

PATENTS

1. Kesavan Ravi, Yuji Ichikawa, Kazuhiro Ogawa, Tiana Deplanke, Olivier Lame, Jean-Yves Cavaille, 2018. *Cold spray powder, the polymeric coating preparation and polymeric coating*. **Grant JP6341505B2** (<https://patents.google.com/patent/JP6341505B2/en>)
2. Kesavan Ravi, Yuji Ichikawa, Kazuhiro Ogawa, Tiana Deplanke, Olivier Lame, Jean-Yves Cavaille, 2015. *Powder for cold spray, method for manufacturing macromolecular coating film, and macromolecular coating film*. U.S. Patent Application. **Application US20170152601A1** (<https://patents.google.com/patent/US20170152601A1/en>)
3. Kesavan Ravi, Yuji Ichikawa, Kazuhiro Ogawa, Tiana Deplanke, Olivier Lame, Jean-Yves Cavaille, 2017. *Powder for cold spray, method for manufacturing macromolecular coating film, and macromolecular coating film*. **Application EP3149225A1** (<https://patents.google.com/patent/EP3149225A1/en>)
4. J-Y·卡瓦卢, O·拉梅, T·德普莱卡, 小川和洋, 科萨万·哈维, 2017. *Powder for cold spray, method for manufacturing macromolecular coating film, and macromolecular coating film*. **Application CN106574373A** (<https://patents.google.com/patent/CN106574373A/en>)

PUBLICATIONS

Peer-reviewed

1. Ravi, K., Ichikawa, Y., Deplancke, T., Ogawa, K., Lame, O., & Cavaille, J. Y. (2015). *Development of Ultra-High Molecular Weight Polyethylene (UHMWPE) Coating by Cold Spray Technique*. Journal of Thermal Spray Technology, 24(6), 1015-1025. (<https://doi.org/10.1007/s11666-015-0276-5>)
2. Ravi, K., Ichikawa, Y., Ogawa, K., Deplancke, T., Lame, O., & Cavaille, J. Y. (2016). *Mechanistic Study and Characterization of Cold-Sprayed Ultra-High Molecular Weight Polyethylene-Nanoceramic Composite Coating*. Journal of Thermal Spray Technology, 25(1-2), 160-169. (<https://doi.org/10.1007/s11666-015-0332-1>)
3. Deplancke, T., Lame, O., Barrau, S., Ravi, K., & Dalmas, F. *Impact of carbon nanotube prelocalization on the ultra-low electrical percolation threshold and on the mechanical behavior of sintered UHMWPE-based nanocomposites*. Polymer 111 (2017), 204-213. (<https://doi.org/10.1016/j.polymer.2017.01.040>)
4. Ravi, K., Deplancke, T., Ogawa, K., Cavaillé, J. Y., & Lame, O. (2018). *Understanding deposition mechanism in cold sprayed ultra high molecular weight polyethylene coatings on metals by isolated particle deposition method*. Additive Manufacturing, 21, 191-200. (<https://doi.org/10.1016/j.addma.2018.02.022>)
5. Ravi, K., Sulen, W., Bernard, C., Ichikawa, Y., Ogawa, K. (2019), *Fabrication of micro-/nano-structured super-hydrophobic fluorinated polymer coatings by cold-spray*, Surface and Coating Technology, 373, 17-24. (<https://doi.org/10.1016/j.surfcoat.2019.05.078>)
6. Ravi, K., Deplancke, T., Ogawa, K., Lame, O., & Cavaille, J. Y., Dalmas, F., *Influence of Nanoceramic Interlayer on Polymer Consolidation during Cold-Spray Coating Formation*, Journal of Material Processing and Technology (In Press). (<https://doi.org/10.1016/j.jmatprotec.2019.116254>)
7. Sulen, W., Ravi, K., Bernard, C., Mary, N., Ichikawa, Y., & Ogawa, K. (2019). *Effects of Nano-Ceramic Particle Addition for Cold Sprayed Fluoropolymer Coatings*. Key Engineering Materials, 813, 141-146. (<https://doi.org/10.4028/www.scientific.net/KEM.813.141>)
8. Sulen, W.L., Ravi, K., Bernard, C., Ichikawa, Y. and Ogawa, K., *Deposition Mechanism Analysis of Cold-Sprayed Fluoropolymer Coatings and Its Wettability Evaluation*. (<https://doi.org/10.1007/s11666-020-01059-w>)
9. Bernard, C.A., Takana, H., Diguët, G., Ravi, K., Lame, O., Ogawa, K. and Cavaillé, J.Y., 2020. Thermal gradient of in-flight polymer particles during cold spraying. *Journal of Materials Processing Technology*, p.116805. ([10.1016/j.jmatprotec.2020.116805](https://doi.org/10.1016/j.jmatprotec.2020.116805))

