

**Session 10 – Posters
Tuesday April 21, 2009**

15:30-16:30 Poster Viewing Session A – Odd numbered panels (1, 3, 5 etc)
16:30-17:30 Poster Viewing Session B – Even numbered panels (2, 4, 6, etc)

Erosive Wear and Erosion/Corrosion

- P10.01.01 **Corrosion wear behaviors of 2024Al in artificial rainwater and seawater at fretting contact**
H Ding, G Zhou, Y Bu*, T Jiang; Huaiyin Institute of Technology, China
- P10.01.02 **Amine type Inhibitor effect on corrosion-erosion wear in oil gas pipes**
D Martinez-Delgado^{*1}, R Gonzalez², K Montemayor¹, B Valdez-Salas³, MAL Hernandez-Rodriguez¹; ¹Universidad Autónoma de Nuevo León, Mexico, ²Universidad Autónoma de Nuevo León, Mexico, ³Universidad Autónoma de Baja California, Mexico
- P10.01.03 **Erosion-corrosion mitigation by corrosion inhibitors - an assessment of mechanisms**
A Neville, C Wang*; University of Leeds, United Kingdom
- P10.01.04 **Triboelectrochemical properties of Nb-Ti alloy at friction in electrolytes**
S Volodymyr*, V Chrystyna; Karpenko Physico-Mechanical Institute of National Academy of Sciences, Ukraine
- P10.01.05 **Effect of thermo - elastic residual stresses on erosive performance of cermets with core-rim structured ceramic grains.**
M Hussainov^{*1}, A Kolesnikova², I Hussainova³; ¹University of Tartu, Estonia, ²Institute of Problems of Mechanical Engineering, Russian Federation, ³Tallinn University of Technology, Estonia
- P10.01.06 **An investigation on the wear of compressor impellers used in gas transmission line**
M Saremi*, M Kazemi; University of Tehran, Iran
- P10.01.07 **Residual stresses in materials exposed to cavitation erosion**
J Stella^{*1}, M Pohl²; ¹Universidad Simón Bolívar, Venezuela, ²Ruhr-Universitaet Bochum, Germany
- P10.01.08 **Effect of carbon on the cavitation erosion resistance of Fe-Ni-C austenitic alloys**
SJ Kim, JH Kim*, JG Lee, KN Kim, et al; Hanyang University, Korea
- P10.01.09 **Cavitation erosion resistance of NiTi thin films produced by Filtered Arc Deposition**
LM Yang*, AK Tieu, DP Dunne, SW Huang, H Li, D Wexler, ZY Jiang, et al; University of Wollongong, Australia
- P10.01.10 **High temperature erosion property of surface nitrided SUS403 with TiAlNi coating**
T Naruse^{*1}, K Shimizu², Y Xinba², Y Yano², M Hatate³; ¹National Maritime Research Institute, Japan, ²Muroran Institute of Technology, Japan, ³Kinki university, Japan
- P10.01.11 **Cavitation resistance of polymeric coatings for application in hydroelectrical turbines**
CE Correa*, AO Toro; National University of Colombia, Colombia
- P10.01.12 **The effect of water flow on the fretting wear between fuel cladding tubes and supporting grids**
JS Kim^{*1}, DS Park¹, YH Kim², YZ Lee¹; ¹SungKyunKwan University, Korea, ²Korea Nuclear Fuel corporation, Korea

Tribology of Friction Materials

- P10.02.01 **Analysis of abrasive wear of automotive brake pads and linings**
MRF Soares^{1,3}, RG Lamb¹, MR Soares^{*1}, HA Al-Qureshi²; ¹Fras-le S/A, Brazil, ²UFSC-EMC LabMat, Brazil, ³CNPq - PDI Scholarship, Brazil
- P10.02.02 **The wear intensity forecasting for brake pads**
A Pogosian*, N Meliksetyan, N Lambaryan, N Mamulyan, et al; State Engineering University of Armenia, Armenia

