

Tran Hung Tra
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Department of Mechanis
Faculty of Civil Engineering
Nha Trang University
02 Nguyen Dinh Chieu St., Nha Trang City, Vietnam

EDUCATION

Nagaoka University. of Technology, Nagaoka, Japan
Ph.D. in Materials Engineering, 2007-2010

Nha Trang University, Nha Trang, Vietnam
MSc. in Shipbuilding, 2001 - 2003
B.A. in Shipbuilding, 1993-1998

RESEARCH INTERESTS

- Friction welding for light alloys.
- Hybrid component fabrications.
- High temperature failure behaviors of alloys and their welded joints.
- FEM simulations

RESEARCH EXPERIENCE

- Friction stir welding machine: Design and manufacture, National project, 2013-1015, principal investigator
- Failure behavior of solid state friction-welded joint at elevated temperature, Doctoral thesis, Nagaoka Univ. of Tech., Japan, 2007-2010

TEACHING RESPONSIBILITY

Undergraduate

- Mechanis of materials
- Engineering mechanics

PUBLICATIONS and PRESENTATIONS

Journals

1. **Tran Hung Tra** (2012), M. Okazaki, M. Sakaguchi, K. Suzuki, Fatigue crack propagation behavior of friction stir welding AA 6063-T5: Residual stress and microstructure effect, International Journal of Fatigue, Vol. 43, pp23-29.

2. **Tran Hung Tra** (2011) Effect of weld parameters on the mechanical properties of friction stir welding AA6063-T5, *ASEAN Engineering Journal*, Vol 4, pp 73-81.
3. **Tran Hung Tra**, M. Okazaki, M. Sakaguchi, M. Seino (2010) Fatigue crack propagation behavior relevant to inhomogeneous microstructure of friction stir welding AA6063-T5, *Journal of solid mechanics and materials engineering*, 4 (6), pp 840-848.
4. M.Sakaguchi, A. Sano, **Tran Hung Tra**, M. Okazaki, M. Sekihara (2008) Low cycle and thermal-mechanical fatigue of friction welded dissimilar superalloys joint, *Journal of solid mechanics and materials engineering*, 2 (12), pp 1508-1516.
5. M. Okazaki, M. Sakaguchi, **Tran Hung Tra**, M. Sekihara (2008) Creep-fatigue and thermo-mechanical fatigue of friction-welded IN718/Mar M247 dissimilar joint, *Superalloys 2008*, pp 221-228.

Presentations

1. **Tran Hung Tra**, (Dec. 2011) Fatigue-creep failure of the dissimilar friction welding of IN718 and M247, *RCM 2011 - 4th Regional Conference on High Performace Materials*, AUN/SEED.net, ISBN:978 604 911 00.
2. **Tran Hung Tra**, M. Okazaki, M. Sakaguchi, M. Seino (2010) Fatigue Crack Propagation Behavior Relevant to Inhomogeneity in the Friction Stir Welding of Aluminum alloy 6063-T5, *Asian Pacific Conference for Materials and Mechanics 2009 (APCMM2009)*.
3. Tran Hung Tra, 2012, High temperature cyclic loadings behavior of the dissimilar friction welding, 1st international conference ICMST2012, pp. 53-56.
4. Motoki SAKAGUCHI, Atsushi SANO, **Tran Hung TRA**, Masakazu OKAZAKI, Masaru SEKIHARA (2008) Low Cycle Fatigue and Thermo-Mechanical Fatigue of Friction Welded Dissimilar Superalloys Joint, *2008 M&M International Symposium for Young Researchers*, pp 5-10.
5. **Tran Hung Tra**, M. Okazaki, M. Sakaguchi, M. Sekihara (2008) Strength of MAR247/IN718 dissimilar metals joint under creep-fatigue and thermo-mechanical fatigue loadings, Sixth international conference on low cycle fatigue, pp 221-228.
6. A. Sano, M. Sakaguchi, M. Okazaki, **Tran Hung Tra** (2006) Creep-fatigue crack propagation in dissimilar friction welded superalloys, Mechanical Engineering Congress Conf. Japan, 2006 (MECJ-06)
7. M. Sakaguchi, M. Okazaki, **Tran Hung Tra**, M. Sekihara (2006) Creep-fatigue damage of dissimilar superalloys joint, 55th Conference of The Society of Material Science Japan.