.

**Title:** Proximity analysis between agricultural production and existing structures from planning perspective in the state of Iowa

**Mohammad Rafayet Hossain**

Massive use of fertilizer and pesticides has become a major concern in recent days all over the world. Use of chemicals in agricultural fields are increasing total rate of production, but its a major health concern. Clear separation distances between residential and agricultural land use are mandatory to preserve safe and sound environment.

**SPEAKER SLOTS AVAILABLE**

**Title: Geospatial Assessment of Raphia Palm Wine production and consumption points in Owerri Senatorial district, Imo State, Nigeria**

**Abiodun Ayooluwa  
Areola**

Raphia palm wine occupies a very important position in the traditional activities of Owerri senatorial district and the Igbo ethnic group in Nigeria generally. A lot of benefits have been derived from Raphia palm, which can be grouped under cultural, health, religious, culinary and economic benefits.

**Title: Predictive modelling of Soil Erosion Rate using Adaptive Neuro-Fuzzy Inference System (ANFIS) coupled with Geographic Information System (GIS) of Wadi Sahel-Soummam Watershed (Algeria)**

**Messaoud Djeddou**

There is a need to develop simple methods for predicting areas of extensive soil erosion using imprecise, but real world, input data at low cost with considerable accuracy. The objectives of this study is to develop fuzzy logic models that predict soil erosion in a relatively large watershed using a limited number of input variables, compare the predictions of soil erosion using ANFIS model with those of the Revised Universal Soil Loss Equation RUSLE.

**Title: The application of semivariogram and ordinary kriging in determining the cohesion and clay percentage distribution in Hilly area of Sabah**

**Mohammad  
Radzif Taharin**

Ordinary Kriging (OK), is one of the geostatistical methods, which were used in the variation types of mapping, which related to the soil. Compliment by semivariogram models, OK has become one of the most sought out method for the digital mapping, which applied Geographical Information System (GIS) as a main approach. In this method, four semivariogram models, which are spherical, exponential, circular and gaussian would be applied to determine the best model for the mapping purposes, with Root-Mean-Squared-Error (RMSE) as a performance indicator.

**SPEAKER SLOTS AVAILABLE**

**Title: Drainage basin morphometric analysis of the zungeru/ nupeko segment of river kaduna catchment north central Nigeria**

**Umar Mohammed  
Umar**

This study relied on the medium resolution Digital Elevation Model (SPOT DEM, 20 m resolution) of the Drainage Basin that was acquired from the Office of the Surveyor-General of the Federation in Abuja, Nigeria. Digital spatial data (such as sub-basin and river network maps) were extracted from other reliable sources and literatures. Analyses were undertaken in various stages to obtain parameters for drainage density, form factor, compactness coefficient, elongation ratio and circulatory ratio.

**Title: Application of GIS in building construction**

**Henry Atta Bonsu**

Geographic information systems (GISs) is a computer based tool and being used extensively to solve various engineering problems involving the use of spatial data. GIS technology provides capabilities to solve problems, involving creation and management of data, integration of information, visualization, E-commerce and cost estimation to which most of the architectural design and construction management software is lacking.

**Title: Geographic Information System (GIS) modelling approach to determine the most efficient delivery routes for fresh product using real time data**

**Mohammad Abousaeidi**

This study involves the adoption of the Geographic Information System (GIS) modelling approach to determine the quickest routes for fresh vegetable delivery. During transport, fresh vegetables mainly deteriorate on account of temperature and delivery time. Nonetheless, little attention has been directed to transportation issues in most areas within Kuala Lumpur.

**SPEAKER SLOTS AVAILABLE**

**Title: Public space as a key component in the geography of post-disaster recovery in Mexico City****Milton Montejano Castillo**

At an international level, it has been increasingly recognized that public spaces are an invaluable resource in a post-disaster recovery phase. Among the most developed research topics are the role that public space plays after a disaster, the evaluation of spaces before disasters, accessibility aspects for emergency shelters and design guidelines to make spaces useful in crisis.

