Proceeding Page #	Paper Title	Mintek, South Africa	University of Cape Town, South Africa	North West University, South Africa	Seol National University, South Korea	University of Pretoria, South Africa	CSIR, South Africa	Vaal University of Technology, South Africa	University of Johannesburg, South Africa	University of Zimbabwe, Zimbabwe	WITS University, South Africa	Council for Scientific and Industrial Research, South Africa	Central University of Technology, South Africa	University of Stellenbosch, South Africa	Luleå University of Technology, Sweden	University of Ibadan, Nigeria	Kwara State University, Nigeria	Tswane University of Technology, South Africa	Sasol Limited, South Africa	Botswana International University of Science and Technology, Botswana	Cape Penninsula University of Technology, South Africa	University of Surrey, United Kingdom	IMT Lille Douai, France	Tsinghua University, Beijing, China	University of Kwa Zulu Natal, South Africa	Moi University, Kenya	National University of Science and Technology, Zimbabwe	Imperial College London, UK	Durban University of Technology, South Africa	Research Center Pharamaceutical Engineering, Graz, 8041, Austria	African Academy, South Africa	Kwatani, 18 Belgrade street, Aeroport Kempton Park 1619, South Africa	Drytech International (Pty.) Ltd, 50 Mimetes Road Denver, Johannesburg 2094, South Africa	Eskom - Research, Testing and Development, Avonside Rd, Rosherville, Johannesburg, South Africa		check entries
35	Toward computational models of metallurgical converting processes	1																																		1
47	A micromorphic approach modelling the anisotropic material behaviour of the human heart		1																																	1
59	Modelling of convection heat transfer in the SNU Riser Heat transfer Experimental Facility			0,5	0,5																															1
70	Adaptive SAFE model of a rail for parameter estimation					0,4	0,6																													1
82	The stochastic effect of nanoparticles size, morphology, spatial distribution on flow rate through a nanostructured membrane surface							1																												1
91	Survey study for the causes of failure of plastic chairs using Finite Element Analysis.								0,667	0,33																										1
103	The influence of rotational speed and pressure on the properties of rotary friction welded Titanium alloy (Ti-6Al-4V)								1																											1
112	A comparison of different CFD and Gaussian dispersion models										0,5	0,5																								1
121	Development of a Transient Numerical Model for a Hybrid Rotary Kiln								1																											1
133	Implementation of a visco-plastic sea ice model into OpenFOAM		0,333				0,33				0,333																									1
144	Validation through digital image correlation of finite element analysis used in the design of a Ti6Al4V mandibular implant												0,667	0,33																						1
156	The Effect of Fibre Length on the Tensile Properties of Natural Fibre Composites: A retrospective look into manufacturing methods										1																									1
167	CFD analysis of thermal dispersion in a structured packed bed			1																																1
179	The Effect of Particle Inter-Separation Distances and Volume Fraction on Thermal Stability and Strength of 3D Printing Composite Material							1																												1
191	Estimation of probability of defect detection by combining simulated defect signatures with measured ultrasonic guided wave signals					0,4	0,6																													1
202	A Review of 4D Printing Technology and Future Trends														1																					1
212	Application of Modal Analysis to Establish the Wavelength Fixing Mechanism for Rail Corrugation								1																											1
224	The transition from high school mathematics to engineering mathematics.								1																											1
234	The Compression and Shear Mechanical Properties of Treated and Untreated Sisal Fibre-Epoxy Resin Composites							0,67					0,333																							1
246	Improved accuracy considerations in Radial Basis Function surrogate models forvariable resolution, scale, dimension and discontinuity						0,5				0,5																									1
257	The effect of Weld Bead Heat Input on the Mechanical Properties of 3CR12 StainlessSteel								0,5																						0,5					1
269	Temperature Compensation for Ultrasonic Guided Wave Measurements						1																													1
279	Non-Linear Finite Element Analysis of Boiler Tubes under Localized Thinning Caused by Wall Loss Mechanisms					1																														1
291	One dimensional dynamic modelling of the HPS2 CSP molten salt trough test facility		1																																	1
