

On issuing

This Furukawa Electric Review 53 introduces our challenges to solve social issues in order to embody the basic philosophy of Furukawa Electric Group “Drawing on more than a century of expertise in the development and fabrication of advanced materials, we will contribute to the realization of a sustainable society through continuous technological innovation”. Through these challenges, we hope you will feel the thoughts on achieving the goals of SDGs set by the world from each paper.

Furukawa Electric Review Chief Editor, General Manager, Intellectual Property Dept., Senior Fellow
Michio Ohkubo

Opening Remarks

Breakthrough With SDGs by “Value new technology”

Shuichi Tanaka 1

Regular Papers

					Technology for Producing Green LPG With Ramune Catalyst <i>Yuichiro Bamba, Junya Hirano, Hirokazu Sasaki, Masayuki Fukushima, Takao Masuda</i> 2
					Building a Solution to the Plastic Waste Problem With Paper Fibre Reinforcement Technology <i>Hidekazu Hara</i> 7
					Development of DC Microgrid Control Method <i>Masahiro Rikiso, Nobuhiko Sakai, Asuka Abe, Noritaka Murohfunshi, Sumio Kachi, Kengo Nakao, Tadataka Wakabishi</i> 13
					Development of Self-bonding NbTi Wires for Superconducting Magnets <i>Yonghoon Kim, Takumi Sato, Hiroyuki Fukushima, Hideki Ii, Hirokazu Tsubouchi, Kiyoshige Hirose</i> 20
					Advanced Simulation Technologies for Next-Generation Transmission Fibers <i>Zoltán Várallyay, Kazunori Mukasa, Tamás Mihálffy, Sándor Bilicz, Bence Németh, Péter Szelestey, Béla Csengeri, Zolt Puskás, Gábor Varga, Yoshihiro Arashitani</i> 26
					PropSim v1.0: A Convenient Way to Model Light Propagation in Optical Fibers <i>Zoltán Várallyay, Zoltán Papp, Bálint Várady, Gábor Varga</i> 33
					Technological Trends, Development Tasks and Initiatives for Submarine Power Cable Systems ~ Contribution to the Achievement of SDGs ~ <i>Ryosuke Kuwabara, Satoru Maruyama, Naoto Shigemori, Yosuke Otake, Masaki Matsuura, Masakuni Echigo, Ryo Matsuumi</i> 39
					Development of the Wiring System Technology to Realize its Weight-Reduction in Vehicles <i>Takanori Toyama, Kouhei Ikemoto, Akihisa Watanabe, Satoshi Hirose, Yuji Tamura, Yasuharu Uchiyama, Akihiro Nagao, Yukihiko Kawamura, Takashi Tonoike, Takuro Yamada</i> 47

Topics

The Initiatives of the Digital Innovation Center to Promote the Digital Transformation

Takehiko Nomura, Tomofumi Kise 54

New Products

Automotive Wires With the World’s Highest Level of Wear Resistance

..... 60