

**VMPT2019 AT Sheraton Vancouver Airport Hotel**

Presentation Number	Proceeding Number		Presentation Title	Speaker
<b>Presentation Section A</b>	<b>Wednesday, April 24th</b>	<b>1:00 PM - 3:00 PM</b>	<b>Section Chair: Dr. Okwudire</b>	<b>Westminster 2</b>
CNC 1	36	1:00 PM - 1:20 PM	Feedrate Optimization with Contouring Error and Drive Constraints in 5-Axis Machining	Erina Nesbit
CNC 2	25	1:20 PM - 1:40 PM	Constraint of contour errors induced by cutting force disturbances on multi-axis CNC machine tools	Z. Murat Kilic
CNC 3	46	1:40 PM - 2:00 PM	Real-time Interpolation of 5-axis Tool-paths with Accurate Local Corner Smoothing	Shingo Tajima
CNC 4	57	2:00 PM - 2:20 PM	Elimination of Feed Drive Dynamic Positioning Errors using Data-Driven Reference Trajectory Modulation	Alper Dumanli
CNC 5	52	2:20 PM - 2:40 PM	An Error Compensation Scheme for Multi-axis Machine Tools Using Global Offset Based on Workpiece Errors	John Agapiou
CNC 6	54	2:40 PM - 3:00 PM	Simultaneous Vibration Compensation and Feedrate Optimization using Filtered B-Splines	Nosakhare Edoimioya
<b>Presentation Section B</b>	<b>Wednesday, April 24th</b>	<b>3:20 PM - 5:20 PM</b>	<b>Section Chair: Dr. Erkorkmaz</b>	<b>Westminster 2</b>
CNC 7	5	3:20 PM - 3:40 PM	Sensorless Control of a Three-degree-of-freedom Ultrasonic Vibration Tool Holder	Jian Gao
CNC 8	58	3:40 PM - 4:00 PM	In-process tool condition monitoring in end-milling of Inconel 718 using peak period analysis of spindle vibration	Gu-seon Kang
CNC 9	40	4:00 PM - 4:20 PM	Evaluation of the industrial suitability of different control strategies for active vibration control	Robin Kleinwort
M 1	31	4:20 PM - 4:40 PM	Optimization of Material Removal Rate in milling of thin-walled pocket structures using penalty cost function	Yaser Mohammadi
M 2	64	4:40 PM - 5:00 PM	Dynamics and Stability of Power Skiving Operation	Milad Azvar
M 3	68	5:00 PM - 5:20 PM	Machining chatter stability limit improvement by means of feed drive control parameters	Oier Franco
<b>Presentation Section C</b>	<b>Thursday, April 25th</b>	<b>8:20 AM - 10:20 AM</b>	<b>Section Chair: Dr. Law</b>	<b>Westminster 3</b>
M 4	60	8:20 AM - 8:40 AM	Constrained Optimization of Edge Geometry of Cylindrical Milling Tools to Enhance Dynamic Stability	Zoltan Dombovari
M 5	69	8:40 AM - 9:00 AM	Quantitative identification of chatter based on Floquet multipliers in milling operation	Adam Kiss
M 6	42	9:00 AM - 9:20 AM	Virtual Machining of Aero Engine Blades	Yusuf Altintas
M 7	35	9:20 AM - 9:40 AM	Modelling the dynamics of industrial robots for milling operations	Hoai Nam HUYNH
M 8	12	9:40 AM - 10:00 AM	Prediction of Chatter Stability in Vibration Assisted Milling	Shaoke Wan
M 9	3	10:00 AM - 10:20 AM	Influence of Non-linear Friction Characteristics of Linear Guide and Ball-screw in Milling Operation	Ryuta SATO
<b>Presentation Section D</b>	<b>Thursday, April 25th</b>	<b>10:40 AM - 12:40 PM</b>	<b>Section Chair: Dr. Mayer</b>	<b>Westminster 3</b>
M 10	53	10:40 AM - 11:00 AM	Machine Tool Design Optimization Considering Thermo-Mechanical Behaviour in the Structure and at the Interfaces	Esra Yüksel
