

# AQTR 2022 – Student Forum Program

## Session 1

Saturday, May 21 <sup>st</sup> , 2022. <b>8.50 – 11.15</b>			
Session chair <b>Rusu- Both Roxana</b>			
Place <a href="#">Teams Platform - AQTR 2022 - SF: Session 1</a>			
Paper ID	Papers		
91	<b>Authors</b>	<i>Brişan Oana Adnana, Mureşan Cristina Ioana</i>	9:00 – 9:15
	<b>Title</b>	Position Control of a Differentially Driven Mobile Robot using State Feedback	
92	<b>Authors</b>	<i>Ioana Paducel</i>	9:15 – 9:30
	<b>Title</b>	Fractional order PID controller tuned with optimization algorithms	
90	<b>Authors</b>	<i>Narita Mihaela</i>	9:30 – 9:45
	<b>Title</b>	PI Autotuning for Servo System Velocity Control	
99	<b>Authors</b>	<i>Escariu Vladut-Gabriel</i>	9:45 – 10:00
	<b>Title</b>	Estimation of the parameters of a steering wheel model in a Steer-by-Wire system by parametric identification	
100	<b>Authors</b>	<i>Maximilian Maier</i>	10:00 – 10:15
	<b>Title</b>	Cascade Control of Aeration in Wastewater Treatment Plants Bioreactors	
108	<b>Authors</b>	<i>Ungur David-Stefan</i>	10:15 – 10:30
	<b>Title</b>	North Finding System using a MEMS Gyroscope	
109	<b>Authors</b>	<i>Badea Iulian Mirel</i>	10:30 – 10:45
	<b>Title</b>	Liquid level control in a two-tank system	
101	<b>Authors</b>	<i>Secan Laura-Cristalia</i>	10:45 – 11:00
	<b>Title</b>	Adjusting the level in a tank	

## Session 2

Saturday, May 21 <sup>st</sup> , 2022. <b>8.50 – 11.15</b>  Session chair <b>Berciu Alexandru</b>  Place <a href="#">Teams Platform - AQTR 2022 - SF: Session 2</a>			
Paper ID	Papers		
107	<b>Authors</b>	<i>Laslo Andrada-Maria, Toma Andrei-Victor</i>	9:00 – 9:15
	<b>Title</b>	Design and Implementation of a Monitoring and control system for Sulphuric acid production optimization	
96	<b>Authors</b>	<i>Moraru Andrei</i>	9:15 – 9:30
	<b>Title</b>	Quaternion Based Kalman Filter for Open Loop Attitude Estimation	
98	<b>Authors</b>	<i>Alinei-Poiana Tudor</i>	9:30 – 9:45
	<b>Title</b>	Tumor modeling using deterministic and stochastic differential equations	
93	<b>Authors</b>	<i>Nagy Paula -Ioana</i>	9:45 – 10:00
	<b>Title</b>	Tumor Growth Volume Modeling	
95	<b>Authors</b>	<i>Cândea Tudor</i>	10:00 – 10:15
	<b>Title</b>	Robust controller for stabilizing the trajectory and modeling the process of a rocket	
102	<b>Authors</b>	<i>Ceoca Ovidiu, Enyedi Ervin, Mihut Andreea-Ioana and Pintea Paul-Andrei</i>	10:15 – 10:30
	<b>Title</b>	Algorithms used in scene understanding for autonomous vehicles	
94	<b>Authors</b>	<i>Ceoca Andreea</i>	10:30 – 10:45
	<b>Title</b>	Design of intelligent vehicle control methods implemented on Arduino microcontroller	

## Session 3

<p>Saturday, May 21<sup>st</sup>, 2022.  <b>8.50 – 11.15</b></p> <p>Session chair  <b>Morar Dora Laura</b></p> <p>Place  <a href="#">Teams Platform - AQTR 2022 - SF: Session 3</a></p>			
Paper ID	Papers		
110	<b>Authors</b>	<b><i>Bogdan-Sorin Marcus</i></b>	9:00 – 9:15
	<b>Title</b>	Adjusting the speed of three-phased induction motors based on pipe diameter and roll dimensions	
103	<b>Authors</b>	<b><i>Roşa Andreea</i></b>	9:15 – 9:30
	<b>Title</b>	PID control for the anaesthesia system	
97	<b>Authors</b>	<b><i>Plugaru Tudor-Ştefan</i></b>	9:30 – 9:45
	<b>Title</b>	BLDC control using Field Oriented Control and 120 degree Trapezoidal Commutation	
106	<b>Authors</b>	<b><i>Toma Andrei-Victor, Laslo Andrada-Maria</i></b>	9:45 – 10:00
	<b>Title</b>	Self balancing system for two-wheeled vehicles	
104	<b>Authors</b>	<b><i>Mihaly Vlad, Pinteă Paul-Andrei</i></b>	10:00 – 10:15
	<b>Title</b>	Passivity-Based Controller for Maximum Power Point Tracking Algorithm Implementation	
34	<b>Authors</b>	<b><i>Souca Mihai Dan, Florea Catalin</i></b>	10:15 – 10:30
	<b>Title</b>	Output linearization of a ground vehicle model	
105	<b>Authors</b>	<b><i>Diana-Marcela Nechita</i></b>	10:30 – 10:45
	<b>Title</b>	Private Clinic Mobile Application	