

**ENGOPT 2012– Monday / Morning 02**

Schedule	MATOPT		ENERGY		COMPOSITE	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
10:30-10:50	330 A General Technique for Interior Point Methods for Nonsmooth Optimization  <i>M. Tanaka; J. Herskovits; A. Canelas</i>	551 The impact of inexactness in nonsmooth optimization: an empirical analysis with application to power management problems  <i>C. Sagastizabal</i>	231 Adaptive Tabu Search in sensitivity of buckling loads to imperfections in conical shells  <i>J. Blachut</i>			
10:50-11:10	291 Solving nonlinear complementarity problems with the FAIPA, the Feasible Arc Interior Point Algorithm  <i>S. Mazorche; J. Herskovits</i>	162 Estimating the probabilistic contents of Gaussian rectangles faster in Joint Chance Constrained Programming for Hydro Reservoir management  <i>W. Van Ackooij; R. Zorgati</i>	143 Material identification of viscoelastic core materials in sandwich structures  <i>A. Araujo; C. M.Mota Soares; J. Herskovits</i>			
11:10-11:30	173 Interior Epigraph Method for Nonsmooth and Nonconvex Optimization via Generalized Augmented Lagrangian Duality  <i>W. Freire; R. Burachik; Y. Kaya</i>	378 The Problem of Expansion of an Electrical Network with Reliability  <i>S. Miloca</i>	144 Optimal positioning of piezoelectric patches in sandwich structures for maximum damping using the Direct MultiSearch method  <i>A. Araujo; J. Aguilar; C. M. MotaSoares</i>			
11:30-11:50	354 Optimization of structural systems with an interior point algorithm for semidefinite programming  <i>M. Aroztegui; J. Roche; J. Herskovits</i>	389 A strategy of global convergence and cubic extrapolation to nonlinear programming applied to optimal power flow  <i>R. Pinheiro; A. Balbo; E. Baptista; L. Nepomuceno</i>	154 Optimal shape of fibers using FEM and BEM  <i>P. Prochazka</i>			
11:50-12:10	546 Numerical Solution Of Moving Boundary Problems Involving Parabolic Equations with a Nonlinear Complementarity Algorithm  <i>G. Chapiro; S. Mazorche; J. Herskovits</i>	478 A portfolio optimization model for renewable energy trading  <i>S. Bruno; A. Street</i>	129 Optimization of stacking sequence of composite layers in circular hybrid tubes under axial impact load  <i>M. Mirzaei; H. Akbarshahi; M. Shakeri</i>			

**ENGOPT 2012 – Monday / Afternoon 01**

Schedule	GPU		MATOPT		COMPOSITE	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
<b>15:00-15:20</b>	242 Conjugate Gradients Implementation on a Tesla GPU: A Tool for Fast Hyperspectral Sensor Signal Optimization  <i>E. Ponce; N. Imam; J. Barhem</i>	175 The Adjoint Method in Optimization  <i>A. Toader</i>	228 Shape and Topology Optimization of Multi-layered Composite Materials  <i>G. Delgado; G. Allaire</i>			
<b>15:20-15:40</b>	348 Parallel Computation of Adjoint Design Sensitivity for Nano-Continuum Multiscale Molecular Dynamics  <i>H. Jang; J. Kim; Y. Park; S. Cho</i>	331 Convex Optimization With Constraints  <i>A. Teixeira; R. Almeida</i>	238 Selfish Gene theory and Memetic Algorithms: A fusion of concepts for robust design of hybrid composites  <i>C. António</i>			
<b>15:40-16:00</b>	419 Electrical Impedance Tomography Image Reconstruction through Simulated Annealing using GPU Parallelization and Outside-In Heuristic  <i>R. Tavares; M. Tsuzuki; T. Martins</i>	557 A General Technique for Interior Point Methods for Nonsmooth Optimization  <i>H. Cortes; J. Herskovits; A. Araujo; C. M. Mota Soares</i>	257 Effective design of rectangular sandwich plate with a corrugated core  <i>L. Wittenbeck; K. Magnucki; P. Kuligowski</i>			
<b>16:00-16:20</b>	533 Development and Implementation of Parallel Versions of the Particle Swarm Algorithm on clusters using MPI  <i>A. Moraes; P. Lage; A. Secchi</i>	404 Combining level and proximal bundle methods for convex optimization in Energy Problems  <i>W. Oliveira</i>	298 Design Optimization of Repaired Composite Structures for Aerospace Applications: Concept and Implementation  <i>M. Gurchich; V. Jagdale</i>			
<b>16:20-16:40</b>	536 LC-SVM : A Support Vector Machine with unequal misclassification costs  <i>L. Capitani; R. Scarpel; E. Azevedo</i>	335 A Simplex Type Method for Bi-Objective Optimization  <i>T. Peachey; M. Riley</i>	316 Properties of the cost functional in free material design  <i>C. Barbarosie; S. Lopes</i>			