- P10.02.03 **Sensitivity of composition of NAO friction materials towards generation of hot-spots on the disc during stop braking**
M Kumar^{*1}, X Boidin², Y Desplanques², G Degallaix², J Bijwe¹; ¹Indian Institute of Technology Delhi, India, ²Ecole Centrale de Lille, French Guiana
- P10.02.04 **Volvo bus brake-pad testing on a brake inertia dynamometer –studies on influence of resin in the composites**
M Kumar^{*}, J Bijwe; Indian Institute of Technology Delhi, India
- P10.02.05 **Influence of nature and particle size of graphite on fade and recovery behavior of composite friction materials**
DK Kolluri^{*}, J Bijwe, AK Ghosh; Indian Institute of Technology Delhi, India
- P10.02.06 **The tribological properties of sintered friction materials**
YT O^{*1}, SE Choi¹, HB Choi², GJ Jung³, HK Lee¹, DC Shin¹, et al; ¹Chosun University, Korea, ²FRIXA, Korea, ³Hankook Tire, Korea
- P10.02.07 **The effect of graphite and Cu content on tribological behavior in Cu-base sintered friction materials**
YT O^{*1}, HK Ham¹, HR Kim², HG Choi², HK Lee¹, DC Shin¹, et al; ¹Chosun University, Korea, ²FRIXA, Korea
- P10.02.08 **Durability of surface acoustic wave motor for high speed and precision positioning**
Y Chiba, H Usuba, K Adachi^{*}, M Kurosawa; Tohoku University, Japan

Wear of Metals and Alloys

- P10.03.01 **Galling resistance of some selected tool steel / high strength steel sheet materials as evaluated under lubricated sliding conditions using pin-on-disc testing**
J Ericsson^{*}, E Gustafsson, M Olsson; Dalarna University, Sweden
- P10.03.02 **The design of experiments approach for improvement of abrasive wear behavior of Hadfield steels by aluminum alloying**
M Abbasi^{*2,1}, S Kheirandish², Y Kharrazi², J Hejazi²; ¹Babol Noshivani University of Technology, Iran, ²Iran University of Science and Technology, Iran
- P10.03.03 **Segregation of atoms of the eutectic alloys Fe-Mn-C-B at friction wear**
MI Pashechko^{*}; Technikal University of Lublin, Poland
- P10.03.04 **Friction-induced microstructure evolution of SUS 304 meta-stable austenitic stainless steel and its influence on the wear behavior**
XC Wei^{*1}, M Hua², Z Gao³, J Li⁴, ZY Xue¹; ¹Shanghai University, China, ²City University of Hong Kong, China, ³East China University of Science and Technology, China, ⁴Wuhan Research Institute of Materials Protection, China
- P10.03.05 **Particle size effect on wear of white cast iron with austenitic and martensitic matrix**
JJ Coronado^{*1,2}, A Sinatora¹; ¹University of Sao Paulo, Brazil, ²Universidad del Valle, Colombia
- P10.03.06 **Influence of wear conditions on metallurgical microstructure and residual stress**
K Hirukawa, R Bulpett^{*}, TA Stolarski, BJ Jones; Brunel University, United Kingdom
- P10.03.07 **Study of factors influencing performance of sliding aluminum electrical contacts**
D Bansal^{*}, J Streator; Georgia Institute of Technology, United States
- P10.03.08 **Tribological behaviour of cast hypereutectic Al-Si-Cu alloy subjected to sliding wear**
DE Lozano^{*1}, AJ Perez-Unzueta¹, J Talamantes², F Morales², RD Mercado-Solis¹, MAL Hernandez-Rodriguez¹; ¹Universidad Autónoma de Nuevo León FIME., Mexico, ²NEMAK SA de CV, Mexico
- P10.03.09 **Boron influence on wear resistance in nickel base alloys**
J Diabb^{*}, A Juarez-Hernandez, RR Colas, AG Castillo, E Garcia-Sanchez, MAL Hernandez-Rodriguez; Universidad Autónoma de Nuevo León FIME, Mexico

