

**20th World Congress of the International Federation of  
Automatic Control**

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**OPEN INVITED TRACK**

**IFAC T.C. Fault Detection, Supervision & Safety of Technical  
Processes - SAFEPROCESS**

**on**

**Design of Fault Diagnosis and Fault-Tolerant Control methods in  
Unmanned Aerial Vehicle/Fleet**

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**SCOPE:**

Unmanned Aerial Vehicle/Fleet are gaining more and more attention during the last a few years due to their important contributions and cost-effective applications in several tasks such as monitoring, surveillance, search, rescue missions, as well as military and security applications. Faults or failures such as defects in components, instruments, controllers and/or control loop can cause undesired reactions and consequences as damage to technical parts of the Unmanned Aerial Vehicles, to the environment but also directly to human life in metropolitan space. Thus, fault diagnosis and fault-tolerant control are extremely important in this emerging area.

The objective of this Open Invited track session aims at presenting the recent significant advances, development and application in the design of Fault Diagnosis (FD) and Fault-Tolerant Control (FTC) methods, devoted to Unmanned Aerial Vehicle/Fleet. The Open Invited track session will considered linear and nonlinear techniques for modeling, fault diagnosis, fault-tolerant control, path and trajectory planning/re-planning, cooperative/formation flight guidance, navigation and control.