M 11	61	11:00 AM - 11:20 AM	Virtual machining of robot-based machining processes	Felix Rust
M 12	63	11:20 AM - 11:40 AM	Efficient cutting force characteristic measurement based on a single turn in milling operation	Daniel Bachrathy
M 13	30	11:40 AM - 12:00 PM	Prediction of the position dependent dynamic behavior of a machine tool considering local damping effects	Thomas Semm
M 14	32	12:00 PM - 12:20 PM	Proposal of novel chatter stability indices of spindle speed variation based on its chatter growth characteristics	Soohyun Nam
M 15	79	12:20 PM - 12:40 PM	Experimental Study of Audible Sound and AE Signals for Defect Monitoring in DED Metal Additive Manufacturing	Ming-Chyuan Lu
<b>Presentation Section E</b>	<b>Wednesday, April 24th</b>	<b>1:00 PM - 3:00 PM</b>	<b>Section Chair: Dr. Veldhuis</b>	<b>Westminster 3</b>
C1	33	1:00 PM - 1:20 PM	Direct Laser-assisted Machining of Carbon-fiber-reinforced polymers through a Sapphire tool	Simon Park
C2	73	1:20 PM - 1:40 PM	Chip Formation in Orthogonal Cutting of Unidirectional CFRP	Chunlei song
C3	74	1:40 PM - 2:00 PM	Analytical and Numerical Analysis of Delamination Defect in Drilling Carbon Fiber Reinforced Composites	Zahra Fattahi Massoom
C4	6	2:00 PM - 2:20 PM	Smart Jaw: Gripping force measurement system in turning operations	Allen Sandwell
3D 1	34	2:20 PM - 2:40 PM	Melt Pool Geometry Modeling and Monitoring via In-Situ Vision System for Powder Fed Laser Fusion Process	Deniz Sera Ertay
3D 2	56	2:40 PM - 3:00 PM	Synergy Strategies between Additive Manufacturing and Machining for High Value Added Components	Deniz Sera Ertay
<b>Presentation Section F</b>	<b>Wednesday, April 24th</b>	<b>3:20 PM - 5:20 PM</b>	<b>Section Chair: Dr. Park</b>	<b>Westminster 3</b>
C5	17	3:20 PM - 3:40 PM	Study on mechanical properties and wear performance behavior of CVD and PVD coatings for machining of austenitic stainless steel 304	Qianxi He
C6	19	3:40 PM - 4:00 PM	Effect of self-lubricating PVD coating on wear performance of carbide tools during various machining conditions of Ti6Al4V alloy	Mohammad Chowdhury

C7	23	4:00 PM - 4:20 PM	Investigation of the effect of tool geometry on the machining process	Baoqin(Sophia) Deng
C8	26	4:20 PM - 4:40 PM	High-speed machining of low carbon steel using coated CBN and carbide tools	Kan Zhang
C9	29	4:40 PM - 5:00 PM	Development of an efficient FE model to predict tool wear and worn tool geometry in orthogonal cutting	Md Khalid saifullah
C10	41	5:00 PM - 5:20 PM	Increasing the drilling efficiency of Inconel 718 using WC-Co tools: Effect of graphene blended MRF	Behzad Eskandari
<b>Presentation Section G</b>	<b>Thursday, April 25th</b>	<b>8:20 AM - 9:40 AM</b>	<b>Section Chair: Dr. Jin</b>	<b>Westminster 2</b>
C11	14	8:20 AM - 8:40 AM	Prediction of Chip formation in Machining of Zr-based Bulk Metallic Glass	Naresh Kumar Maraju
C12	50	8:40 AM - 9:00 AM	Validation of a hardware-in-the-loop simulator for investigating regenerative chatter in orthogonal cutting	Law, Mohit
C13	4	9:00 AM - 9:20 AM	Prediction of Cutting Forces in Gear Skiving of Internal Gear	Hongjin JUNG
CAM	66	9:20 AM - 9:40 AM	Efficient Surface Voxel Identification of a Milling Cutter in Volumetric Model Based Machining Simulation	Zhengwen Nie
