

SMART MOBILITY CITY 2013

The 43rd Tokyo Motor Show 2013 Organizer-Themed Project

Vehicles of Tomorrow

The 21st century may bring dramatic changes to the design of vehicles.

Such changes will be realized by technological advancement surrounding vehicles. The development of new power sources such as electricity and fuel cells, and the rise of new materials such as carbon fiber composites, may someday revolutionize the design of vehicles. If vehicles use electricity or fuel cells, which give off less heat compared to internal combustion engines, the vehicle body will no longer be confined to the use of metal such as steel, allowing for the adaptation of new material such as carbon fiber. The evolution of next generation vehicles will be greatly accelerated by the use of the latest advanced technologies, such as the implementation of solar power generating roofs, solid hydrogen-type fuel cell systems, and motors that do not use rare metals. These new technologies, as well as new materials with features that did not exist in prior materials, will increase the freedom in designing vehicles. It will allow great changes to be made to traditional frame structures and outside appearances of vehicles, raising expectations toward the realization of truly innovative and imaginative designs.

We may be close to seeing vehicles with designs that have never been seen before. In the future, it may become difficult to differentiate between four-wheel and two-wheel vehicles. There may be an evolved version of a quadrupedal walking robot, and many more exciting designs. And with the advent of such new designs, the values and roles of vehicles within our society and our lives may also be changed. These changes in the value of vehicles may further enrich and enhance our ways of mobility and our future lifestyles.

If new vehicles are born of the likes that have never been seen before, our lives will surely become more convenient and enriching. And if such changes revitalize our mobility and our ways of communication, we can also expect to see more elements of fun added to our everyday lifestyles.

The organizer-themed project SMART MOBILITY CITY 2013 is a main event of the Tokyo Motor Show, which is aiming to lead the world as the foremost technology-focused motor show. And it is from here that new technologies and designs will be introduced for the next generation.

This is the last of SMC Newsletter which we have sent seven times. Thank you for your interest till the last. Let's meet you in next Tokyo Motor Show.





SMART MOBILITY CITY 2013 NEWSLETTER

COLUMN

Shaping a New Vehicle Culture



Hitoshi Kikuchi / Pietro

Born in Tokyo in 1946.

A graduate of Keio University, Kikuchi started working at a major advertisement agency.

He went independent in 1997, and has been active as an essayist and artist. As a writer he is known as Hitoshi Kikuchi, and paints by the name of Pietro. His writings and illustrations appear regularly in a variety of magazines. He has also published many books, including Tetsu wa Umai!

Solo exhibitions have been held at galleries such as the Galerie Nichido in Karuizawa and Tokyo Kaikan Gallery. He was also the first person to introduce Dutch ovens to Japan, and is known as "Tetsunabe Ojisan" [Mr. Dutch oven"]. He serves as the President of the Japan Dutch Oven Society (www.jdos.com). I own two treasures that are parked in my garage – a sports car with a horizontally opposed flat-6 engine, and an SUV with a V8 engine. Both of these cars have different characteristics, and I have driven them for more than 20 years. But when I am driving around Tokyo, these cars can be a bit overwhelming especially when I am by myself. At one time I entertained adding a compact car that would be more suitable for city commuting. When I was just about to buy one, it dawned on me that my house is overflowing with many things. My colleague has a motto I can't seem to follow: "if you buy one thing, then throw one thing away." However I keep things even if I no longer need them. Because of this, my home is filled with them. I was beginning to have doubts about my lifestyle when I realized that owning another car would be nonsense, whatever the motive behind it might be and it just isn't copacetic to be driving around a confined city in a big car.

That's when I wondered if it's possible to fulfill all of my wishes with one vehicle – a commuter car easily maneuverable in a city like Tokyo; a comfortable SUV that can be loaded with luggage for covering long distances on the expressways; an open-top sports car that loves spirited driving on mountain passes; and a mini truck that can tackle many jobs from the ocean to high up on the mountains. If only one vehicle can serve all of these purposes, that would be terrific. As I was pondering about the impossibility of the existence of such a vehicle, I saw image of the movie *Transformers* and how the robots changed shape into vehicles as they ran around. This is it, I thought, this is the ideal vehicle that I want.

What would it be like if I can own a vehicle that could change itself into any shape while keeping a specific size, function, design, and a comfortable ride? Such a vehicle will be created to reflect the distinct styles of each auto manufacturers. For example, makers would take pride in the choice of cylinder arrangements for reciprocating engines – such as in-line, V or W configuration, horizontally-opposed and radial – as well as where this engine is located and placed. Each of these layouts would be appealing by offering its own unique driving experience, making it delightfully difficult for us consumers to decide what to choose. If one vehicle can be made to answer all of these desires, I think it would be amazing progress by which we can enjoy an eco-friendly lifestyle. Perhaps an anthropomorphic vehicle can be realized in the future.

(Hitoshi Kikuchi)



SMART MOBILITY CITY 2013 NEWSLETTER

SMART MOBILITY CITY 2013 Programs at the Venue

Core exhibit



Test Ride Personal mobility experiences



Conference International Symposium



Test Ride Autonomous vehicle demonstrations



Test Ride

Personal mobility experiences



Conference International Symposium



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