304	The stochastic effects of nanoparticles size, morphology of membrane channels and spatial distribution of membrane channels on surface energy							1																												1
314	Modelling and Simulation of the first pass in Industrial Cold Rolling Process ofAluminium 8015 Alloy								0,333						0,33	0,167	0,167																			1
322	A Numerically Stable Eulerian-Eulerian Model of Air-Core Formation in a Hydrocyclone								1																											1
334	Multisphere clumped DEM methodology for modeling near realistic particles shapes and the subsequent numerical computations of the resultant particle heap formations						0,5											0,5																		1
345	The effect of dynamic forces on Surface energy and their impact on membrane wettability during oil/water separation							1																												1
354	A System CFD Model of a Single-Channel Fuel Module in a Prismatic Block VHTR			1																																1
363	Feedwater heater component development for a high fidelity transient simulation of acoal-fired power plant using Flownex SE		1																																	1
375	Parametric Study of Natural Frequencies and Mode Shapes of Planar Flexible-linkRobots with Elastic Rotational Restraints at the Joint-Link Couplings								1																											1
386	The effect of side ventilator positions on a single span, naturally ventilated greenhouse – a CFD Study					0,5			0,5																											1
398	Analysis of the performance of a hybrid hydraulic Pump/Motor using MATLABSimulink								1																											1
410	Bilinear Response in Paper-Silicone Composite Material													1																						1
420	Comparison between Free Vibration Response of Healthy and Damaged Pinned Turbine Blades					1																														1
432	Comparison between SAFE forced response and Abaqus/Explicit solutions of a railexcited at a cut-off frequency						1																													1
443	Simulation of suction recirculation in double suction centrifugal pumps			0,667															0,33																	1
454	Open source implementation of a user material subroutine for composite materials					0,667	0,33																													1
468	Investigation of 1D system CFD and 3D CFD numerical methodology applied to an experimental facility			1																																1
478	Students' perceptions of the applicability of Employability Improvement Skills during Experiential Training.								1																											1
490	Dynamic modelling of once-through boiler heat exchangers during shutdown with level tracking as a tool to investigate quenching		1																																	1
503	The relationship between surface tension and surface energy in a membrane channel viscous flow during oil/water separation							1																												1

514	Model to Predict Dynamic Performance of a Tractor Semi-trailer Car-carrier						0,33				0,667																									1
526	Numerical simulation of the hydrodynamics in a bubble column reactor: influence of turbulence models							1																												1
538	Relating parameters of flow in membrane channel to nanoparticles and surface energy during oil/water separation process							1																												1
548	Analysis of the Microstructure and Microhardness of Rotary Friction Welded Titanium (Ti-6AL-V4) Rods								1																											1
554	An integrated model to study the root causes of ID fan capacity limitations in coal fired power plants		1																																	1
564	A probabilistic quarter-car model for predicting worst-case vehicle performance						0,5		0,5																											1
575	Improving the Predictive Capacity of Newtonian Fluid Theories on the Elastic Moduli Ratio (Ec/Em) of Particulate Composites												1																							1
588	Dynamic Modelling and Simulation of Planar Flexible-link Robots with Elastic Rotational Restraints at the Joint-Link Couplings								1																											1
598	Characterization and Wear Behaviour of Hydrophobic Silane Coating								0,6		0,2									0,2																1
604	Finite Element Analysis of Spent Nuclear Fuel Dry Storage Casks during Accidental Drop with No Shock Absorption													0,33							0,667															1
616	Design and Performance Analysis of Vegetable Seed Oil Expellers: A Review								1																											1
627	Determination of the head loss coefficient of closely spaced pipe bends					0,333			0,333												0,333															1
640	Mass and energy balance and associated uncertainty analysis of super heater process parameters at 100% boiler maximum continuous rating		0,333					0,67																												1
