CC8. Bio- and Ecological Systems

At the time of submission of you paper in PaperPlaza, by first selecting "Bio- and Ecological Systems", the following keywords in the right column will be listed. By selecting one of them as your "1st keyword", your paper will be handled and reviewed by the members of the IFAC Technical Committee (TC) shown in the left column. For more on Technical Committees under this theme, please see https://tc.ifac-control.org/8.

TC Name	Keywords
8.1. Control in Agriculture	Agricultural ergonomics
	Agricultural ergonomics
	Agricultural robotics
	Agricultural solar energy use
	Animal husbandry
	Bio-energetics
	Bioresponses
	Biosensors in agriculture
	CFD in agriculture
	Controlled ecological life support systems (CELLS)
	Crop processes
	Decision support systems
	Grading systems and quality assessment
	Greenhouse control
	Human robot collaboration
	Man-machine systems in agriculture
	Modeling and control of agriculture
	Multi-agent systems for agriculture
	Navigation and guidance
	Pattern recognition and artificial intelligence in agriculture
	Plant factories
	Post-harvesting and food processing
	Precision agriculture
	Precision farming
	Software sensors in agriculture
	Speaking organism systems
	Standardisation in agriculture
	Swarm robotics
	UAVs in agriculture
	Wireless sensor networks in agriculture
8.2. Biological and Medical Systems	Artificial pancreas or organs
	Bio-signals analysis and interpretation
	Biomedical and medical image processing and systems
	Biomedical system modeling, simulation and visualization
	Cellular, metabolic, cardiovascular, pulmonary, neuro-systems
	Chronic care and/or diabetes
	Clinical trial
	Clinical validation
	Control of physiological and clinical variables
	Control of voluntary movements, respiration
	Decision support and control
	Developments in measurement, signal processing
	Healthcare management, disease control, critical care
	Identification and validation
	Intensive and chronic care or treatment
	Kinetic modeling and control of biological systems
	Medical imaging and processing
	Model formulation, experiment design
	Pharmacokinetics and drug delivery
	Physiological Model
	Quantification of physiological parameters for diagnosis and treatment assessment
	Rehabilitation engineering and healthcare delivery
	Tracer kinetic modeling using various imaging systems
8.3. Modeling and Control of Environmental Systems	Air quality planning and control
	Climate change impact and adaptation measures
	Environmental decision support systems
	Hydroinformatics
	Integrated assessment modelling
	Machine learning for environmental applications
<u></u>	Model reduction and dynamic emulation
	Modeling and identification of environmental systems
	Multi source environmental data integration

	Natural and environmental systems
	Natural resources management
	Optimal control and operation of water resources systems
	Planning and management for participatory decision making
	Real time control of environmental systems
	Risk analysis, impact evaluation
	Water and food security
	Water quality and quantity management
8.4. Biosystems and Bioprocesses	Bioenergy production
	Bioinformatics
	Data mining tools
	Downstream processing
	Dynamics and control
	Fault diagnosis
	Food engineering
	Industrial biotechnology
	Integrated bioprocessing
	Life cycle analysis/assessment
	Mammalian, insect and plant cell technology
	Metabolic engineering
	Microbial technology
	Modeling and identification
	Monitoring
	Parameter and state estimation
	Pharmaceutical processes
	Scheduling, coordination, optimization
	Wastewater treatment processes