

9<sup>th</sup> World Congress on

# MATERIALS SCIENCE AND ENGINEERING

June 12-14, 2017 Rome, Italy

## High performance rubber concrete

Samaneh Pourmohammadimajveri  
Western Sydney University, Australia

For centuries, the researchers have been trying to make life easier for everyone, all the achieved technologies in material, civil, mechanical, chemical, electrical and other fields of engineering are appreciated and valued. Many scientists worked on how to get to the next level of development in all areas during the last decades, and as a result of that mankind enjoys a better life these days. But achieving all these developments without concern for the environment has resulted in some serious environmental damages such as global warming, stockpiling solid wastes in outdoor areas, fire, disease and poisoning. Nowadays, to resolve the said problems all over the world, there are several organizations focused on manufacturing and distributing sustainable and recycled products such as recycled tire rubber, and etc. Also there are some market leaders in delivering sustainable products to customers in civil infrastructure, building and construction, transport and other industries. But still the problem is standing and it seems the progress is rather slow. To reduce the resulting environmental impacts is for researchers to propose new products considering not just the scientific benefits, but also addressing sustainable development as a major concern more than ever in their projects. The current research is based on using recycled wastes such as vulcanized rubber of used-tires and trying to turn them into value added materials to achieve better quality. These recycled materials in some concrete applications after being modified chemically in order to obtain a product with enhanced physical, mechanical, thermal and structural properties, will decrease the impact of these waste materials on the environment. Due to high demand for concrete and its applications in all countries, the outcome of this research could make a big change in construction materials and technology for the future.

### Biography

Samaneh Pourmohammadimajveri joined the Western Sydney University in 2014, as a PhD Research Student. Her PhD research has been focused on developing a framework for optimum use of recycled materials such as waste tire rubber in concrete construction.

samaneh.pm@westernsydney.edu.au

Notes: