

Name: Dr. Vishvesh badheka

List of original research papers

Sr. No	Name of the authors	Year of Publications	Title of the paper
1	Kamal H. Dhandha, Vishvesh J. Badheka	Journal of Manufacturing Processes 17 (2015) 48–57 Source Normalized Impact per Paper : 1.528	Effect of activating fluxes on weld bead morphology of P91 steel bead-on-plate welds by flux assisted tungsten inert gas welding process
2	Kush Mehta, Vishvesh Badheka	Materials and Manufacturing Processes”, Journal of Taylor & Francis I.F~ 1.486. 10.1080/10426914.2014.994754.	Effects of Tilt Angle on Properties of Dissimilar Friction Stir Welding Copper to Aluminum.
3	Sanjay N Badheka V J,	Journal of Manufacturing Processes 16 (2014), pp. 137-143; Source Normalized Impact per Paper : 1.528	Effect of Oxide-based Fluxes on Mechanical and Metallurgical Properties of Dissimilar Activating Flux Assisted-Tungsten Inert Gas Welds.
4	Shriraj V P, Badheka V J.	Indian Welding Journal, Vol. 47, No 3, July 2014	Effect of tool pin offset on mechanical and metallurgical properties of Dissimilar FSW joints of 6061T6 Al alloy and Copper material
5	Badheka V J, S K Agrawal,	Indian Welding Journal, IIW Vo. 45(4), Oct 2012, pp 66-76.	Review on Design and Development of Narrow Gap Welding Torches
6	Badheka V J,	International Journal of German Welding Society; Welding & Cutting, DVS;2/2013.	Effect of Metal Cored Arc Welding Process Parameters on Weld Bead Geometry'
7	Dr Vishvesh J Badheka	International Journal of German Welding Society, <i>Welding and Cutting</i> 1 /2010	Utilization of Conventional Milling Machine for Friction Stir Welding (FSW) of Commercial Aluminum
8	Dr Vishvesh J Badheka, Prof S.K.Agrawal and Mr Nandish Shroff	International Journal Of Mechanical And Materials Engineering Vol. 4 (2009), No. 3, 328-340	Resistance spot welding of Martensitic stainless steel (SS420)- Part I
9	Dr Vishvesh J Badheka, Prof S.K.Agrawal and Mr Nandish Shroff	International Journal Of Mechanical And Materials Engineering Vol. 5 (2010), No. 1, 43-52	Resistance spot welding of Martensitic stainless steel (SS420)- Part II
10	Badheka V.J & Agrawal S.K	International Journal of German Welding Society. <i>Welding and Cutting</i> 4(2009)	Microstructural Investigation of weld metal in low carbon steel welded by NG-GMAW
Second Best oral presentation award; National Welding Seminar 2009			
11	Badheka V.J & Agrawal S.K	International Journal of German Welding Society. <i>Welding and Cutting</i> 5 (2008)	Effect of Residual Magnetism on Sidewall Fusion in Narrow Gap Gas Metal Arc Welding
12	Badheka V.J &	International Journal of German	Design and Development of

	Agrawal S.K	Welding Society. <i>Welding and Cutting</i> 5 (2007)	GMAW Torch for Narrow Gap Welding
13	Badheka V.J & Agrawal S.K	International Journal of Canadian Welding Society. Fall issue 2007	Effect of Welding Variables on Sidewall Fusion of Low Carbon Steel Welded using NG-GMAW Process
14	Badheka V.J & Agrawal S.K	Welding Research Supplement, Australian Welding Journal- Vol. 52, fourth quarter 2007	Cross-tension fracture testing of resistance spot welded galvanized steel sheet
15	Badheka V.J & Agrawal S.K	Australian Welding Journal- Vol. 53, First quarter 2008	Resistance spot welding of High Carbon Steel Strip
16	Badheka V. J & Agrawal S K & Parikh U	Indian Welding Journal of Indian Institute of welding, in July 2007 issue.	Comparative Study of Hot Cracking Susceptibility of AISI 347 Austenitic Stainless Steel (ASS) using Acidic and Basic Coated Filler Material