Refereed Conference Publications

1. Kesavan Ravi, Kazuhiro Ogawa, Tiana Deplancke, Olivier Lame, Jean-Yves Cavaillé, *High Strain Rate Sensitivity of Ultra-High Molecular Weight Polyethylene and its Consequence on Cold-Spray Deposition Behavior*, ITSC (2018), Orlando, USA

Peer-reviewed, Oral Presentation

2. Kesavan Ravi, Kazuhiro Ogawa, Olivier Lame, Jean-Yves Cavaillé, *Experimental analysis of impact behavior of ultra-high molecular weight polyethylene-nano-ceramics composite particles by Isolated Particle Deposition Method using downstream injection cold-spray technique*, ITSC (2017), Dusseldorf, Germany.

Peer-reviewed, Oral Presentation

3. Kesavan Ravi, Yuji Ichikawa, Kazuhiro Ogawa, Tiana Deplancke, Olivier Lame, Jean-Yves Cavaillé, *Mechanistic study and characterization of cold sprayed ultra high molecular weight polyethylene-nano ceramic composite coatings*, ITSC (2015), California, USA.

Peer-reviewed, Oral Presentation

Non-Refereed Conference Publications

1. Kesavan Ravi, Kazuhiro Ogawa, Tiana Deplancke, Chrystelle Bernard, Olivier Lame, Jean-Yves Cavaillé, *Polymer metal integration via cold-spray*, IJBSFMM (2018), Chennai, India

Invited Talk

2. Kesavan Ravi, Kazuhiro Ogawa, Olivier Lame, Jean-Yves Cavaillé, Tiana Deplancke, Chrystelle Bernard, *Inter-Particle Sintering of Ultra-High Molecular Weight Polyethylene (UHMWPE) – Fumed Nano-Alumina (FNA) Nanocomposites under Different Interfacial Loading Conditions*, ICFD (2017), Sendai, Japan.

Oral Presentation

3. Kesavan Ravi, Yuji Ichikawa, Kazuhiro Ogawa, Tiana Deplancke, Olivier Lame, Jean-Yves Cavaillé, *Development of ultra high molecular weight polyethylene coatings by cold spray technique*, ATSC (2014), Hyderabad, India.

Poster presentation

4. Kesavan Ravi, Yuji Ichikawa, Kazuhiro Ogawa, Tiana Deplancke, Jean-Yves Cavaillé, *Development of ultra high molecular weight polyethylene coatings by cold spray technique*, ICFD (2014), Sendai Japan.

Oral Presentation

5. Kesavan Ravi, Yuji Ichikawa, Kazuhiro Ogawa, Tiana Deplancke, Olivier Lame, Jean-Yves Cavaillé, *Development of polymer coating by cold spray on various surfaces*, JTSC (2014), Japan.

Oral Presentation

6. Kesavan Ravi, Vivekanand Kain, *Comparison of the electrochemical behavior of wrought and porous Ni-Ti alloy in a body simulated solution*, CORCON (2011), Mumbai, India.

Poster presentation

Workshops

1. Kesavan Ravi, Yuji Ichikawa, Kazuhiro Ogawa, Tiana Deplancke, Olivier Lame, Jean-Yves Cavaillé, *Ultra high molecular weight polyethylene coatings by cold spray technique*, ElyT Lab International Workshop 2015, Matsushima, Japan.

Poster presentation

2. Kesavan Ravi, Yuji Ichikawa, Kazuhiro Ogawa, Tiana Deplancke, Olivier Lame, Jean-Yves Cavaillé, *Development of polymer coatings by cold spray*, FRIWS 2014, INSA Lyon, France.

Oral Presentation

3. Kesavan Ravi, Kazuhiro Ogawa, *Feasibility study of polycarbonate coating on metallic materials*, FRIWS 2013, Beijing, China.

Oral Presentation

4. Tiana Deplancke, Olivier Lame, Jean-Yves Cavaillé, Jean-Pierre Franc, Kazuhiro Ogawa, Kesavan Ravi, *Mitigation of cavitation by polymeric coating. Interest of cold spray technique*, ELYT Lab International Workshop 2013, Frejus, France, February 20, 2013.

Oral Presentation

Non-Academic Publications

1. Kesavan Ravi, Development of High Functional Polymer/Metal and Polymer/Ceramic Integrated Systems “Dream Beyond Your Dreams”. Japan Thermal Spray Society, 52(4), 149, 2015.
(<http://www.jtss.or.jp/journal/52.html>)