

THE THIRD INTERNATIONAL CONFERENCE ON PHYSICAL AND NUMERICAL SIMULATION OF MATERIALS AND HOT WORKING(ICPNS'99)

Oct. 10 – 14, 1999
Beijing, China



Organized by
Harbin Institute of Technology

Sponsored by
National Material Society of China
Dynamic Systems Inc. (USA)
Fuji Electronic Industrial Co. (Japan)
The University of Oulu (Finland)
National Key Laboratory of Advanced Welding
Production Technology (China)
National Key Laboratory of Precision Hot
Processing of Metals (China)
Harbin Institute of Technology (China)

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9:40	Coffee Break
10:00	1-26. Two-dimensional Numerical Analysis of Plasma Immersion Ion Implantation of Cylindrical Bores A.G.Liu, X.F.Wang, S .Y.Wang, B.Y.Tang,P.K.Chu*, H.K.
Chair: L.I.Mikhoduj	1-27. Diffusion welding of Aluminum MMCs Reinforced with Al ₂ O ₃ Particle Jitai Niu, HIT, China
	1-28. The Design of an Integrated System for Predicting and Analyzing Solder Joint Shape and Reliability in SMT Chunqing Wang, HIT, China
	1-29. Numerical Simulation of the Temperature Field in a Solder Ball under Pulsed Laser and Its Effect on the Vibration of the Solder Chunqing Wang, HIT, China
13:30~17:30	Meeting and Visit
Chair: Tie Gang	

October 12, Tuesday

Time	Presentation (N0.2 Group—Rolling, Stamping and Forging)
8:00	2-1. Severe Plastic Deformation Techniques Weichang Chen, David Ferguson, Dynamic Systems Inc., USA
	2-2. Coupled Numerical Simulation on Cold Rollers Temperature Fieldphase Transformation-Stress Field during its Quenching Process Jianfeng Gu, Shanghai Jiaotong University, China
Chair: K.B.Nielson	2-3. Development of Constitutive Equations for Ti-6Al-4V Alloy under Hot-Working Condition Luoxing Li, Central South University of Technology, China
	2-4. Numerical Simulation of Forging and Subsequent Heat Treatment of a Rod By a Finite Volume Method Peiran Ding, Dong-Ying Ju, Tatsuo Inoue, MSC Japan Ltd., Osaka, Japan
	2-5. Optimization of Material Properties Through the Linkage of Simulation Calculation with the Real Rolling Process by the Example of Different Grades for Bars and Wire Rod R. Kohlmann, Betriebsleiter Qualitätsstelle, Krupp Edelstahl Profile, Siegen, M. Kruse, Meyer, u.Plociennik Research & Development SMS Schloemann Siemag AG, Düsseldorf, Germany