



## Kushendarsyah Saptaji

Senior Lecturer

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### Academic Qualification

PhD (Mechanical Engineering) – Nanyang Technological University Singapore, 2012  
Thesis: Study of Micro-cutting of Thin Workpieces

M.Sc in Mechanics and Processing of Materials – Nanyang Technological University Singapore, 2007  
Independent Study: Mechanical Behavior of Magnesium Matrix Composite Reinforced By Alumina

B.Eng (Cum Laude) Mining Engineering, Institute Technology of Bandung, 2000

### Research Interest / Theme

I have an interest in finding new techniques or methods in the manufacturing process. I am particularly interested in the application of green manufacturing concept and the manufacturing of bio-compatible materials. I am also interested in micro-manufacturing especially related with micro-machining, micro-cutting, precision machining and bio-manufacturing.

### Working Experiences

1. Research Fellow / Research Associate in School of Mechanical and Aerospace Engineering, Nanyang Technological University Singapore from March 2012 – January 2015.
2. Failure Analysis Engineer in Matcor Technology and Services Pte Ltd Singapore from May to December 2007.
3. Technical Service Engineer in PT. Torrecid Indonesia from July 2001 to July 2006.

### Publications (Selected)

1. **Kushendarsyah Saptaji**, Sathyan Subbiah and Jaspreet Singh Duphia, “*Effect of Side Edge Angle and Effective Rake Angle on Top Burrs in Micro-Milling*”, Precision Engineering Journal, 36 (2012) 444-450.
2. **Kushendarsyah Saptaji** and Sathyan Subbiah, “*Orthogonal Micro-cutting of Thin Workpieces*”, ASME Journal of Manufacturing Science and Technology, 135(3), 031004 (May 24, 2013).
3. **K. Saptaji**, S. Subbiah and H. Zarepour, “*A Study of Linear Vibration-Assisted Scratching on Silicon to Improve Diamond Wire Wafering Process*”, Proceedings of 2013, 28<sup>th</sup> European PV Solar Energy Conference (EU-PVSEC), September 30-October 4, 2013, Paris, France.
4. **K. Saptaji**, H. Zarepour and S. Subbiah, “*Improved Surface Roughness of Diamond Wire Sawn Wafers Using Ultrasonic Vibration-Assist*”, 29<sup>th</sup> European PV Solar Energy Conference (EU-PVSEC), September 22-26, 2014, Amsterdam, The Netherlands.
5. H. Zarepour, **K. Saptaji** and S. Subbiah, “*Novel diamond-slurry wire sawing process for silicon wafering*”, 29<sup>th</sup> European PV Solar Energy Conference (EU-PVSEC), September 22-26, 2014, Amsterdam, The Netherlands.
6. G.R. Srinivas, **K. Saptaji**, S. Subbiah and H. Zarepour, “*Novel Texturing Method to Remove Amorphous Silicon on Diamond Wire Sawn Wafers Surfaces*”, 29<sup>th</sup> European PV Solar Energy Conference (EU-PVSEC), September 22-26, 2014, Amsterdam, The Netherlands.
7. **K. Saptaji**, “*Mechanical Micro-machining*”, in **Handbook of Manufacturing Engineering and Technology**, Edited by Andrew Yeh-Ching Nee, Springer-Verlag, 2015.