



Registration Form for WFC Youth Working Committee

Personal Info.

Name: Dequan Shi

Title: Prof.

Affiliation: University of Shanghai for Science and Technology



Research Interest

- (1) Robot intelligent grinding and polishing technology for castings;
- (2) Monitoring and intelligent control for the casting forming parameters;
- (3) Modification of high-performance aluminum magnesium alloy under multiple external fields;
- (4) Additive manufacturing technology in foundry.

Main Achievements (<200 words)

Presided over 10 projects including National Natural Science Foundation of China, key research and development projects of Heilongjiang Province, and enterprise commissioned projects; Also serving as a member of Foundry Institution of Chinese Mechanical Engineering Society and an editorial board member of "China Foundry" Journal; Published 80+ academic papers, authorized 21 Chinese invention patents, and published 4 books; Received first prize of Shandong Provincial Science and Technology Award, second and third prizes of Heilongjiang Provincial Science and Technology Award, Excellent Young Talent Award in Chinese Foundry Industry, Youth Science and Technology Award of Harbin, etc. We have developed a "technology and equipment for detecting and dynamic controlling the quality of compacted molten iron", which addresses the significant demand for key vermicular graphite cast iron castings for high-end internal combustion engines and is at an international advanced level. We also have developed the first "online non-destructive testing equipment for the vermicularity of castings based on ultrasonics", ensuring that the vermicularity of engine key parts is fully qualified.