650	A Review of Finite Element Modelling of Nanoindentation and Micro-scratch Techniques in Characterizing Thin Films								0,75											0,25																1
659	Rub-Impact of Coupled Vibration of Vertical Rotor-Stator System Submerged in an Inviscid Fluid							1																												1
670	3D printing of carbon nanofiber-PLA composite								1																											1
680	Reduction in the torque ripple of a vertical axis wind turbine through coupled optimization of the pitch angle													1																						1
693	Experimental development of electromagnetic acoustic transducers for measuring ultrasonic guided waves						1																													1
703	A numerical hopper discharge study for convex and non-convex particle systems					0,2																0,2	0,2	0,2						0,2						1
715	Towards modelling the penetration of Iron III chloride in reinforced concrete affected by chloride-induced corrosion using the Theory of Porous Media		1																																	1
724	Data driven teaching and learning interaction, a case study							1																												1
733	Relationship between vibrating screen dynamics and self-synchronised excitation																														1					1
745	Mechanical Characterisation of Bambusabalcooa for bicycle construction								1																											1
757	Artificial Intelligence Neural Network Techniques to Predict the Removal of Anions from Wastewater							1																												1
772	On the uniqueness of material identification for aluminium using spherical indentation					1																														1
780	Towards a Computational Dynamical Model for Tumbling Mill Power Draw		0,2						0,6																0,2											1
799	Experimental and Numerical Structural Performance Assessment of a Direct Fired Rotary Kiln								0,667																								0,33			1
811	Effects of washing on the adhesion of PLA polymer onto cotton fabric																									0,75	0,25									1
819	Development of a numerical model for failure prediction in carbon fibre composite wheels										1																									1
828	Steady-state heat transit analysis in a spherical domain							1																												1
835	Can hardness measurements be used to determine mechanical properties of hammer forged overhead line hardware					0,25											0,5																	0,25		1
842	Experimental and Numerical Validation of a Simplified Rigid Torso Surrogate used for Investigating the Fluid-Structure Interaction of Air Blast Waves						0,75																					0,25								1
856	Investigation of Material Wear Formation on Centrifugal Fan Impeller								1																											1
863	Numerical optimization of small-scale thermo-acoustic refrigerators considering maximum cooling								1																											1
875	Prediction of fibre waviness in a thermosetting composite panel with ply drop-offs													1																						1
887	Variation of the Transverse Strain Matrix/Fibre Magnification/Reduction and Stress Ratio with the inter-fibre spacing/fibre radius (s/r) ratio							0,5					0,5																							1
900	Development Design of an Acoustic Cleaning Apparatus for Boilers at SASOL Synfuels Power Station Plant in Secunda								1																											1
911	Numerical Simulation of the Dynamic Characteristics of Power line Conductors: A Comparison between Straight and Curved beam Models																												1							1
923	MODELING OF STRUCTURAL DAMAGE BY DISPLACEMENT AND STRAIN MODES							1																												1
935	Experimental Study of Part Load Performance of a Counter Flow Cooling Tower								1																											1
947	EFFECT OF COLD CLIMATE ON WIND TURBINE IN TERMS OF AERODYNAMIC LIFT AND DRAG							1																												1
959	Use of Finite Element Analysis to analyse potential causes of product failure along withlaboratory testing during product testing: (Case of Zimbabwe).								0,5	0,5																										1
970	Theoretical Evaluation of the Limitations of the Predictive Capacity of Newtonian Fluid Theories on the Shear Moduli Ratio (Gc/Gm) of Particulate Composites												1																							1
980	A method to model the effect of excess superheat on the performance of a feedwater heater.		0,5																															0,5		1
	Total number fraction of contribution per institution	1	7,367	4,167	0,5	5,75	7,45	14,83	22,95	0,83	4,2	0,5	3,5	3,67	1,33	0,167	0,167	1	0,33	0,45	1	0,2	0,2	0,2	0,2	0,75	0,25	0,25	1	0,2	0,5	1	0,3333333	0,75		87
	Percentage contribution per institution	1,1%	8,5%	4,8%	0,6%	6,6%	8,6%	17,0%	26,4%	1,0%	4,8%	0,6%	4,0%	4,2%	1,5%	0,2%	0,2%	1,1%	0,4%	0,5%	1,1%	0,2%	0,2%	0,2%	0,2%	0,9%	0,3%	0,3%	1,1%	0,2%	0,6%	1,1%	0,4%	0,9%		100,0%