Wear of Composites

- P10.04.01 **Impact of surface finishing operations on the friction and wear response of WC based cemented carbide sliding pairs**
K Bonny¹, P De Baets^{*1}, W Liu², B Lauwers², J Vleugels², O Van der Biest²; ¹Ghent University, Belgium, ²Catholic University of Leuven, Belgium
- P10.04.02 **A comprehensive study of the wear mechanisms in WC-Co hardmetals, from the microscopic to the macroscopic scale**
SN Ndlovu^{*}, K Durst, M Goeken; University of Erlangen-Nuernberg, Germany
- P10.04.03 **Wear behaviours of hypereutectic Al-Si composites prepared by powder metallurgy**
SK Park^{*}, JM Choi, BG Park, IK Park, YH Park; Pusan National University, Korea
- P10.04.04 **Microstructure and mechanical properties of hypereutectic Al-Si/TiCp composites**
JM Choi^{*}, SK Park, BG Park, YJ Kim, IM Park, YH Park; Pusan National University, Korea
- P10.04.05 **Investigations of tribological properties of silica particle-aluminum matrix composite alloys**
Z Peng^{*}, L Han, X Nie; University of Windsor, Canada
- P10.04.06 **Wear property of titanium matrix composites by casting route**
SY Sung^{*1}, MG Kim², YM Ryu¹, BS Han¹, YJ Kim³; ¹KATECH(Korea Automotive Technology Institute), Korea, ²RIST, Korea, ³Sungkyunkwan University, Korea
- P10.04.07 **Effect of volume fraction on wear resistance of (TiB+TiC) hybrid titanium matrix composites**
BJ Choi^{*}, KE Hong, YJ Kim; Sungkyunkwan University, Korea
- P10.04.08 **Effect of SiC filler on three body abrasive wear behaviour of Polymer Matrix Composites**
S Basavarajappa^{*}, AG Joshi, AP Kumar, KV Arun; ¹University BDT College of Engineering, India
- P10.04.09 **Tribological performance of boric acid filled polymer composite**
A Mimaroglu^{*}, H Unal, SH Yetgin; University of Sakarya, Turkey
- P10.04.10 **Tribological behavior of epoxy resins reinforced with carbon nanofibers**
A Adib, MA Garrido-Maneiro, J Rodríguez^{*}; Universidad Rey Juan Carlos, Spain
- P10.04.12 **Tribological characterization of ultrahigh molecular weight polyethylene/carbon nanotubes composites: The effect of sliding distance**
S Kanagaraj¹, MT Mathew^{*2}, A Fonseca³, LA Rocha⁴, MSA Oliveira³, JAO Simões⁴; ¹Indian Institute of Technology Guwahati, India, ²Rush University Medical Centre, United States, ³University of Aveiro, Portugal, Portugal, ⁴University of Minho, Guimaraes, Portugal
- P10.04.13 **Wear of natural graphite/polymer materials immersed in diesel oil for automotive fuel pump DC motor**
PH Cornuault^{*1}, R Charpenay², PhKapsa², S Benayoun²; ¹Institut National des Sciences Appliquées de Lyon, France, ²Ecole Centrale de Lyon, France

Wear of Thin Films and Coatings, Surface Engineering for Wear Control
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- P10.05.01 **Wear properties of nitrocarburizing AISI P20 tool steel for high temperature aluminum forming**
MD Hanna^{*}; GM R&D Center, United States
- P10.05.02 **Wear mechanisms and microstructure of nitrogen ion beam implanted Fe-Zr alloy**
AV Byeli^{*}, VA Kukareko, EG Bilenko, AG Kononov; National Academy of Science, Belarus
- P10.05.03 **Scratch and indentation of indium tin oxide films on polyester substrates**
NJ Morris^{*1,2}, KA Sierros¹, R Nair², NX Randall², DR Cairns¹; ¹West Virginia University, United States, ²CSM Instruments, United States
- P10.05.04 **Correlation between critical loads, cohesive failure and delamination of hard diamond-like carbon on stainless steel**
LV Santos^{*}, RPCC Statuti, PA Radi, VJ Trava-Airoldi; National Institute for Space Research - INPE, Brazil

