

## Chronology (Detailed Version)

- 1964 Science Council of Japan recommends that the government establish a National Welding Research Institute.
- 1966 The government makes a resolution to realize the above proposal at the ministerial meeting.
- 1969 Welding Research Center (Division of Welding Energy Sources & Heat Transfer) is established in the Faculty of Engineering, Osaka University.
- 1970 Heat and Mass Transfer Division is established.
- 1971 Chemical Reaction Division is established.
- 1972 "Welding Research Institute" is established as a nationwide joint-use research institute of Osaka University, starting with four research divisions (Welding Energy sources & Heat Transfer, Heat and Mass Transfer, Chemical Reaction, and Material Physics) and two administrative units.
- 1973 The Lab. for Common Use is completed (1376 m<sup>2</sup>).  
Elasticity and Plasticity Division is established.
- 1974 Welding Instruments Division is established.
- 1975 The Main Research Building including the Administrative Office is partially completed (2644 m<sup>2</sup>).
- 1976 Welded Structures Division is established.
- 1978 Fusion Welding Division is established.
- 1979 The Main Research Building is expanded (2101 m<sup>2</sup>).  
One additional Administrative Unit is established.
- 1980 Pressure Welding Division is established.  
The Research Center for Ultra High Energy Density Heat Source building is completed (1754 m<sup>2</sup>).
- 1981 Research Center for Ultra High Energy Density Heat Source is established (currently called Research Center for Additive Joining Application).
- 1987 The Main Research Building is completed (900 m<sup>2</sup>).
- 1988 Research Center for High Energy Surface Processing is established (currently called Research Center for Additive Joining Application).  
The Arata Memorial Hall is completed (752 m<sup>2</sup>).
- 1995 Welding Research Institute is appointed as an organization of "Core Research Organization Support Program" for the formation of Center of Excellence (COE).
- 1996 "Welding Research Institute" is reorganized and converted into "Joining and Welding Research Institute," consisting of three research divisions, two research centers, three administrative units, and a technical expert division.  
Research Center for Materials Recycling and Integration is established (reorganized and converted from former Research Center for High Energy Surface Processing).
- 2002 Donated Research Division of Nanopowder Bonding Technology (Hosokawa Micron Corporation) is established (implemented through March 31st, 2005).
- 2003 Smart Processing Research Center is established (reorganized and converted from former Research Center for Ultra High Energy Density Heat Source and Research Center for Materials Recycling and Integration).
- 2004 Osaka university is transformed into a national university cooperation.
- 2005 The administrative units are integrated into two units.  
Development Base of Joining Technology for New Metallic Glasses and Inorganic Materials is established (implemented through March 31st, 2010).
- 2006 Professor Emeritus ARATA Yoshiaki is awarded the Order of Culture.  
The Cooperated Research Lab. is completed (595 m<sup>2</sup>).  
The name of Department of Chemical and Biological Processing is changed to Department of Laser Welding Materials Processing.
- 2007 Global and Industrial Collaborative Research Center for Computational Welding Science (CCWS) is established.  
Department of Advanced Processing for Hybrid Materials (Kurimoto Ltd.) is established (implemented through March 31st, 2010)
- 2008 The International Welding Engineer (IWE) Course is established.  
One additional Administrative Unit is established.  
Toyo Tanso "Advanced Carbon Design" Joint Research Chair is established (implemented through September 30th, 2013).

- 2009 JWRI is accredited as the Joint Usage/Research Center on Joining and Welding Science by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in Japan.
- 2010 Development Base of Advanced Materials Development and Integration of Novel Structured Metallic and Inorganic Materials is established (implemented through March 31st, 2016).
- The Joint Interface microstructure Characterization Room is established.
- Fuji Electric Co., Ltd. Joint Research Chair is established (implemented through June 30th, 2013).
- 2011 Hitachi Zosen Advanced Welding Technology Joint Research Chair is established (implemented through March 31st, 2022).
- Department of Eco Materials Processing is established in Division of Materials Processing System.
- 2013 Osaka Fuji Advanced Functional Processing Joint Research Chair is established.
- Center to Create Research and Educational Hubs for Innovative Manufacturing in Asia /Division of Global Joining for Extreme Environments is established (implemented through March 31, 2018).
- 2014 The Common Research Lab. is completed (1472 m<sup>2</sup>).
- 2015 Structural Integrity and Failure Assessments is established in Research Division of Materials Joining Assessment.
- Department of Smart Beam Processing, Smart Processing Research Center is discontinued.
- 2016 JWRI is reorganized (with changes of the research division names, department names, and the research division affiliations and with discontinuation of Department of ECO Materials Processing).
- Development Base on Development of Interdisciplinary and International Researchers for Creation of Life Innovation Materials is established (implemented through March 31st, 2021).
- Advanced Joint Production System Joint Research Chairs is established (implemented through March 31st, 2020).
- 2017 Department of Life-innovation Materials Processing is established in Smart Processing Research Center.
- 2018 JFE Welding Research Alliance Laboratories are established (implemented through March 31st, 2024).
- Advanced Joining Technology Joint Research Chair is established (implemented through March 31st, 2021).
- Center to Create Research and Educational Hubs for Innovative Manufacturing in Asia /Division of International Collaboration Research/Division of Global Human Resource Development is established (implemented through March 31, 2022).
- 2019 DAIHEN Welding and Joining Research Alliance Laboratories are established.
- 2020 The Co-Creation Consortium for Joining and Welding with Blue Diode Laser is established.
- 2021 Nippon Steel Future Manufacturing Research Alliance Laboratories are established.
- Advanced Joint Production System Joint Research Chair is established (implemented through March 31st, 2024).
- Joining Technology Hub is established.
- The Design & Engineering by Joint Inverse Innovation for Materials Architecture (DEJI<sup>2</sup>MA) is established.
- 2022 JWRI celebrates its 50th anniversary.
- Research Center for Additive Joining Application is established (reorganized and converted from former Smart Processing Research Center).
- The Project "Development of Inter-Institute Collaborations of 6 Research Institutes from 6 Universities for Strengthening Material Innovation Force" supported by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) begins.
- JWRI is reorganized (with changes of the department names and with consolidation of the departments in Research Division of Materials Joining Assessment).
- Global D & I Promotion Office is established.
- 2023 Strategy Office for Promotion of Inter-Institute Collaborations is established.
- New Normal Manufacturing Consortium Office is established.
- Joining and Welding Research Institute HUST-OU was established at Hanoi University of Science and Technology, Vietnam.

2024      Honda-Osaka Univ. Joining Technology Monozukuri Research Alliance Laboratories are established.