Tomasz Chmielewski, Ph.D., D.Sc., Assoc. Prof.

Director of Institute of Manufacturing Technologies
Warsaw University of Technology (WUT)
Faculty of Production Engineering
85 Narbutta St.
02-524 Warsaw, Poland

Area of scientific activity – Welding and surface engineering

Editor-in-Chief of "Welding Technology Review" – www.pspaw.pl
Scopus account - link
ORCID - link
Google Scholar - link

Scientific projects – grants

- M-ERA NET Call 2016 „Innovative Ni-Cr-Re coatings with enhanced corrosion and erosion resistance for high temperature applications in power generation industry" 2018-2020 - supervisor in WUT
- National Science Center, Research project N519 652840: "Modeling and computer analysis in the technology of layers (coatings) applied by thermal methods on parts of machines and devices" 2011-2014 - main researcher
- National Science Center, Research project N508 406037: "Research on detonation metallization with titanium advanced Al2O3 and AlN ceramics" 2008-2010 –supervisor

(Selected) Publications

- **Chmielewski T**, Siwek P, Chmielewski M**,** Piątkowska A, Grabias A, Golański D, tructure and selected properties of arc sprayed coatings containing in-situ fabricated Fe-Al intermetallic phases, Metals, 8(12), 1059, 2018
- Salacinski, **T Chmielewski**, M Winiarski, R Cacko, R Świercz, Roughness of metal surface after finishing using ceramic brush tools, Advances in Materials Science, 18 (1), 2018
- B Jaeschke, M Węglowski, **T Chmielewski**, Current State and Development Opportunities of Dynamic Power Source for GMA Welding Processes, Journal of Manufacturing Technologies 42 (1), 23-30, 2017
- D Golański, G Dymny, M Kujawińska, **T Chmielewski**, Experimental investigation of displacement/strain fields in metal coatings deposited on ceramic substrates by thermal spraying, Solid State Phenomena 240, 174-182, 2016
- M Węglowski, **T Chmielewski**, K Kudła, Productivity assessment of the low-energy SpeedRoot welding process in PG position, Welding International 30 (3), 192-195, 20
- **T Chmielewski**, D Golanski, S Zhu, Deposition of Ti Coatings on the AlN Ceramics Substrate Using the D-Gun Spraying, Journal of Manufacturing Technologies 41 (3), 29-33, 2016
- **T Chmielewski**, D Golański , The role of welding in the remanufacturing process, Welding International 29 (11), 861-864, 2015
- **T Chmielewski**, D Golański, W Włosiński, Metallization of ceramic materials based on the kinetic energy of detonation waves, Bulletin of the Polish Academy of Sciences Technical Sciences 63 (2), 449-456, 2015
- **T Chmielewski**, D Golański, W Włosiński, J Zimmerman, Utilizing the energy of kinetic friction for the metallization of ceramics, Bulletin of the Polish Academy of Sciences Technical Sciences 63

(1), 201-207, 2015

- A Kochański, A Krzyńska, **T Chmielewski**, A Stoliński, Comparison of Austempered Ductile Iron and Manganese Steel Wearability, Archives of Foundry Engineering 15 (1/2015), 51-54, 2015
- G Gontarz, D Golański, **T Chmielewski**, Properties of Fe-Al type intermetallic layers produced by AC TIG method, Advances in Materials Sciences 13 (3), 5-16, 2013
- A Krajewski, W Włosiński, **T Chmielewski**, P Kołodziejczak, Ultrasonic-vibration assisted arc-welding of aluminum alloys, Bulletin of the Polish Academy of Sciences: Technical Sciences 60 (4), 841-852, 2012

Published books

- Tomasz Chmielewski, Dariusz Golański, Numerical modeling of selected thermal spray problems, Publishing house of the Warsaw University of Technology, Warsaw, 2019 (in *polish*)
- Tomasz Chmielewski, Designing of welding processes, Publishing house of the Warsaw University of Technology, Warsaw, 2013 (in *polish*)
- Tomasz Chmielewski, Application of the kinetic energy of friction and detonation wave for metallization of ceramic, Materials and Mechanics, Publishing house of the Warsaw University of Technology, Warsaw, 2012 (*in polish*)

Supervios of PhD thesis:

- Michał Hudycz “Metallization of ceramic materials based on friction surfacing process” Graduated
- Marek Żubrowski ” Influence of technological parametres in microjoining on the structure and functional properties of the joints” Graduated
- Jacek Szulc “Hybrid Plasma-MAG welding of S700MC steel”
- Piotr Siwek “Arc spraying of Fe-Al intermetallic coatings”
- Beata Skowronska “Friction welding of UFG 316l steel”
- Konrad Tobota “Thermal spraying of Ni-Cr-Re coatings”