**ENGOPT 2012 – Monday / Afternoon 02**

Schedule	AUTOMOTIVE		CIVIL-ENG		SYSTEMS	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
17:00-17:20	350 Automotive Vehicle Launch Optimization based on Differential Evolution (DE) Approach for Increased Driveability  <i>M. Bachinger; B. Knauder; M. Stolz</i>		339 Optimization of masonry units for single leaf walls using a Genetic Algorithm  <i>L. Sousa; C. Castro; H. Sousa; C. António</i>		253 Towards optimal control of dynamic frictional contact problems involving large elasto-plastic deformations  <i>S. Werner; G. Leugering; M. Stingl</i>	
17:20-17:40	422 SHAPE BLENDING OPTIMIZATION FRAMEWORK FOR SHELL STRUCTURES  <i>P. de Nazelle; C. Fourcade; F. Gillot; Y. Tourbier</i>		146 A deterministic segment-linked optimization model for road network maintenance management  <i>A. Ferreira; R. Souza</i>		381 Engineering Optimization of Multiple Sensors Integration Techniques in Multi-Target Tracking and Discrimination Scenarios  <i>N. Imam; J. Barhen; C. Glover</i>	
17:40-18:00	472 On the use of empirical likelihood-based spread regression in the case of flywheel assembly  <i>A. Gadek-Moszczak; J. Pietraszek</i>		357 Harmony Search Algorithm applied to the Optimization of Reinforced Concrete Columns  <i>G. Fleith de Medeiros; M. Kripka</i>		471 Dynamic Optimization Using Wavelets Bases  <i>L. Santos; A. SECCHI; E. Biscaia Jr.</i>	
18:00-18:20	475 Efficient optimisation of the structure of a passenger bus by iterative finite element models with increasing degrees of complexity  <i>O. Ruíz; E. Ramírez; V. Jacobo; R. Schouwenaars</i>		462 Influence Of Silica Fume On The Properties Of Self-Compacting Concretes  <i>S. Alsanusi; H. Esmoue; W. Jouma</i>		304 Combined Topology and Shape Optimization of Controlled Structures  <i>K. Vandyshay; M. Langelaar; F. van Keulen</i>	
18:20-18:40	505 Model Predictive Control for Vehicle Yaw Stability  <i>M. Choi; S. Choi</i>		544 Production scheduling in proportionate machines with setup times and sequence dependent job deadlines  <i>J. Daza-Escorcía; M. Ferrer-Vásquez</i>		322 Optimization Framework for Controlling the Synthesis Process of Silicon Nanoparticles  <i>M. Gröschel</i>	