List of publications in International/National Seminar/conferences;

- 1) **Narrow Gap MIG Welding of Mild Steel**” Published in Proceedings of the IIW Asian Pacific International Congress, Singapore, 29 Oct. - 1 Nov. 2002, publ. by The Welding Technology Institute of Australia (WTIA), ISBN 0-909539-99-5, vol. ST 3/4, paper No. 44, Document number ICRA-2002-SING-44.
- 2) **Comparative study of 6 % Cr hard faced deposited by FCAW & SMAW**”; Proc of the 56th ATM of Indian Institute of Metals (IIM), 14th to 17th Nov.2002, Baroda
- 3) Some **Experiences with NG-GMAW**” Proc.of National Welding Seminar (NWS)-2003, organized by The Indian Institute of Welding (IIW); 4th - 6th Dec.2003, Baroda.
- 4) **Some Considerations in Design and Development of GMAW Torch for Narrow Gap Welding (NG-GMAW)**”;Proc. of the International Welding Congress, organized by The Indian Institute of Welding (IIW), on behalf of The International Institute of Welding (IIW),16th to 19th Feb 2005, Mumbai. Document number ICRA-2005-IND-120
- 5) **Various Narrow Gap Welding (NGW) Processes for Heavy Fabrication**; Proc. of National Welding Meet (NWM)-2006, organized by The Indian Institute of Welding (IIW); 2nd Sept.2006, Baroda.
- 6) **“Mode of Failure of Resistance Spot Welded Martensitic Stainless Steel”**; published in the proceeding of International Welding Congress, held at Chennai, 8th to 10th Jan 2008.
- 7) **Microstructure Investigation of weld metal in low carbon steel welded by NG-GMAW**. Presented at National Welding Seminar 2009; Awarded Second Best oral presentation award;
- 8) **Improving the weld penetration by application of oxide coating in GTAW of P91 steel**. Presented at National Welding Seminar 2009-10 held at Kolkata.
- 9) **Development of welding procedures (including FSW) for joining Al-Mg-Si alloy and Al-Mg alloy for marine application**. Presented at National Welding Seminar 2009-10 held at Kolkata. Awarded **Panthaki Memorial Award-2010**, by IIW for the best paper on Welding of Non Ferrous Metals
- 10) **In-house Design and Development of Friction Stir Welding setup for Aluminum and Its Alloys**. Presented at National Welding Seminar 2009-10 held at Kolkata
- 11) **Friction Stir Welding in the Transportation Industry**; presented on 2nd Oct 2010 at 12th Foundation Day Seminar, Organized by Indian Institute of Welding, Baroda Branch
- 12) **Penetration Enhancing Gas Tungsten Arc Welding (PE-GTAW) process for 6mm thick 304 Stainless Steel**. Presented at National Welding Seminar, 21st -23rd Dec 2010 held at Vizag.
- 13) **Influence of MCAW Process Parameters on Weld bead Geometry**. Presented at National Welding Seminar, 21st -23rd Dec 2010 held at Vizag.
- 13) **Double sided Friction stir welding of 12mm thick 60601-T6 Aluminum material**. Presented at National Welding Seminar, 21st -23rd Dec 2010 held at Vizag.

