

CONTENTS

JOURNAL OF THE JAPAN WELDING SOCIETY

Vol.90 No.4 June 2021

The Address by the President in General Meeting	HIROSE Akio	3
Essay		
What I Think Back in My 40th Year of Research Work	KASUYA Tadashi	4
The Latest Technology Note		
Aircraft Engine Titanium Alloys, Welding / Joining Process and Automation Technology for Future	TSUZUKI Ryoichi	8
Technical Information – Special Issue –		
Passion of Young Professionals for Welding and Joining Research		
A Preface	{ KASANO Kazuki { YAMAMOTO Hajime	30
Approaches and Future Developments about Evaluation of Hydrogen Diffusion Behavior in Resistance Spot Welds	KAWABE Nao	31
Research for Carbide Composite Laser Cladding on Steam Turbine Blades for Geothermal Power Generation	NAKASHIMA Yuya	33
Influence of Gas Cutting on Deformation during Removal of Constraint Jig Using Fast Large-Scale Analysis	ASHIDA Ryo	36
Development of Numerical Model for Visualization of Submerged Arc Welding Phenomena	KOMEN Hisaya	40
A Technique for Preventing Solidification Cracking at the end part in One-Side Submerged Arc Welding	YOKOTA Hiroyoshi	43
My Passion for Dissimilar Joining Research in Student Days Connecting with My Current Work	SAKINO Shota	46
The First Step as a Researcher in the Welding Process	TANAKA Keigo	50
A Class in Joining & Welding – Application Examples Learned from the Basics to the Advanced Level –		
Solid-State Dissimilar Film Formation for Metals, Ceramics, and Polymers by Cold Spray Technique	OGAWA Kazuhiro	53
Point Lesson of Experiments		
Visualization of Material Flow During Friction Stir Welding Utilizing Transparent Fluid	{ SHIBAYANAGI Toshiya { ORI Kyohei { KAWANISHI Syoichi { TOMONAGA Naoya { YAMANE Takeshi	62
Up-to-the-minute		
Report on 27 th Symposium on “Microjoining and Assembly Technology in Electronics”	MATSUSHIMA Michiya	66
Spot Light		
– My History for Welding –	MAEDA Kyohei	69
WELNET for Young Members		
Report of WELNET Evening Forum at JWS National Meeting in Spring 2021		72
Calendar of Event		73
Society Announcements		74
Quarterly Journal of the Japan Welding Society Vol. 39 No.1 2021 Contents		75

一般社団法人 溶接学会 2020・2021年度 理事・監事・幹事

理事 (会長)	廣才	瀬田	明一	夫幸	理事	大畑	充彦	理事	西村	仁英	志俊
(副会長)	山岡	弘和	人幸	”	小野	数一	”	”	井本	光賢	生道
(”)	青山	和浩	”	”	北側	彰一	”	”	藤本	元賢	二次
”	青木	聡	”	”	清水	弘成	”	”	山本	賢健	治
”	伊石	孝	”	”	大丸	学	監事	”	篠井	健健	”
”	伊藤	博	”	”	田中	介	”	”	大野	健健	”
”	伊藤	博	”	”	坪井	竜	幹事	”	平野	賢健	”
”	恵	哲	”	”	中村	好	”	”	”	賢健	”

Notice for photocopying

If you wish to photocopy any work of this publication, you have to get permission from the following organization to which licensing of copyright clearance is delegated by the copyright owner.

<All users except those in USA> Japan Academic Association for Copyright Clearance, Inc. (JAACC) 6-41 Akasaka 9-chome, Minato-ku, Tokyo 107-0052 Japan TEL: 81-3-3475-5618 FAX: 81-3-3475-5619 E-mail: info@jaacc.jp

<Users in USA> Copyright Clearance Center, Inc. 222 Rosewood Drive, Danvers, MA 01923 USA

Phone: 1-978-750-8400 FAX: 1-978-646-8600