



**REDE TEMÁTICA EM ENGENHARIA DE MATERIAIS**

UFOP - CETEC - UEMG

**Pós-Graduação em Engenharia de Materiais**



### **Programa de Disciplinas**

<b>Disciplina: RED 902 - Inovative biomass utilization in iron &amp; steelmaking</b>		
<b>Carga Horária: 45</b> horas-aula	<b>Caráter:</b> Optativa	<b>Créditos:</b> 03
<b>Cursos para os quais é ministrada:</b> Aperfeiçoamento		
<b>Professores:</b> I – Dr. Paulo Santos Assis II – Dr.		
<b>Ementa: Topics:</b> General introduction about the use of biomass in Iron and Steelmaking. Overview of the Iron and Steelmaking Processes. Overview of biomass in the world and in Brazil. Overview of biomass – Characterization. Production of charcoal. Characterization of charcoal. Production of biomass and Characterization of wastes. Overview of wastes in the biomass usage. Ironmaking production by using biomass. Powder coal injection into blast furnaces. Use of biomass in the steelmaking. Final remarks.		



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### **Referências Bibliográficas**

<b>Disciplina: RED 902 - Inovative biomass utilization in iron &amp; steelmaking</b>	
1.	Powder coal and biomass injection into BF - Assis, P.S
2.	Iron and Steelmaking , L.A. 1987
3.	Assis, P.S (editor) Modeling and simulation on iron and steelmaking; REM (1998), 366 p