**Title: GIS based identification for active tectonics: An example from Western India****Jayanta Kumar Jena**

Tectonic landforms express a broad spectrum of topographic features that can be employed as indicators of the style, magnitude and rate of timing of tectonic movements. The tectonic activities may be episodic or may occur at very low rate for prolonged period. The selected area is sandwiched between Jahazpur Thrust (JT) and Great Boundary Fault (GBF) as its western and eastern boundary, respectively.

**Title: Remote sensing and cloud GIS optimizes field work for data collection during flood events****Javier Gustavo Villegas**

In the floodplains of the Yacuma River watershed, the events of extreme inundations are occurring with an increasing frequency. Yacuma River is a navigable water course that is part of the Amazon basin. In February 2014 a major flooding event in the Beni provinces, caused by unprecedented rains and river flow levels, devastated this beef cattle producing area. With less magnitude but also prejudicial for the farmers, floods occurred in the following years.

**SPEAKER SLOTS AVAILABLE**

**Title:** The geographic information systems in the era of big data. The impact on society

**Marco Antonio López  
Vega**

In the age of mobile devices, applications based on global positioning systems, social networks and mass storage systems in the "cloud". Geographic Information Systems take a step forward in their evolution, by implementing new technologies and integrating all the sources of information provided by the Internet. With the objective of spatial data analysis.

**Title:** Development of an application for implementation of a spatial data warehouse in ArcGIS

**Abdellah Mebrek**

GIS offers advanced functions for acquisition, storage, analysis and map display; of a geographic information. However, their effectiveness for complex spatial analysis, is questionable because of their determinism and decision-making rigor. On the other hand, the OLAP technology that combine both bases multidimensional analysis and the concepts of the datamining, provides powerful tools allowing to highlighting inductions and informations not obvious by the conventional tools.

**Title:** Precision farming: A new approach to cocoa farm management in Malaysia

**Tee Yei Kheng**

Development of precision cocoa management is a game changer for cocoa industry in Malaysia by providing access to know about the conditions of crop, soil and factors contributing to the cocoa production using modern technology. Precision cocoa farm management might provide a blueprint to increase cocoa productivity and at the same time reduce agriculture input costs.

**SPEAKER SLOTS AVAILABLE**

**Title: Applications of remote sensing for water resource management in hard rock terrain**

**Pallavi Chattopadhyay**

Geographical Information System (GIS) technology is well-established tool and is routinely used in applied hydrogeology. To demonstrate the capabilities of GIS technique for groundwater resources development in hard rock terrains, specifically for the demarcation of suitable sites for groundwater exploration and exploitation of aquifers, a study was carried out in Telangana State, India. Groundwater is an important source of water supply in such hardrock terrains. Occurrence of groundwater in hard rock terrains is restricted and subject to greater complexity.

**Title: Using GIS as a decision support systems for the location of primary schools in Fagge Localgovernment area of Kano State, Nigeria**

**Oluwaseun  
Olubadewo-Joshua**

This paper analyzed the spatial distribution of Primary schools in the area and the objectives are to make an inventory of the schools in the area, to create a geo-database of the schools in the area and to analyze the pattern of the schools in the area. There are over 2 million primary school children in Kano State, the teacher-pupil ratio is 1:42.

**Title: Monitoring of agricultural drought using remote sensing**

**Saeed Shojaei**

It is essential to have reliable indicators to effectively assess and monitor the drought. Field measurements have high accuracy for producing drought indices. On the other hand, the provision of these indicators in large areas is very costly. Space observations provide the ability to monitor droughts using remote sensing technology through the ability to receive high spatial and temporal resolution information on a wide range of terrain.

