

Preface UAV-g 2019

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Unmanned Aerial Vehicles (UAV) have become a popular instrument for a wide range of emerging applications such as mapping, search & rescue, infrastructure monitoring, precision farming, transportation, just to mention some of them. The UAV market has overcome 130 B\$ value in the last year (source PWC report 2017) and the trend looks extremely promising for the upcoming years too. The economic boom has boosted the scientific and technological development of UAV technologies in the last decade. In this context, **UAV-g** was initiated in 2011 as the largest scientific event dedicated to UAV in Geomatics and Remote Sensing. In the different editions, the new scientific challenges have made more evident the need for an inter-disciplinary approach leading to stronger synergies with adjacent disciplines.

The ambition of **UAV-g 2019** was therefore to bring together experts from different domains such as remote sensing, robotics, computer vision, aerospace engineering as well as UAV user communities. UAV-g showed to be the common house of all these experts where they can create synergies, learn about the recent developments and exchange views on the future directions of UAV research, applications and services. Researchers, developers, service and platform providers as well as end users participated in UAV-g and contributed with presentations, posters and discussions to create synergies between researches and applications on unmanned platforms. This multidisciplinary environment was also reflected in the composition of the Scientific Committee composed by experts with very different expertise and working all over the World. For the first time in its history, UAV-g was hosted in the [ISPRS GeoSpatial Week](#) (GSW) 2019. This ensured a larger audience and impact of the conference on the Remote Sensing disciplines.

UAV-g 2019 received 29 Full-papers and 91 Abstract-based submissions. The members of the Scientific Committee thoroughly read and commented on these submissions while authors received feedback from at least three reviewers. Given the review results, 15 papers were accepted for the inclusion in the ISPRS Annals and 76 papers were accepted in the ISPRS Archives, while the remaining contributions were either rejected or withdrawn. All the accepted manuscripts show a high level of maturity, presenting novel and interesting ideas.

A great acknowledgement must be given to all the members of the Scientific Committee who did an excellent job in selecting the published contributions.

Local organizing chair

Francesco Nex – University of Twente, The Netherlands

Scientific committee

Helge Aasen – ETH Zurich, Switzerland

Costas Armenakis – York University, Canada

Mourad Bouziani – IAV Hassan II, Morocco

Filiberto Chiabrando – Politecnico di Torino, Italy

Davide Cucci – EPFL, Switzerland

Wolfgang Förstner – University of Bonn, Germany

Matteo Fumagalli – Aalborg University, Denmark

Kevin Franke – Brigham Young University, USA

Andrea Fusiello – University of Udine, Italy
Markus Gerke – Technical University of Braunschweig, Germany
Caroline Gevaert – University of Twente, The Netherlands
Jean Marc Gilliot – AgroParisTech, France
Daniele Giordan – CNR IRPI, Italy
Görres Grenzdörffer – University of Rostock, Germany
Norman Kerle – University of Twente, The Netherlands
Taejung Kim – Inha University, Korea
Lammert Kooistra – Wageningen University and Research, The Netherlands
Norbert Haala – University of Stuttgart, Germany
Petra Helmholz – Curtin University, Australia
Eija Honkavaara – National Land Survey of Finland, Finland
Dorota Iwaszczuk – Technical University of Munich, Germany
Arko Lucieer – University of Tasmania, Australia
Matthew McCabe – King Abdullah University of Science and Technology, Saudi Arabia
Farid Melgani – University of Trento, Italy
Sander Oude Elberink – University of Twente, The Netherlands
Claudio Persello – University of Twente, The Netherlands
Fabio Remondino – Fondazione Bruno Kessler, Italy
Ewelina Rupnik – IGN, France
Václav Šafář – Research Institute of Geodesy, Topography and Cartography, Czech Republic
Cyrill Stachniss – University of Bonn, Germany
Rudolph Triebel – DLR, Germany
Matthew Westoby – Northumbria University, UK