
○

	Study of Hybrid Electric Vehicle Modeling using MATLAB/Simulink Simulation
	○ Glenn Hizkia Argy , Akira Kato
	Fuel efficiency and exhaust emissions of vehicles are determined by test cycles. Due to various road environments and climates, CO2 emissions on actual roads are different to the regulated values. Furthermore, conducting the test on actual road takes a lot of time and cost. Therefore, we aim to build a simulation that can calculate the fuel consumption and exhaust emissions of vehicles on actual roads. In previous study, small passenger gasoline vehicle of 2011 Honda Fit model was built by using MATLAB/Simulink and actual driving test route of Utsunomiya City was built by using traffic flow simulation (SUMO). In this study, since the trend has been moving to the use of Hybrid Electric Vehicle (HEV), 2020 Toyota Aqua model is chosen to be constructed in MATLAB/Simulink and the modeling method will be reported.