**SPEAKER SLOTS AVAILABLE**

**Title: Urban forest cover changes using remote sensing in democratic People's Republic of Korea****Seongmin Shin**

Since urban green spaces play an essential role in sustainable development and quality of life in cities, there have been numerous efforts to increase green spaces including parks and gardens. Democratic People's Republic of Korea (DPRK) has also tried to make cities green since the late 1990s in line with the change of forest policy from economic utilization of forest resources to forest protection.

**Title: Thermographic imaging of water bodies to identify pollution****Stepan Marval**

Contribution in the form of a poster presentation focuses on the lessons learned from the application of the principle of thermal imaging in the field of water management. The main area of interest is the identification of potential sources of pollution entering watercourses or reservoirs. Identification is based on temperature differences between the main stream and the discharge object.

**Title: Monitoring responses of vegetation phenology and productivity to extreme climate conditions using remote sensing across different sub-regions of China****Tehseen Javed**

In this paper, we investigate the impact of extreme climatic variation on vegetation phenology and productivity over the sub-regions of China. Daily rain gauge datasets were used to predict the air temperature and precipitation trend and compute the Standardized Precipitation Evapotranspiration Index (SPEI). Remote sensing data Moderate Resolution Imaging Spectroradiometer (MODIS) Enhanced Vegetation Index (EVI) data was used to predict the vegetation penology.

**SPEAKER SLOTS AVAILABLE**

**Title: Pollution evaluation of Ghanat Kosar District in Tehran****Milad Davoudkhani**

GIS has different applications in various fields and one of its important applications is in the environment and mapping of noise pollution. Noise pollution is one type of the environmental pollution which threatens the life of living creatures. The extent of physical and mental damage of this type of pollution is so much that technical and international standards have been defined for it.

**Title: Assessment of climate change adaptation strategies used by cassava-based farmers in Southern Nigeria****Oussama Yazidi**

In recent years, urban areas have dramatically increased. Hence, there is a significant interest for improving efficiency of urban planning in most developed countries. The wide world is experiencing a rapid urbanization rate. Which urban growth contributes many advantages in term of economics; if is uncontrolled, it would produce negative consequences to the physical, social and natural environment.

**Title: Preliminary study on remote sensing the relationship between the brightness temperature pulses observed with a ground-based microwave radiometer and the lightning action integral****Wang Zhenhui**

The integral of lightning current squared over time, named as the “lightning action integral”, is an indicator of Joule heat generated by lightning discharge. The temperature of air molecules is thus increased, which can be observed by a ground-based microwave radiometer for atmospheric temperature remote sensing.

**SPEAKER SLOTS AVAILABLE**

**Title:** Land use/land cover change mapping and impact of geo-environment in Bangui city using remote sensing and GIS techniques

**Mamadou Traore**

The security instability in the Central African Republic (CAR) forces the civilian population to flee the provinces to seek refuge in Bangui city, or in other countries. Human activity, which is very beneficial in the context of urbanization, is the main driver of change in the city of Bangui, but also has a negative effect on the geo-environmental.

**Title:** Evaluation of the urban landscape structures and dynamics of Hawassa City, using satellite images and spatial metrics approaches, Ethiopia

**Berhanu Terfa**

The study deals with the analysis of urban expansion and land transformation of Hawass City using remote sensing data and landscape metrics during the last three decades (1987–2017). Remote sensing data from Various multi-temporal satellite images viz.

**Title:** Why geographic information systems in crime mapping and spatial-temporal analysis?

**Gachie Baraka**

Security management is becoming complex in today's society due to increased transnational crimes which are enhanced by technological advancements. To address this challenge, police agencies need to continuously adopt and effectively apply more innovative decision support tools in law enforcement. Kenyan police officers are however still using paper-maps and pushpins (manual crime mapping tools) to analyse crime.

**SPEAKER SLOTS AVAILABLE**

**Title:** The spatial characterisation of environmental perceptions, attitudes and place attachment in Gauteng, South Africa

**Simangele Dlamini**

The rationale for this study lied in the assumption that people transact with the perceived environment through co-construction of environmental meanings and attachment to place in a spatially heterogeneous manner. Environmental perceptions, attitudes and feelings of attachment arise through processes of symbolic interaction with the environment.

