Biographical Data

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Assoc. Prof. Dr.-Ing. Pornwasa Wongpanya

Education and Competence:

2005-2008 D.-Ing. (Mechanical Engineering)
Helmut-Schmidt-Universität, Germany,

2002-2004 M.Eng. (Metallurgical Engineering)
Chulalongkorn University,

1997-2000 B.Eng. (Metallurgical Engineering)
Suranaree University of Technology

Present Position:

Lecturer, Suranaree University of Technology

Work Experiences:

2008-Present Lecturer at School of Metallurgical Engineering,
Suranaree University of Technology

Association Member:

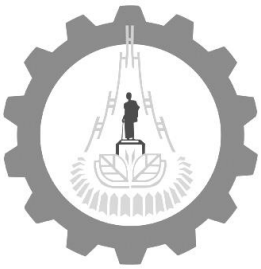
- Thai Corrosion of Metals and Materials Association (TCMA)
- Associate Mining Engineer (Metallurgical Engineering)

Research areas:

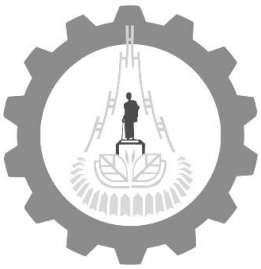
Surface technology, Corrosion of metals, Hydrogen assisted cold cracking in welded component, Numerical simulation of welded component, Recycle of metals by pyro- and hydro-metallurgy

Publications:

1. N. Konkhunthot, S. Tunmee, X.L. Zhou, K. Komatsu, P. Photongkam, H. Saitoh, **P. Wongpanya**, " The correlation between optical and mechanical properties of amorphous diamond- like carbon films prepared by pulsed filtered cathodic vacuum arc deposition", Thin Solid Films 653 (2018) 317-325 Received 14 May 2017; Received in revised form 6 March 2018; Accepted 17 March 2018; Available online 19 March 2018 https://doi.org/10.1016/j.tsf.2018.03.053



2. S. Tunmee, P. Phothongkam, C. Euaruksakul, H. Takamatsu, X. L. Zhou, **P. Wongpanya**, K. Komatsu, K. Kanda, H. Ito, and H. Saitoh, "Investigation of localized corrosion of diamond-like carbon films using synchrotron-based spectromicroscopy", Journal of Applied Physics 120, 195303, 2016.
3. **P. Wongpanya**, T. Wongpinij, P. Photongkam, C. Euaruksakul, N. Witit-anun, " Effect of the thickness on the microstructure and corrosion behavior of a TiAlN film on 4140 steel", Materials Testing, Vol. 57, No. 5, 2015, pp. 385-392.
4. **P. Wongpanya**, T. Wongpinij, P. Photongkam, C. Keawhan, S. Tunmee, N. Witit-anun, "The corrosion behavior of chromium nitride film on AISI 4140 and H13 steels", Suranaree Journal of Science and Technology, Vol. 22, No. 3, 2015, pp. 231-242.
5. **P. Wongpanya**, S. Tunmee, C. Euaruksakul, P. Songsiriritthigu , N. Witit-Anun " Corrosion Behaviors and Mechanical Properties of CrN Film", Advanced Materials Research, Vols. 853, 2014, pp. 155-163.
6. **P. Wongpanya**, S. Surinphong, J. Rujisomnapa, "Increasing Tool Life by AlCrTiSiN Film", Advanced Materials Research, Vols. 853, 2014, pp. 217-222,.
7. N. Konkhunthot, C. Euaruksakul, P. Photongkam , **P. Wongpanya**, "Characterization of diamond-like carbon (DLC) films deposited by filtered cathodic vacuum arc technique", Journal of Metals, Materials and Minerals, Vol. 23, No. 1, pp. 35-40, 2013.
8. J. Rujisomnapa, Surasak Surinphong, **P Wongpanya**, "A Comparative Study of Wear and Oxidation Behaviors of End Mill Coated by PVD Coatings", Advanced Materials Research, Vols 785-786, 2013, pp. 858-863,.
9. T. Wongpinij, **P Wongpanya**, "Oxidation and Adhesion of Decorative Nickel–Chromium Plating on Ferritic Stainless Steel", Advanced Materials Research, Vols 785-786, 2013, pp. 852-857,.
10. T. Wongpinij, **P. Wongpanya**, C. Euaruksakul, P. Photongkam, N. Witit-anun, " Corrosion Behavior of TiAlN film on AISI 4140 Steel", Journal of Metals, Materials and Minerals, Vol. 23, No. 2, pp. 59-65, 2013.



