



HTS/Bodycote Best Paper in Heat Treating Award Past Recipients

The ASM Heat Treating Society established the Best Paper in Heat Treating Award in 1997 to recognize a paper that represents an advancement in heat treating technology or promotes heat treating in some substantial way or represents a clear advancement in managing the business of heat treating. The award is endowed by Bodycote Thermal Process - North America.

J.L. Cunningham, D.J. Medlin, George Krauss.....1998
For their paper entitled:

"Effects of Induction Hardening and Prior Cold Work on a Microalloyed Medium Carbon Steel".

Youichi Watanabe, Naoki Narita, Shunzo Umegaki, Yoshinao Mishima1999
For their paper entitled:

"Rolling Contact Fatigue Strength of Carbo-Nitrided and Shot Peened Chromium Alloy Steel"

Michio Sugiyama, Kunihiko Ishikawa, Hitoshi Iwata2000
For their paper entitled:

"Vacuum Carburizing with Acetylene"

P.F. Stratton and Dustin Ho2001
For their paper entitled:

"Modelling the Gas Quenching of a Gear Wheel"

Manoj M. Thete2002
For his paper entitled:

"Simulation of Gas Carburizing: Development of a Computer Program with Systematic Analysis of Process Variables Involved"

Jason Blush.....2003
For his paper entitled:

"Modeling of Concentration, Flow Stress, and Residual Stress Due to Surface Hardening with Interstitial Solutes"

Peter King.....2004
For his paper entitled:

"Ferritic Nitrocarburising of Tool Steels"

Shuhui Ma.....2006
For her paper entitled:

"Modeling the Heat Treatment of Age-Hardening Cast Aluminum Alloys"

Olga Karabelchtchikova, Christopher A. Brown, R. D. Sisson, Jr.....2007
For their paper entitled:

"The Effect of Surface Roughness on the Kinetics of Mass Transfer During Gas Carburizing"

Vivekanand Sista, Philip Nash, and Satyam S. Sahay	2008
For their paper entitled:	
“Accelerated Bainitic Transformation During Cyclic Austempering”	
K. D. Clark, C. J. VanTyne, C. J. Vigil, and R. E. Hackenberg	2010
For their paper entitled:	
“Induction Hardening 5150 Steel – Effects of Initial Microstructure and Heating Rate”	
Y. Wei, G. Wang, R. D. Sisson Jr., B. Bernard, and R. Poor	2011
For their paper entitled:	
“Intelligent Heat Treating: Simulation of Carburization Process”	
Mei Yang and R. D. Sisson Jr.	2012
For their paper entitled:	
“Modeling the Nitriding Process of Steels”	
Jiandong Liang, Shengmin Guo, Muhammad A. Wahab	2013
For their paper entitled:	
“Localized Surface Modification on 1018 Low Carbon Steel by Electrolytic Plasma Process and Its Impact on Corrosion Behavior”	
Anthony Lombardi, C. Ravindran, R. MacKay	2014
For their paper entitled:	
“Development of Methodology to Improve Mechanical Properties of 319 Al alloy Engine Blocks Through Cost-Effective Heat Treatment Optimization”	
Lei Zhang, Liang He, R. D. Sisson Jr.	2015
For their paper entitled:	
“Enhancement of CarbonitrideTool©-Retained Austenite and Microhardness Prediction”	
Xiaoqing Cai and R. D. Sisson Jr.	2016
For their paper entitled:	
“Microstructure Development in AISI 4140 Steels During Tempering”	
Gaosong Yi and Michael L. Free	2017
For their paper entitled:	
“Effect of Pretreatment on the Sensitization Behavior of Al 5083 H116”	
Blake M. Whitley	2018
For his paper entitled:	
“Understanding Microstructural Evolution During Rapid Heat Treatment of Microalloyed Steels Through Computational Modeling, Advanced Physical Simulation and Multiscale Characterization Techniques”	
Virginia K. Judge	2019
For her paper entitled:	
“Rapid Tempering: Opportunities and Challenges”	
Roberto Cruces-Reséndez	2020
For his paper entitled:	

“The effect of probe-fluid interaction on the performance of standard probes
for cooling curve analysis in agitated quenchants”

Bryer Sousa.....2021

For his paper entitled:

“Phase Fraction Quantification in Austempered Steels by Nanomechanical Mapping:
AISI 5160 as a Case Study”

Maryam Razavipour2022

For her paper entitled:

“Data-Driven Design Framework for Laser Heat Treatment Process of Cold Spray Coating”

Haoxing You.....2023

For his paper entitled:

“Flux analysis of nitrogen and carbon during nitriding and FNC heat treating”

Bernoulli Andilab.....2024

For his paper entitled:

“In-situ analysis of incipient melting of Al₂Cu in a novel high strength Al-Cu casting
alloy using laser scanning confocal microscopy”