**Title:** Forest fire risk zone mapping by using remote sensing and GIS in two major landscapes of Nepal

**Ashok Parajuli**

Each year forest fire is causing enormous damage to the Nepal's forest ecosystems and landscape. This research used the geospatial technology and statistical tools for developing forest fires risk model in two major landscapes of the country i.e. Terai Arc Landscape (TAL) and Chitwan Annapurna Landscape (CHAL). MODIS hotspot satellite data from 2001 to mid-2018 and other variables were integrated using geo spatial technique.

**Title:** Determination of the physical properties and geometric shape of objects buried by simulation signals radar GPR

**Gamil Alsharabi**

This paper aims at solving the problem of not knowing the physical properties and geometric shape of buried objects. In this work, we focus on the simulation of Ground Penetrating Radar (GPR) signals to detect buried objects and determine their physical properties and geometric shape. This simulation was based on the FDTD method of electromagnetic wave analysis, which is the basis of GPR operation.

**SPEAKER SLOTS AVAILABLE**

**Title:** Mapping of global system mobile mast station in bade local government area, Yobe state, Nigeria

**Anslem Rimau Bako**

Since the introduction of Global System Mobile (GSM) in 2001, the sitting of GSM mast station has generate a lot of argument, among is whether it emit electromagnetic radiation, EMR, which pollutes the environment. It has become a part of the environment to see tall masts in different locations around the country.

**Title:** Impact of aquaculture in reduction of Kolleru lake area, India

**Avadootha Shivakrishna**

The Geospatial technologies as Geographical Information System (GIS), Global Positioning System (GPS) and Remote sensing (RS) are the effective tools for wetland conservation, planning, and management through their various spatial, temporal and spectral characteristics. Kolleru lake is one of Asia's largest freshwater lakes, it is located in Andhra Pradesh between the Godavari and the Krishna river basins.

**Title:** Groundwater quality assessment using averaged water quality index and ordinary kriging approach: A case study of Jhelum city, Punjab, Pakistan

**Sadaf Javed**

This study assesses the nine physiochemical parameters of drinking water quality of Jhelum City of Punjab Province in Pakistan by using water quality index (WQI) method and kriging estimation technique. Two hundred and ninety-two drinking water samples were randomly collected from domestic wells in the city area of Jhelum, Pakistan.

**SPEAKER SLOTS AVAILABLE**

**Title:** Spatio-temporal variability mapping and assessment of land surface temperature and evapotranspiration from landsat & thermal data

**Ibrahiim Bathis**

Evapotranspiration has been widely used to schedule agricultural irrigation in the rainfed watershed through the quantitative estimation of the crop water requirement, to achieve sustainable water conservation and agricultural yield. Accurate estimation of ET through conventional methods are based on point measurements but the results are not applicable to large and heterogeneous region.

**Title:** Finding an alternate access route from Ikire to Gbongan using geospatial techniques

**Nureni Babatunde  
Amoo**

This paper describes Geospatial techniques to select suitable right of way and demonstrate the use of remotely sensed imagery for selecting the least cost and practically feasible alternative route in a way that reduce the cost of construction, time and effort in the field and Environmental hazard that may occurs as a result of the constructional activities.

**Title:** Evaluation of EZZONE tool for delineating crop management zones using soil chemical & physical properties data

**Naeem Abbas Malik**

Precision Agriculture (PA) comes with the solution for food security issues. PA tools like yield monitors and Variable Rate Technologies (VRT) are not likely to be adopted by farmers of Pakistan due to their huge cost. Moreover, lack of case studies portraying the benefits of PA is also the cause of unwillingness of growers to go for this technology. However, objective of PA can be achieved by using cost effective methods especially in the context of Pakistan.