- P10.05.05 **Carbon based tribological coatings by using the high-rate electron beam evaporation**
J-P Heiness*, Chr Metzner, B Scheffel; Fraunhofer-Institut Elektronenstrahl- und Plasmatechnik, Germany
- P10.05.06 **Influence of deposition parameters on tribological properties of CNx coatings**
R Waesche¹, U Springborn², M Hartelt¹, K Bewilogua²; ¹Federal Institute for Materials Research and Testing (BAM), Germany, ²Fraunhofer Institute for Surface Technologies (FhI IST), Germany
- P10.05.07 **Effect of inert gas atmosphere on the friction and wear properties of carbon nitride coatings**
P Wang*, K Adachi; Tohoku University, Japan
- P10.05.08 **Sliding wear performance of diamond reinforced composite coating**
K Venkateswarlu*, V Rajinikanth, Ajoy Kumar Ray ; National Metallurgical Laboratory, India
- P10.05.09 **High-speed drilling performance of coated micro-drills with Zr-C:H:Nx% coatings**
WH Kao*; Chienkuo Technology University, Taiwan
- P10.05.10 **Low friction CrAlYCN/CrCN nanoscale multilayer PVD coatings deposited by the combined high power impulse magnetron sputtering / unbalanced magnetron sputtering technology**
P Hovsepian¹, A Ehasarian¹, U Ratayski²; ¹Sheffield Hallam University, United Kingdom, ²Technical University of Mining and Technology, Germany
- P10.05.11 **Wear behaviour of chromizing-titanizing coating**
L Baiyang¹, J Linchuan², X Bin¹, H Dou¹; ¹Zhejiang University of Technology, China, ²Hangzhou Bureau of City Management and Execution, China
- P10.05.12 **Low friction CrN/TiN multilayer coatings prepared by the new hybrid HIPIMS/UBMS deposition technique**
J Paulitsch¹, PH Mayrhofer², M Schenkel³; ¹Materials Center Leoben Forschung GmbH, Austria, ²Department of Physical Metallurgy and Materials Testing Montanuniversität Leoben, Austria, ³SVS Vacuum Coating Technologies, Germany
- P10.05.13 **The friction and wear characteristics of CrN, TiN, TiAlN coatings on anodized aluminium alloy**
GS Lee, SH Bae*, YZ Lee; Sungkyunkwan University, Korea
- P10.05.14 **Structure and properties of low-friction TiAlCN coatings prepared by reactive arc-evaporation**
M Rebelo de Figueiredo¹, GA Fontalvo¹, R Franz¹, C Polzer², M Lechthaler³, C Mitterer¹, et al; ¹University of Leoben, Austria, ²PLANSEE Composite Materials GmbH, Germany, ³OC Oerlikon Balzers AG, Liechtenstein
- P10.05.15 **Wear behaviour of TiAlN/TiAl multilayers deposited on plasma nitrated steels**
M Flores¹, E Rodriguez¹, L Huerta², E De las Heras³; ¹Universidad de Guadalajara, Mexico, ²Universidad Nacional Autonoma de Mexico, Mexico, ³Instituto Nacional de Tecnologia Industrial, Argentina
- P10.05.16 **On the possibility to replace cemented carbide wire drawing dies with CVD and PVD coated steel wire drawing dies – A tribological investigation**
M Nilsson¹, M Olsson²; ¹Ovako Steel AB, Sweden, ²Dalarna University, Sweden
- P10.05.17 **Comparative tribological behaviour and wear mechanisms of V(N,C) and VC coated DIN 1.2367 hot work steel against WC/Co cemented tungsten carbide**
F Fazlalipour*, N Shakib, M Niki Nooshari; Iran Radiator Company, Iran
- P10.05.18 **High temperature tribological studies of AlCrN coated tool steels**
BY Choi*, YS Koo, JH Kook, YB Lim; Chonbuk National University, Korea
- P10.05.19 **High temperature wear behavior of laser clad coatings based upon Nickel base self-fluxing with round shape tungsten-carbide hardmetals.**
SH Park*, SY Hwang; Research institute of Industrial Science & Technology, Korea
- P10.05.20 **Effect of CeO₂ on microstructure and sliding wear properties of Al₂O₃ ceramic coating with laser-cladding Ni- Al₂O₃-Re composite plating**

