

23<sup>rd</sup> International Congress  
of Mechanical Engineering

  
COBEM 2015  
December 6<sup>th</sup> to 11<sup>th</sup>  
Rio de Janeiro - Brazil

## CERTIFICATE OF PRESENTATION

The organizing committee certifies that

has presented the paper

at the 23<sup>rd</sup> International Congress of Mechanical Engineering,  
COBEM 2015, held in Rio de Janeiro, RJ, Brazil, from  
December 6<sup>th</sup> to 11<sup>th</sup>, 2015.

  
Heraldo da Costa Mattos  
Congress Chair

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