**SPEAKER SLOTS AVAILABLE**

**Title:** Using GIS in oil and gas field

**Omer Ahmed Ibrahim**

A geodatabase stores, collects and visualizes the physical location of feature. In oil and gas, this includes pipelines, wells, pump stations and tank terminals. But it also includes non-spatial information. For example, oil and gas companies are interested in leases, date of installation and pipe material. This can be useful to better understand when pipelines are in need of maintenance or repair.

**Title:** Spatiotemporal analysis of land use/cover changes in NEKA basin of Iran

**Zahra Sedighifar**

Land use and land cover (LU/LC) change is a key component of environmental change studies. LU/LC change is a major issue of concern with regards to change in the global environment. Geographic Information System (GIS) and Remote Sensing (RS) are now providing new tools for advance ecosystem management.

**Title:** Impact Assessment of Land Use Change on Surface Temperature and Agricultural Productivity in Peshawar-Pakistan

**Imran Khan**

The profound appreciation of urban expansion and land use change (LUC) considerably influences the ecosystem functions, services and biodiversity along with the local and regional climate. Land use has undergone an awful transformation due to rapid urbanization and population growth, which in turn increased land surface temperature (LST) in district Peshawar, Pakistan.

**Title:** Applying remote sensing and GIS to measure economic development in Romania

**Temerdek-Ivan Kinga**

Night-time lights reflects the intensity of human economic activity of an area. In the present study, we propose to measure the economic development in Romania at local and county level, for the period 1992-2018, using remote sensing and statistical data.

**Title:** Development plan for the system for collecting and directing the waters of the Golshahr-Hashtgerd electric train using GIS, multi-criteria assessment and hierarchical analysis process in Hashtgerd new city

**Saeid Gharehhassanloo**

Determining the optimal route in which technical and engineering considerations, economic and environmental considerations have been applied requires techniques that consider the parameters that are effective in determining the route together.

**Title:** Integrate GIS and e-business suite enterprise asset management (EBS - eAM) for maintain electric network asset information

**Suresh Sithiranathan**

GIS is the prime source of the electric asset details to the Asset Enterprise Management. GIS network and feature status that provides the information about the asset hierarchy and status of the asset in the eAM. By establishing the two-way integration between GIS with eAM applications that helps GIS and Asset management team to locate, define, maintain, manage the assets geographical in eAM.

**SPEAKER SLOTS AVAILABLE**

**Title:** Tracing course change of river Yamuna using remote sensing and GIS  
in trans-Yamuna area, Delhi

**Mukesh Yadav**

The paper intends to study the trend of urbanization in the trans- Yamuna, Delhi region and its impact on river course change. The study is based on the hypothesis that the extent of urbanization affects the quantum of water bodies in the urban areas. For analysis, urban area along river Yamuna is selected as the study area.

**Title:** IoT and GIS integration in disaster management for severe weather conations

**Akram Nabil**

The evolutionary approaches of information technology and the need for human comfort life lead to more demands for accurate weather forecasts at different spatial and temporal scales. Geographic Information System (GIS) is a computer system build to capture, store, manipulate, analyze, manage and display all kinds of spatial data.

**Title:** Mapping of built-up areas from landsat imagery based on one-class classification and google earth engine platform

**Zakaria Benyelles**

Mapping of built-up areas was always a main concern to researchers in the field of remotely sensing. Thus, various image classification techniques, supervised approaches in particular, have been used with promising performance in terms of classification accuracy.

**SPEAKER SLOTS AVAILABLE**

**Title:** Database transformation, cadastre automatization data processing in QGIS and implementation in WEBGIS

**Hamidreza Ostadabbas**

On a judicial basis of § 196 Baugesetzbuch (BauGB, 2018) every municipality in the Republic of Germany must publish standard land values in €/m<sup>2</sup> for the whole district area in a biennial cycle. The standard land values have to be derived comprehensively for different land use within a district. These are mainly residential areas, mixed-use zones (residential and commercial areas), industrial areas, cropland, grassland and forestry.