<b>Poster Section</b>	<b>Thursday, April 25th</b>	<b>10:20 AM - 12:20 AM</b>		<b>Westminster 1+2</b>
Poster 1	15	10:20 AM - 12:20 AM	Monitoring built-up edge formation using acoustic emission signals in turning stainless steels Authors: Yassmin Seid Ahmed, Md. Shafiul Alam, A.F.M. Arif and Stephen Veldhuis	
Poster 2	16	10:20 AM - 12:20 AM	Identification of Cutting Force Coefficients in End-Milling Authors: mehran farhadmanesh and keivan ahmadi	
Poster 3	18	10:20 AM - 12:20 AM	Application of Edge Preparation Technologies to Improve Tool Performance Authors: Wanting Wang, Abul Fazal Arif, Jose de Paiva and Stephen Veldhuis	
Poster 4	20	10:20 AM - 12:20 AM	Machinability comparison between two different grades of aerospace alloys under diverse turning conditions: Ti-6Al-4V and Ti-5Al-5V-5Mo-3Cr Authors: Pietro Stolf, Jose Mario Paiva, German Fox-Rabinovich and Stephen Veldhuis	
Poster 5	21	10:20 AM - 12:20 AM	An investigation on initial tool wear while machining of titanium metal matrix composite Authors: mina marousi, Xavier RIMPAUT, Sylvain TURENNE and Marek BALAZINSKI	
Poster 6	24	10:20 AM - 12:20 AM	TiCrAIN/TiCrAlSiYN-based nano multilayer PVD coatings applied to high speed ball nose hard end-milling Authors: Edinei Locks Junior, Jose de Paiva and Stephen Veldhuis	
Poster 7	27	10:20 AM - 12:20 AM	Wear of Form Taps in Threading of Al-Si Alloy Parts Authors: Rohan Barooah, Abul Fazal Arif, Jose de Paiva and Stephen Veldhuis	
Poster 8	37	10:20 AM - 12:20 AM	In situ machine tool walking on large workpieces: Improvement of machining accuracy by compensating orientation dependent position error Authors: Chang-Ju Kim, Seung-Kook Ro and Chun-Hong Park	
Poster 9	47	10:20 AM - 12:20 AM	Discrete Cutter-Workpiece Engagement for Five-axis Milling using Tri-Dexel Model Authors: Jan Theegarten, Denys Plakhotnik, Murat Kilic, Eva Berckmann, Marc Stautner and Yavuz Murtezaoglu	
Poster 10	48	10:20 AM - 12:20 AM	Tool Wear Diagnosis under Adaptive Control Authors: Jihee Jung, EunYoung Heo, HiKoan Lee and DongYoon Lee	
Poster 11	49	10:20 AM - 12:20 AM	Performance Improvement of Machine Tools via Optimized Multiple Tuned-Mass-Dampers Authors: Jihyun Lee, Chang-Ju Kim, Changho Lee and Kangjae Lee	
Poster 12	67	10:20 AM - 12:20 AM	Virtual model building for 5-axis laser drilling machine from field data Authors: Chia-Pei Wang, Kaan Erkorkmaz and John Mcphee	
Poster 13	75	10:20 AM - 12:20 AM	Machine Tool Accuracy Condition Monitoring Using Combined Vector Similarity Measures Array of Volumetric Errors Authors: KANGLIN XING, Rene Mayer and Sofiane Achiche	
Poster 14	76	10:20 AM - 12:20 AM	Generation of 3D grid error compensation from ISO 230-1 error parameters Authors: sareh esmaeili and René Mayer	
Poster 15	77	10:20 AM - 12:20 AM	Kernel density estimation function used for process monitoring Authors: Gabriel Bernard, Sofiane Achiche and Rene Mayer	
Poster 16	78	10:20 AM - 12:20 AM	Automatic Decision Making of Machining-parameters Optimization Based on Experimental Determination Authors: Chung-Yu Tai, Chun-Yu Tsai, Ta-Jen Peng, Tzuo-Liang Luo, Yum Ji Chan and Ming-Chyuan Lu	