X Cheng*, J He; Shantou University, China

- P10.05.21 **Investigation of nano SiC-nickel composite coatings**
G Heidari¹, M Mosavi Khoie¹, A Shahhosseini², M Toghraie¹; ¹Amirkabir University, Iran
²University of Louisville, United States
- P10.05.22 **Fabrication and characterization of Ni-SiC metal matrix composite (MMC) nano-coatings by electrodeposition**
F Kiliç, H Gül*, S Aslan, A Alp, H Akbulut; Sakarya University, Turkey
- P10.05.23 **New coating of NiP with fullerene like WS₂ incorporated compared with three different commercial state of the art PVD coatings**
B André*, F Gustavsson, F Svahn, S Jacobson; Uppsala University, Sweden
- P10.05.24 **Structure and tribological properties of arc-evaporated HfAlN hard coatings**
R Franz*¹, M Lechthaler², C Polzer³, C Mitterer¹; ¹University of Leoben, Austria, ²OC Oerlikon Balzers AG, Liechtenstein, ³PLANSEE Composite Materials GmbH, Germany
- P10.05.25 **Wear resistance and friction of femtosecond and excimer laser micro-structured ta-C films**
S Weissmantel*, G Reisse, R Boettcher, A Engel, M Nieher, K Guenther; University of Applied Sciences Mittweida, Germany
- P10.05.26 **Tribological study of coatings applied in fixing elements used in offshore**
MCM Farias*¹, LR Villabón², RM Souza¹, Z Panossian³, NG Berry⁴, A Sinatora^{1,2}; ¹University of São Paulo, Brazil, ²Aços Villares - Unidade Cilindros, Brazil, ³Institute for Technological Research, Brazil, ⁴Petrobras, Brazil
- P10.05.27 **The effects of surface profiles and coatings on the tribological behavior of the surfaces of a piston skirt**
Y Lee¹, S Lee*¹, D Cho¹; ¹Sungkyunkwan University, Korea, Republic of
- P10.05.28 **The influence of surface topography on the formation of build-up layers and wear of CVD-Al₂O₃ coatings**
M Fallqvist*¹, M Olsson¹, J Andersson², R Msaoubi²; ¹Dalarna University, Sweden, ²Seco Tools AB, Sweden
- P10.05.29 **The effect of adhesion and hardness of coating film on contact behavior for elliptic rough surface**
JH Horng*, SJ Hwang, JM Chen; National Formosa University, Taiwan
- P10.05.30 **Scanning laser light scattering probe applied to the study of coating integrity after wear in a pin-on-disk apparatus.**
HA Llanito-Urbano, I Dominguez-Lopez*, AL Garcia-Garcia, HJ Gonzalez-Martinez, JA Montes-de-Oca-Valero; CICATA-IPN Unidad Queretaro, Mexico
- P10.05.31 **Nano and micro indentation and scratch tests of coatings and thin films**
N Gitis*, S Kuiry, I Hermann; Center for Tribology Inc, United States
- P10.05.32 **Investigation of mechanical and cutting performance of cemented carbide cutting tools with CrTiAlN composite coatings**
P Zhang*¹, Z Cai¹, J Du¹, et al; ¹National Key Laboratory for Remanufacturing, China

Wear in Liquid Lubricated Regimes

- P10.06.01 **An efficient lubrication condition based on the difference of material wettability**
A Borruto*, G Narducci; La Sapienza University, Italy
- P10.06.02 **Prediction of running-in duration for mixed lubrication between parallel surfaces**
F Robbe-Valloire*, R Progi, B Paffoni; Supmeca, France
- P10.06.03 **Tribofilm - A review to find its characteristics**
K Mistry*, A Neville, A Morina; University of Leeds, United Kingdom
- P10.06.04 **Tribological studies on self lubricant composites**
PA Radi*, LV Santos, VJ Trava-Airoldi; Inpe - National Institute for space ressearch, Brazil

- P10.06.05 **Friction and wear of the lubricated vane and roller materials in a carbon dioxide refrigerant**
Y Lee, H Jeon*, S Oh; Sungkyunkwan University, Korea

Biotribology

- P10.07.01 **Wear Mapping Analysis with Retrieval 28mm CoCr-CoCr Hip Bearings - 11-years Experience**
KK Kubo*^{1,2}, ICC Clarke¹, JYL Lazennec³, EJ Smith⁴, TKD Donaldson⁵, KY Yamamoto², et al;
¹Peterson Tribology Laboratory Loma Linda University, United States, ²Tokyo Medical University, Japan, ³Hospital Pitie Salpetriere, France, ⁴North Bristol NHS Trust Southmead Hospital, United Kingdom, ⁵Empire Speciality Orthopedics Center, United States
- P10.07.02 **Wear study of retrieved alumina hip replacements**
A Rana*, P Zeng, WM Rainforth, BJ Inkson; University of Sheffield, United Kingdom
- P10.07.03 **Wear mechanism study of Biolox® delta for artificial hip-joint by reciprocating wear testing**
L Ma, WM Rainforth*; University of Sheffield, United Kingdom
- P10.07.04 **Design and construction of a bio-tribocorrosion test apparatus for hip joint application**
MT Mathew*¹, R Pourzal², NJ Hallab¹, T Uth¹, A Fischer², MA Wimmer¹; ¹Rush University Medical Center, United States, ²University of Duisburg-Essen, Germany
- P10.07.05 **Oxidized zirconium in comparison with cobalt-chromium-molybdenum alloys and titanium nitride coatings as bearing material for artificial knee joints**
MC Galetz*, U Glatzel; University of Bayreuth - Metals and Alloys, Germany
- P10.07.06 **Wear and corrosion behavior of various surface treated medical grade titanium alloy in bio-simulated environment**
F Yildiz, F Yetim, A Alsarar, I Efeoglu*; Ataturk University, Turkey
- P10.07.07 **Exploration of the size, shape and abundance of UHMWPE wear particles using Atomic Force Microscopy**
LG Gladkis*^{1,2}, R Li², J Scarvell², P Smith², H Timmers¹; ¹UNSW@ADFA, Australia, ²TORU The Canberra Hospital, Australia
- P10.07.08 **Frictional properties of PVA – H for biological model material of artery**
V Fridrici¹, M Ohta², Ph Kapsa*¹; ¹LTDS - Ecole Centrale de Lyon, France, ²IFS - Tohoku University, Japan
- P10.07.09 **Influence of environmental humidity on the friction of human skin against textiles**
A Ramalho*; CEMUC University of Coimbra, Portugal