**Title:** Analyzing the spatio-temporal vegetation dynamics in Iceland by using Remote Sensing

**Iman Rousta**

In this study spatio-temporal variations of NDVI (Normalized Difference Vegetation Index) in Iceland were investigated over the period 2001–2018 by using MODIS/Terra (MOD13Q1.006\_250m\_16\_days) images. The results show that dense vegetation (NDVI 0.4-0.6) in 2018 in the study area is increasing in terms of Length of Growing Period (LGP) as well as the extent of covered area in comparison with 2001.

**Title:** Coastal land forms and high and low tide mapping using remote sensing, GIS and GPS technology in coastal regulation zone: Bosher area

**Ahmadreza Valikhani**

Boshehr is a coastal city located along warm waters of Persian Gulf. It is limited to Zagros mountains, Persian Gulf, and Hableh river and Tangestan town from north, south, west and east respectively. The study area is in between sea and land areas. Such especial situations make the formation of specific land forms in coastal regulation zone (CRZ).

**Title:** The Regression analysis of PM<sub>2.5</sub> and its driving factors in typical urban Agglomerations**Jingjing Liua**

Since PM<sub>2.5</sub> has a high specific surface area, it can absorb harmful substances and bring it into the human body, causing various respiratory, circulatory, and immune diseases, which have extremely adverse effects on human health, it is significant to study on the response of PM<sub>2.5</sub> to land use change.

**Title:** Analysis of spatial location of immigrant currents from regions of Spain in the city of Rosario, Santa Fe, Argentina with Geographic Information Systems**Adrián Oscar  
Bussolini**

The city of Rosario in the province of Santa Fe was developed from 1854 by the contribution of a broad current of immigration of European origin, mainly Italians and Spaniards. The Spanish Association of Mutual Reliefs of Rosario was the second of its kind in South America.

**Title:** Impacts of tobacco farming on forest cover in bukira west/bukira east location, migori county, Kenya**Magige James**

Tobacco has existed since prehistoric times and is widely grown as a cash crop in developing countries like Kenya. Its production significantly contributes to environmental degradation and increased health and safety risks. Tobacco farming practices also pose a challenge for environmental sustainability due to increased deforestation, and over-application of agrochemicals.

**SPEAKER SLOTS AVAILABLE**

# PAST AFFILIATES

Victor Puchkov Nikolaevich,  
*Russian Academy of Sciences, Russia*

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# Rome Attractions



# GLIMPSES OF GIS CONGRESS CONFERENCES



# Scientific Program



4<sup>th</sup> International Conference on  
**GIS and Remote  
Sensing**

September 27-28, 2018 | Berlin, Germany

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# DAY-1

September 27, 2018  
Meeting Hall: **Bismarck**

Registrations

## Opening Ceremony

### KEYNOTE FORUM

#### Introduction

**Title:** Applications of GIS and remote sensing in landslide hazard assessment

**Wendy Zhou,** Colorado School of Mines, USA

Networking & Refreshments

**Sessions:** GIS and Remote Sensing | Geodynamics | Spatial Analysis With GIS | Global Navigation Satellite System (GNSS) | GIS & RS in Climate Change | Remote Sensing in Urban Environment

**Chair:** Agustin Fernandez Eguiarte, Universidad Nacional Autonoma de Mexico, Mexico

**Co-Chair:** Waqas Wajid, Hochschule Anhalt, Bernburg (Saale), Germany

### INTRODUCTION

**Title:** Selection of an appropriate height system for geomatics

**Petr Vanicek,** University of New Brunswick, Canada

**Title:** A service-enabled visualization for conveying spatial information by summarizing temporal point data

**Leanne Sulewski,** United States Department of Defense, USA

**Title:** Deep learning based on U-Net architectures for lithological classification using multi-sensor data

**Yuanze Chen,** Technical University of Munich, Germany

### GROUP PHOTO

Lunch Break

**Title:** Synthesising information in remote sensing images based on an adaptive accumulation of evidence

**Gloria Bordogna,** CNR IREA, Milano, Italy

**Title:** Coupling deep learning and GIS for forest damage assessment based on high-resolution remote sensing data

**Zayd Mahmoud Hamdi,** Technical University of Munich, Germany

**Title:** Using Sentinel 2A images to analyze temporal variation of estimated chlorophyll content in olive groves and its relationship to phenological stages

