CONTENTS

JOURNAL OF THE JAPAN WELDING SOCIETY
Vol.90 No.3 April 2021

Welcome to Toyohashi –Eastern Gate of Aichi–................................. FUKUMOTO Masahiro 3
Essay
Fujii, Double-titled, and Materials Development..................................... AIHARA Shuji 6
Let’s Join Together, Engineers!
Repair of Kansai Airport Connection Bridge..................................... HIIGUCHI Manabu 9
Technical Information – Special Issue –
Multi-physics Analysis for Spot Welding
A Preface ............................................................................................... HIRANO Satoshi
FUKUMOTO Shinji KOYAMA Shinni 14
Nonlinear Transient Contact Deformation-Electric Current-Thermal Conduction
Triply Coupled Finite Element Analysis for Resistance Spot Welding .......... NIHO Tomoya 15
Process and Mechanical Simulation of Spot Welding
Development of Prediction Model for Nugget Diameter of
Two-Stage Resistance Spot Weld Using Neural Network ....................... SATO Akira
IYOTA Muneyoshi KITANO Houichi NAKAMURA Terumi 20
FEM Simulation of Stress Fields During Resistance Spot Welding .......... FUKUMOTO Manabu
UEDA Hideki 32
Numerical Simulation in High-speed Spot Welding
A Class in Joining & Welding – Application Examples Learned from the Basics to the Advanced Level –
Basics of Thermal Cutting and Long-life Techniques of the Electrode for Oxygen Plasma Cutting
YAMAMOTO Kentaro IHARA Daisuke SANO Yoshimi 45
Up-to-the-minute
Participation Report of the ASME Pressure Vessels & Piping 2020............ IWAMATSU Fuminori 53
Spot Light
– Egg of Welding – ............................................................................ KAWAKUBO Takumi 56
WELNET for Young Members
Information of WELNET Evening Forum at JWS National Meeting in Spring 2021 .............................................. 59
Calendar of Event .................................................................................. 60
Society Announcements ........................................................................... 61