11. T. Wongpinij, T. U-dom, T. Suptrakun, T. Puttanasun, C. Pimpan, N. Nangnoi,
P. Wongpanya, “The Oxidation Behaviour of Stainless Steel AISI 409 Coated by Decorative Nickel-Chromium Plating”, Journal of Metals, Materials and Minerals, Vol. 22, No. 1, pp. 45-54, 2012.
12. C. Keawhan, P. Songsiriritthigu , N. Witit-Anun, **P. Wongpanya**, “Corrosion Behavior of AISI 4140 Steel Surface Coated by Physical Vapor Deposition”, Journal of Metals, Materials and Minerals, Vol. 22, No. 1, 2012, pp. 69-76.
13. S. Tunmee, C. Euaraksakul, P. Songsiriritthigul, N. Witit-Anun, **P. Wongpanya**, “The study of sputtered CrN films on the AISI H13 tool steel”, Thai Journal of Physics Series 7, 2011, pp. 92-95.
14. T. Intiang, S. Boonarj, E. Plespanis, **P. Wongpanya**, “Effect of cold work intensity on corrosion behaviour of AISI 304 stainless steel”, Special Issue of Research Journal of Chemistry and Environment, 2010, pp. 49-54.
15. S. Paranard, P. Sattarum, K. Photiruk, J. Kumkoonmongkol, **P. Wongpanya**, “Effect of inhibitor content on corrosion behaviour of AISI 1020 carbon steel”, Journal of Metals, Materials and Minerals, Vol.20, No.3, 2010, pp. 9-13.
16. K. Sutthiprapa, N. Jumao, W. Srichanchaeng, J. Chatdumrongsakul, **P. Wongpanya**, “Stress corrosion cracking behavior of austenitic stainless steel AISI 304 with cold work severities of 60 and 90 percent reduction in thickness”, Journal of Metals, Materials and Minerals, Vol.20, No.3, 2010, pp. 25-29.
17. J. Rujisomnapa, P. Seechompoo, P. Suwannachoat, S. Suebca, **P. Wongpanya**, “High Temperature Oxidation Behaviour of Low Carbon Steel and Austenitic Stainless Steel”, Journal of Metals, Materials and Minerals, Vol.20, No.3, 2010, pp. 31-36.
18. **P. Wongpanya**, “Welding Residual Stresses in Two Competing Single V-Butt Joints”, Journal of Metals, Materials and Minerals, Vol.19, No.1, 2009, pp. 67-75.
19. **P. Wongpanya** and Th. Boellinghaus, “Transverse Residual Stress Distribution at Two Interacting Butt Joints Dependent on Restraint Length”, IIW doc. IX-2299-09.

20. **P. Wongpanya** and Th. Boellinghaus, Residual Stress Distribution in Competing S 1100 QL Butt-Welds Dependent on Plate Thickness and Restraint Length", Proceeding of Conference on High Strength Steels for Hydropower Plants, 20-22 July 2009, Takasaki, Japan.
21. **P. Wongpanya**, Th. Boellinghaus, G. Lothongkum and H. Hoffmeister, "Numerical Modelling of Cold Crack Initiation and Propagation in S 1100 QL Steel Root Weld", IIW doc. IX-L-1016-08 and Welding in the World, Volume 53, No. ¾, 2009, pp. R34-R43.
22. **P. Wongpanya**, Th. Boellinghaus, G. Lothongkum and Th. Kannengiesser, "Effects of Preheating and Interpass Temperature on Stresses in S 1100 QL Steel Root Weld", IIW doc. IX-L-1002-07 and Welding in the World, Vol. 52, No. ¾, 2008, pp. 79-95.
23. **P. Wongpanya**, Th. Boellinghaus and G. Lothongkum, "Numerical Simulation of Hydrogen Removal Heat Treatment in High Strength Structural Steel Welds", Mathematical Modelling of Weld Phenomena 8, ISBN 978-3-902465-69-6, 2008, pp. 643-665.
24. **P. Wongpanya**, Th. Boellinghaus and G. Lothongkum, "Evaluation of Heat Treatment Procedures for Hydrogen Assisted Cold Cracking Avoidance in S 1100 QL Steel Root Weld", International Conference of the International Institute of Welding, 6-11 July 2008, Graz, Austria.
25. Th. Boellinghaus and **P. Wongpanya**, "Numerical Analysis of Hydrogen Assisted Cold Cracking in High Strength Steel Welds", International Hydrogen Conference, Effect of Hydrogen on Materials, 7-10 September 2008, Jackson Lake Lodge, Grand Teton National Park, Wyoming, USA.
26. G. Lothongkum, **P. Wongpanya**, S. Morito, T. Furuhara and T. Maki, "Effect of Nitrogen on Corrosion Behaviour of 28Cr-7Ni Duplex and Microduplex Stainless Steels in the Air-Saturated 3.5 wt% NaCl Solution", Corrosion Science Journal, Vol. 48, 2006, pp. 137-153.
27. **P. Wongpanya**, Th. Boellinghaus and G. Lothongkum, "Effects of Hydrogen Removal Heat Treatment on Residual Stresses in High Strength Structural Steel Welds", Welding in the World, Volume 50, Special Issue 2006, pp. 96-103.
28. **P. Wongpanya**, Th. Boellinghaus and G. Lothongkum, "Ways to Reduce the Cold Cracking Risk in High Strength Structural Steel Welds", International Conference of the International Institute of Welding, 25-29 May 2008, Johannesburg, South Africa.

Awards:

The Best Presentation Award, " TMETC Award Oral Presentation of Properties Session", the 2nd Thailand Metallurgy Conference (TMETC2), 16-17 October 2008, Century Park Hotel, Bangkok, Thailand