



## Application Form for WFC Academic Committee Member

### Personal Info.

Name: Primoz MRVAR

Title: full. prof. dr., Head of Foundry chair

Affiliation: University of Ljubljana

Nationality: Slovenian



### Research Interest

field of metallurgy, materials sciences and foundry technology

### Main Achievements (<200 words)

Over the past 30 years, P. Mrvar has worked in the field of metallurgy, materials sciences and foundry technology at the University of Ljubljana.

He specializes in modern foundry technologies e.g. high pressure die casting, gravity die and sand casting process, etc. He developed a few new innovative quality control methods and equipment for testing and research the alloys, exothermic mixtures etc. *On the Chair for Foundry, Department of materials and metallurgy, Faculty of natural sciences and engineering, University of Ljubljana, I am lecturer on graduate and postgraduate studies for Materials and metallurgy for following subjects: Casting technology, Statistic and quality control, Castings I, Castings II, and on the Ph. D. Study Materials Science and Engineering: Solidification of the metallic materials, Recycling, Metal forming and casting.*

1996-1997 Dilatation analyses of cast iron alloys

1996-1997 Gating systems for grey and ductile iron castings

1997 -2004 Development of "in situ" dilatometric equipment and method for the control, estimation and characterization of the quality of the spheroidal graphite cast iron

2004 -2006 Development of the control method for the foundries of the Mg alloys («in situ» thermal analysis of the Mg casting alloys...) and the simultaneous characterization of the casting alloys depending to the technology on the relation of the melting-casting-recycling

2000- Problems of hot spots solidification process

2002-2005 The development and use of additional ceramic materials in metallurgical industry, especially Foam- ceramic filters for filtering of metal melts

2005-2006 The research of controlling method for testing and investigation of exothermal mixtures for foundry industry

2005 - Development of the control method for foundries of Al-casting alloys («in situ» Thermal analysis of the Al-alloys...) and the simultaneous characterization of the casting alloys depending to the technology on the relation of the melting-casting-recycling

2005 - Sand mixtures for Croning process, etc.

2006- Computer simulation of casting process

2009-Development of innovative composed and Mg-composite cast plates



The 75<sup>th</sup>  
**WORLD FOUNDRY  
CONGRESS**

2024 **Oct. 25-30**  
Deyang·China

2018-Development of controlling methods for determination of shrinkage tendency

2022-Development of biodegradable materials and casting technologies for them

105 original scientific articles in materials and metallurgical periodicals,

175 papers at the international and domestic conferences

190 Technical reports for foundry projects