



## Advances in Environmental Monitoring with UAS International Workshop

30<sup>th</sup> March 2022  
(MTA DAB székház)

### PROGRAM

08:30 – 09:30 Registration

- 09:30-09:50:** László Bertalan, Brigitta Tóth – **Welcome from local organizers**  
**09:50-10:05:** Salvatore Manfreda – **The achievements HARMONIOUS COST Action**  
**10:05-10:25:** *Plenary talk:* Francesco Nex – **Towards real-time UAS mapping: example, challenges and opportunities**  
**10:25-10:55:** *Plenary talk:* James Dietrich – **Drones for River Monitoring, a ten-year perspective**

10:55-11:20 Coffee Break

- 11:20-11:35:** Sorin Herban – **Summary of WG1: UAS data processing**  
**11:30-11:50:** Jana Müllerová – **Summary of WG2: Vegetation status (part 1)**  
**11:50-12:05:** Antonino Maltese – **Summary of WG2: Vegetation status (part 2)**  
**12:05-12:20:** Yiyian Zeng – **Summary of WG3: Soil moisture content**  
**12:20-12:35:** Dariia Strelnikova – **Summary of WG4: River monitoring**  
**12:35-12:50:** Eyal Ben-Dor – **Summary of WG5: Harmonization of methods and results**

12:50-14:30: Lunch break

- 14:30-14:45:** Gábor Papp – **HungaroControl's Air-Ground-Air communication concept in order to enable UAVs' ecosystem**  
**14:45-15:00:** Géza Király et al. – **UAS and their application in forest monitoring**  
**15:00-15:15:** Gábor Bakó et al. – **HRAM: High Spatial Resolution Aerial Monitoring Network for Nature Conservation**  
**15:15-15:30:** Ferenc Kovács et al. – **Application of UAS imagery in environmental research at the University of Szeged**  
**15:30-15:45:** Anette Eltner et al. – **Hydro-morphological mapping of river reaches using videos captured with UAS**  
**15:45-16:00:** Ilyan Kotsev et al. – **UAS-aided bedform and habitat mapping of Bolata Cove, Bulgarian Black Sea**

16:00-16:30: Coffee Break

- 16:30-16:50:** Lance R. Brady – **UAS for Research and Applied Science in the United States Geological Survey**  
**16:50-17:05:** Kamal Jain et al. – **Crop identification and classification from UAV images using conjugated dense convolutional neural network**  
**17:05-17:20:** Nicolas Francos et al. – **Mapping Water Infiltration Rate Using Ground and UAV Hyperspectral Data  
A Case Study of Alento, Italy**  
**17:20-17:35:** Martin Jolley et al. – **Considerations When Applying UAS-based Large-Scale PIV and PTV for Determining River  
Flow Velocity**  
**17:35-17:50:** Adrian Gracia-Romero et al. – **UAS plant phenotyping under abiotic stresses**  
**17:50-18:05:** Shawn C. Kefauver et al. – **High-resolution UAV Imaging for Forest Productivity Monitoring**

**Attendance at the Workshop is free, but registration is required.  
Coffee breaks, refreshments and lunch are provided for each registered participants free of charge.**

Registration: [www.costharmonious.eu/2022/01/18/final-general-assembly](http://www.costharmonious.eu/2022/01/18/final-general-assembly)

The event is co-organized by :

HARMONIOUS COST Action (CA16219)  
Hungarian Academy of Sciences, Academic Commission Debrecen, Committee of Earth Sciences