**Judit Rubio Delgado,** University of Extremadura, Spain

**Title:** Sentinel-1 SAR data for agricultural applications

**Dietrich Heintz,** Cropix, Thalwil, Switzerland

Networking & Refreshments

**Title:** Spatio-temporal analysis of landuse change using Landstat 5 TM and stochastic gradient boosting in peri-urban areas of Yogyakarta, Indonesia

Sintha Prima Widowati Gunawan, Osaka University, Japan

**Title:** Spatial analysis of tourism places in post-Soviet contexts: Tourist destinations of Baltic states

Andris Klepers, Vidzeme University of Applied Sciences, Latvia

**Title:** Use of geo-spatial techniques to estimate the efficiency of public transport service in an urban area

Salman Zubair, University of Karachi, Pakistan

## Panel Discussion

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# DAY-2

September 28, 2018

Meeting Hall: Bismarck

## KEYNOTE FORUM

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**Title:** International Terrestrial Reference Frame (ITRF) and global geodynamics

Victor Puchkov Nikolaevich, Russian Academy of Sciences, Russia

Networking & Refreshments

**Sessions:** GIS Techniques and Technologies | Geostatistics | Disaster assessment and management |

GIS in renewable energy sources | GIS in Mapping | Seismology and Geodesy

**Chair:** Leanne Sulewski, United States Department of Defense, USA

**Co-Chair:** Andris Klepers, Vidzeme University of Applied Sciences, Latvia

**Co-Chair:** Katerina Mekhlis, NeoCityLab, Netherlands

## INTRODUCTION

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**Title:** Quantification of the impacts of tropical cyclones on the coasts of the Gulf of Mexico, the Western Caribbean Sea and on the urban, semi-urban and rural localities of Mexico

Agustin Fernandez Eguiarte, Universidad Nacional Autonoma de Mexico, Mexico

**Title:** Adopting the linked data approach for spatio-temporal analysis: Opportunities and challenges

Valentina Janev, University of Belgrade, Serbia

**Title:** Spatial and sensible planning of chaotic metropolitan city through GIS and remote sensing  
Waqas Wajid, Hochschule Anhalt, Bernburg (Saale), Germany

## GROUP PHOTO

Lunch Break

**Title:** A geospatial study on coastal erosion in Krishna-Godavari delta region, Andhra Pradesh, India  
Peddada Jagadeeswara Rao, Andhra University, India  
**Title:** Using GIS to develop vulnerability index map for Bassetlaw District Council  
Andrews Kwasi Afforo Odoom, Losamills Consult Limited, Ghana  
**Title:** New approach to data visualisation, automated object recognition and urban management based on laser scanning and photo panoramas  
Katerina Mekhlis, NeoCityLab, Netherlands  
**Title:** Developing a prototype of geo-spatial system for the implementation of One District, One Factory policy in support of regional economic development and poverty alleviation programmes in Ghana  
Napoleon Kurantin, Ghana Institute of Management and Public Administration, Ghana

Networking & Refreshments

**Title:** Object-based forest cover change mapping using remote sensing in Nuristan province, Afghanistan  
Shogufa Popal, Kabul University, Afghanistan  
**Title:** Earthquake risk assessment of Blida (Algeria) using GIS  
Khalida Tadjer, University of Blida, Algeria

## POSTER PRESENTATIONS

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## PANEL DISCUSSION

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## Awards & Closing Ceremony