

Universitatea Transilvania din Braşov

Facultatea Ştiinţa şi Ingineria Materialelor

Departamentul Ştiinţa Materialelor

Tematica propusă pentru admiterea la doctorat Septembrie 2019

Domeniul de doctorat **Ingineria Materialelor**

Conducător de doctorat: **Prof. Dr. Ing. Virgil Geamăn**

Tematica 1: **SUPERPLASTICITATEA MATERIALELOR POLICRISTALINE**

Tematica 2: **PLACAREA PRIN COMPACTARE IZOSTATICĂ**

Bibliografie recomandată:

[1]

1. S.N.Patankar, Tan Ming Jen, "Superplastic Forming of Commercial Purity Aluminium" (Scripta Materialia, Vol.38 (1) (1998) pp 145-148)
2. X.Li, M.J.Tan, "High Strain Rate Superplasticity and deformation mechanisms of powder metallurgy 6061 Al/SiCp composites" (Mater. Sci. & Tech., Vol. 18 (5) (2002) pp581-585)
3. C.L.Chen, M.J.Tan, "Effect of grain boundary character distribution (GBCD) on the cavitation behaviour during superplastic deformation of Al7475" (Materials Science and Engineering A Vol. 338 (2002) pp243-252)
4. G. Raisson, etal (Aubert & Duval, France). 'Production of Net-Shape Static Parts by Direct HIPing of Nickel-base Superalloy Prealloyed Powders'. Paper presented at Euro Superalloys 2010, and published in Advanced Materials Research, Vol 278, 2011, pp 277-292.

[2]

1. Atkinson, Dr H. V.; Davies, S. (2000-12-01). "Fundamental aspects of hot isostatic pressing: An overview". Metallurgical and Materials Transactions A. 31 (12): 2981–3000.
2. W. Theisen, HIP CLADDING OF TOOLS. Karlstad University, Sweden, 2008.
3. A. Bose and W. B. Eisen, Hot consolidation of powders & particulates: Metal Powder Industries Federation, 2003.
4. H.V. Atkinson and B.A. Rickinson, Hot isostatic processing, Adam Hilger series, Bristol 1991.

Transilvania University of Braşov

Faculty of Materials Science and Engineering.

Department of Materials Science

Proposed topic for doctoral studies admission contest – September 2019

Doctoral field **Materials Engineering.**

Doctoral coordinator **Prof. Ph.D. Eng. Virgil Geamăn**

Topic 1: **SUPERPASTICITY OF POLYCRISTALLINE MATERIALS.**

Topic 2: **HIP CLADDING PROCESS**

Recommended bibliography:

[1]

1. S.N.Patankar, Tan Ming Jen, "Superplastic Forming of Commercial Purity Aluminium" (Scripta Materialia, Vol.38 (1) (1998) pp 145-148)
2. X.Li, M.J.Tan, "High Strain Rate Superplasticity and deformation mechanisms of powder metallurgy 6061 Al/SiCp composites" (Mater. Sci. & Tech., Vol. 18 (5) (2002) pp581-585)
3. C.L.Chen, M.J.Tan, "Effect of grain boundary character distribution (GBCD) on the cavitation behaviour during superplastic deformation of Al7475" (Materials Science and Engineering A Vol. 338 (2002) pp243-252)
4. G. Raison, etal (Aubert & Duval, France). 'Production of Net-Shape Static Parts by Direct HIPing of Nickel-base Superalloy Prealloyed Powders'. Paper presented at Euro Superalloys 2010, and published in Advanced Materials Research, Vol 278, 2011, pp 277-292.

[2]

1. Atkinson, Dr H. V.; Davies, S. (2000-12-01). "Fundamental aspects of hot isostatic pressing: An overview". Metallurgical and Materials Transactions A. 31 (12): 2981–3000.
2. W. Theisen, HIP CLADDING OF TOOLS. Karlstad University, Sweden, 2008.
3. A. Bose and W. B. Eisen, Hot consolidation of powders & particulates: Metal Powder Industries Federation, 2003.
4. H.V. Atkinson and B.A. Rickinson, Hot isostatic processing, Adam Hilger series, Bristol 1991.