

Press Release

Amaravati, May 16, 2022

Patent granted for SRM AP innovation to increase stiffness and capacity of engine piston rings

Research at SRM University-AP research shows that applying a composite coating of chromium aluminum carbide (CR2 ALC) to the engine piston rings not only improves piston performance but also increases engine life, efficiency, and lubrication. The university also obtained a patent for the same. The university released the details in a statement on Monday

For any vehicle to run desperately for a long time, its engine must be good. The rings on piston further improve the engine performance. It is in this context that many efforts are being made by scientists to develop piston rings with the new scientific technologies. Dr Sheela Singh, who is an Associate Professor in the Department of Mechanical Engineering at SRM AP, has been conducting comprehensive research on the subject for three years with research student Deepak Davis.

The piston rings of motor vehicles currently on the market have a coating with nickel molybdenum aluminum. SRM University-AP researchers say it would be better to use a composite coating made with chromium aluminum carbide instead. If the piston rings have high velocity and lubrication properties, their rigidity is good, and it is better to use chromium aluminum carbide (CR2LC).

The Patent Certificate is issued by the Patent Office, Government of India after thorough examinations. University President Dr Satyanarayanan, Vice-Chancellor Prof V S Rao, Pro-Vice-Chancellor Prof D Narayana Rao, and other scholars lauded Dr Sheela Singh and Deepak Davis for their fervent research and innovation. This is the second patent granted to SRM University-AP.