Wear Test Methods

- P10.08.01 **Estimation of contact width and wear studies at Nanolevel**
K Singh*, S Baghmar, J Sharma; University of Mississippi, United States
- P10.08.02 **Microtribology tests on patterned silicon**
L Winkless, A Cuenat, MG Gee*; National Physical Laboratory, United Kingdom
- P10.08.03 **A low earth orbit space tribometer**
BA Krick*¹, DL Burris², JG Jones³, WG Sawyer¹; ¹University of Florida, United States, ²University of Delaware, United States, ³Air Force Research Laboratory, United States
- P10.08.04 **Optical evaluation of wear**
MG Gee*, LJ Brown, EG Bennett; National Physical Laboratory, United Kingdom
- P10.08.05 **Knowledgeable strategy for identification of wear modes of engineering surfaces**
G Meille*, TG Mathia; Ecole Centrale de Lyon CNRS LTDS, France

Wear: Modeling and Simulations

- P10.09.01 **Numerical and experimental study of elastic contact analysis for cylinder on flat configuration**

P Darji^{*1}, DP Vakhariya²; ¹CU Shah College of Engineering and Technology, India, ²SV National Institute of Technology, India

- P10.09.02 **Preliminary investigation of the effect of roughness in dynarat simulation**
F Alwahdi^{*1}, A Kapoor², FJ Franklin²; ¹The University of Omer Al Mukhtar, Libyan Arab Jamahiriya, ²The University of Newcastle, United Kingdom
- P10.09.03 **Numerical simulation of fretting wear on press-fitted shaft**
WH You^{*1}, DH Lee¹, SJ Kwon¹, JB Choi², YJ Kim²; ¹Korea Railroad Research Institute, Korea, ²Sungkyunkwan University, Korea
- P10.09.04 **Numerical modelling of edge rounding of brittle materials in vibratory finishing**
A Mohajerani*, JK Spelt; University of Toronto, Canada
- P10.09.05 **Application of combined discrete/finite element multiscale method for modelling of Mg redistribution during hot rolling of alluminium**
WM Rainforth*, M Krzyzanowski; The University of Sheffield, United Kingdom
- P10.09.06 **Predicting ploughshare wear rate using multivariate analysis and artificial neural network**
EYH Bobobee*, A Addo; Kwame Nkrumah University of Science and Technology, Ghana
- P10.09.07 **An investigation on the wear volume of rail and friction energy**
Q Liu*, M Chen, W Wang, M Zhu, Z Zhou; State Key Laboratory of Traction Power, China

Case Studies

- P10.10.01 **Wear characteristics of rubber-seal due to dust particles in the automobile's chassis system**
T Won¹, S Chung¹, S Park¹, Y Lee^{*1}, G Kim², D Kim²; ¹Sungkyunkwan University, Korea, ²Korea Automotive Technology Institute, Korea
- P10.10.02 **The effect of properties of aggregates on polishing resistance**
S Hamlat*, P Marsaci, O Boujard; Laboratoire Régional des Ponts et Chaussées d'Angers, France
- P10.10.03 **Stone vase manufacture in Bronze Age Crete: drilling and polishing techniques**
H Procopiou^{*1}, A Boleti¹, E Morero¹, R Vargiolu², H Zahouani²; ¹University Paris ¹ (Panthéon-Sorbonne)- UMR CNRS 70⁴¹ (ArScan), France, ²Laboratoire de Tribologie et Dynamique des Systèmes - ECL ENISE CNRS - UMR 55¹³, France
- P10.10.04 **Static and kinetic friction on parallel interfaces: slip between playing cards**
PJ Blau*; Oak Ridge National Laboratory, United States
- P10.10.05 **Design of a smart cylindrical thermoplastic bearing which can recover its wearing depth**
G Kamel*; General (retired), Egypt