- 14) **Narrow Gap Metal Cored Arc Welding**, presented at 64th International Welding Conference, 17th-22nd July 2011 held at Chennai.
- 15) Badheka V. J, et al **“Review of Safety Practices in Welding and Cutting Processes”** presented at International Conference on safety, Organized by IIT Gandhinagar, 12-13 Oct 2012.
- 16) Badheka V J and S.K. Albert **“Development of Flux Assisted GTAW process for RAFM steel material”** Second joint ITER-IAEA Technical meeting on Analysis of ITER Material and Technologies, 11-13th Dec 2012 held at A’bad.
- 17) Badheka V J, Shrinivas S, and B Kumar **“Development of Flux Assisted Gas Metal Arc Welding (GMAW) Process for fusion reactor fabrication”** Second joint ITER-IAEA Technical meeting on Analysis of ITER Material and Technologies, 11-13th Dec 2012 held at A’bad
- 18) Badheka V J, Mitesh P, **“Hybrid Friction Stir Welding of pure Copper Material”** presented during National Welding Seminar, Organized by Indian Institute of Welding, Bangalore Branch, during 7th to 9th Feb 2013. **Panthaki Memorial Award-2013**, during IIW International Welding Congress held at New Delhi during 9-11 April 14, for the best paper on Welding of Non Ferrous Metals.
- 19) Badheka V J, Hardik V, **“Comparisons of GMA, FCA and MCA weldments of SA516 Gr70 Steel Material”** presented during National Welding Seminar, Organized by Indian Institute of Welding, Bangalore Branch, during 7th to 9th Feb 2013.
- 20) Badheka Vishvesh J **“Friction Stir Welding assisted by Gas Tungsten Arc”** presented during National Welding Conference on *Advances in Welding Science & Technology*, Organized by Indian Institute of Welding, Chennai Branch, at Pondicherry during 3rd-4th May 2013.
- 21) S.V. Pande, Badheka Vishvesh J, J. K. Sawale **“Effect of tool pin offset on mechanical and metallurgical properties of Dissimilar FSW joints of 6061T6 Al alloy and Copper material”** presented during National Welding Conference on *Advances in Welding Science & Technology*, Organized by Indian Institute of Welding, Chennai Branch, at Pondicherry during 3rd-4th May 2013.
- 22) Pankaj, Badheka, Arora, **“Numerical Modeling of Temperature Distribution during Friction Stir Welding of Copper”** presented at IIW International Welding Congress held at New Delhi during 9-11 April 14.
- 23) S.V. Pande, Badheka Vishvesh J, **“Effect of tool pin offset on mechanical and metallurgical properties of Dissimilar FSW joints of 6061T6 Al alloy and Copper material”** presented IIW International Welding Congress held at New Delhi during 9-11 April 14.
- 24) V. V. Patel, V. J. Badheka and A. Kumar, **“Friction Stir Processing as a Grain Refinement Technique for Aluminum 7075 alloy”** International Conference on Friction Based Processes , 3-5 Sept 2014, IISc, Bangalore
- 25) Kush Mehta, Vishvesh Badheka **“Investigation on friction stir welding defects for dissimilar copper to aluminum materials under different process parameters”** International Conference on Friction Based Processes , 3-5 Sept 2014, IISc, Bangalore
- 26) H.G. Rana, V. J. Badhek2 and A. Kumar; **“Fabrication of Al7075 / B4C surface composite by Friction Stir Processing (FSP) and investigation on Hardness”** International Conference on Friction Based Processes , 3-5 Sept 2014, IISc, Bangalore

27) S.Gandhi, P. Shah, V.Badheka **“Experimental Investigation on Strength properties and temperature distribution in FSW of Al 8011 alloy under varying Conditions”** International Conference on Friction Based Processes , 3-5 Sept 2014, IISc, Bangalore.

Patent Applications

- 1) **Patent application** of welding torch designed for Narrow Gap Gas Metal Arc Welding has been filed at Indian Patent Office, New Delhi. Application number 629/Del/2007 dated 22/03/2007; Request For Examination was filed on 25/02/2008
- 2) **Patent application** of "Narrow Gap Gas Metal Arc Welding Torch Oscillation Device" has been filed at Indian Patent Office, New Delhi. Application no. 2797/Del/2008 dt. 11/12/2008.; Request for Examination was filed on 01/10/2012

For both the applications examination is awaited at the Indian Patent Office