CHAO, HUANG-LIN (BROOK)

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EDUCATION

9/03-present **University of Texas at Austin**
PhD program in Mechanical Engineering with a focus on the academic area of Materials Science and Engineering

9/96-6/98 **National Tsing Hua University ROC**
M.S. Major in Power Mechanical Engineering with a focus on the academic area of Solid Mechanics.

9/92-6/96 **National Chiao Tung University ROC**
B.S. Major in Mechanical Engineering.

EXPERIENCE

6/05-present **University of Texas at Austin, Willson research group**
Graduate Research Assistant. Conducted research in polymer characterization for step-and-flash imprint lithography, including nano-indentation, dielectric constant measurement, dynamic mechanical analysis, thermal mechanical analysis and interfacial analysis.

6/04-present **University of Texas at Austin, Ho research group**
Graduate Research Assistant. Research focus on flip-chip packaging reliability and packaging level polymeric materials characterization. Reliability research includes flip chip electromigration reliability, thermal cycling reliability, and simulation of current enhanced solder intermetallic diffusion kinetics.

6/00-12/02 **Applied Materials, Taiwan**
Process Support/Customer Engineer. Significant experience on process enhancement of CVD TiN, PVD/IPVD and Cu ECP systems.

9/98-6/00 **Military Service**

AWARDS

1998 **Outstanding Theses Award**
Honored by *Chinese Society of Mechanical Engineer*s

PUBLICATIONS

2005 M. Ding, G. Wang, H.L. Chao, P.S. Ho, and P. Su., "A Study of Electromigration Failure in Pb-free Solder Joints", IPRS 2005.

1999 H.L. Chao and W.C. Wang, "On the Modification of Hertz Contact Theory," Proceedings of the 1999 SEM Spring Conference on Theoretical, Experimental and Computational Mechanics, pp.245-248, Cincinnati, Ohio. USA, June 7-9.

1998 H.L. Chao and W.Ch. Wang, 1998.12, "Photoelastic analysis of the contact stresses of rotating disks and conjugated cams," 22nd Symposium of Chinese Society of Mechanics, pp.53-60.