**ENGOPT 2012 – Tuesday / Morning 01**

Schedule	OIL-GAS		SHAPE-SIZE		COMPOSITE	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
<b>08:30-08:50</b>	294 A Mixed-Integer Nonlinear Formulation for Optimal Operation of Oil Fields with Facility, Routing, and Pressure Constraints  <i>M. Aguiar; T. Silva; E. Camponogara</i>	153 Optimization of the magnet system for the Lorentz Force Velocimetry of low conducting materials  <i>A. Alferenok; U. Luedtke</i>	375 Optimal Design of Sandwich Functionally Graded Structures using Particle Swarm Optimization  <i>I. Barbosa; M. Loja</i>			
<b>08:50-09:10</b>	282 Automatic History Matching Considering Surrogate Based Optimization and Karhunen-Loève Expansions  <i>J. de Lira Jr; S. Bastos Afonso; R. Willmersdorf; B. Horowitz</i>	393 Minimization Of VIV Using An ALE-FE Formulation And Fractional Step Method In Fluid Structure Interaction Problems  <i>U. Farias Filho; A. Antunes; S. Bastos; P. Lyra</i>	405 Multiscale finite element design and optimization of composite poroelastic and porous piezoelectric materials  <i>A. Nasedkin; A. Nasedkina</i>			
<b>09:10-09:30</b>	390 Constraints Handling For Hybrid Algorithms In Waterflooding Optimization Problem  <i>L. Oliveira; S. Afonso; B. Horowitz; A. Lemonge</i>	266 A Comprehensive Comparison of Shape Deformation Methods in Evolutionary Design Optimization  <i>D. Sieger; S. Menzel; M. Botsch</i>	435 Optimization of active-passive piezoelectric networks parameters  <i>H. Leal dos Santos; M. Trindade</i>			
<b>09:30-09:50</b>	439 Optimal Operation of a Three-Phase Separator to Minimize Severe Slugs Effects in Offshore Oil Platforms  <i>S. Miyoshi; T. Monte; R. Bendia; M. Souza Jr.; A. Secchi</i>	444 Interior Point Methods for Shape Optimization in Electromagnetic Casting  <i>A. Canelas; J. Herskovits; J. Roche</i>	415 Optimum design of composite prestressed concrete girder railway bridges  <i>A. Al-Nuaimi; F. Mohammad</i>			
<b>09:50-10:10</b>	443 Production Optimization in Oil Producing Wells with Continuous Gas Lift  <i>A. Teixeira; A. Secchi; E. Biscaia Jr</i>	365 Shape optimization for a seepage problem using Small Amplitude Homogenization  <i>S. Gutiérrez; J. Mura</i>	446 Design of interfaces to maximize material properties in polymer composites  <i>R. Tannenbaum; I. Jasiuk; K. Jacob; D. Cipriri</i>			

**ENGOPT 2012 – Tuesday / Morning 02**

Schedule	OIL-GAS		PROCESS		STRUCTURAL	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
<b>10:30-10:50</b>	373 Decision support system for optimizing oilfield operations  <i>A. Plucenio; E. Camponogara; C. Giuliani; R. Costa; R. Mejia; P. Nakashima</i>	358 Implementation of Pareto Multiobjective Particle Swarm Optimization Algorithm in EMSO  <i>L. Gonçales; F. Furlan; R. Soares; A. Secchi; R. Giordano; C. Costa</i>	392 Scalable finite and boundary element solution of contact shape optimization problems with Coulomb friction  <i>V. Vondrak; P. Beremlijski; T. Kozubek; A. Markopoulos; M. Sadowska; Z. Dostal</i>			
<b>10:50-11:10</b>	480 A Comparative Study of Constraint-Handling Methodologies Applied to Genetic Algorithm for the Optimization of Submarine Pipeline Routes  <i>R. de Lucena; D. Coutinho; B. de Lima; J. Baioco; C. Albrecht; B. Jacob</i>	279 Evaluation of Feasible and Infeasible Path Techniques for Process Optimization Coupled to an Equation-Oriented Process Simulator  <i>R. Campos; L. Orenstein; A. Secchi; E. Biscaia Jr.</i>	274 Multi-step Free-form Optimization of Shell Structures  <i>L. Yang; S. Masatoshi</i>			
<b>11:10-11:30</b>	287 Refining Structures Optimization  <i>M. Beltran Marin; V. Kafarov; C. MahechaBohorquez</i>	327 Pulp fibres refining optimization: a study for energy consumption minimization and conjugate paper properties optimization  <i>Á. Vaz; R. Simões; J. Silvy</i>	353 Structural shape optimization using Shor's r-algorithm  <i>D. Wilke</i>			
<b>11:30-11:50</b>	351 Scheduling of Offshore Wells Activities in Petroleum Specific Resources  <i>G. Nishioka; M. Joly; G. Le Roux</i>	493 AN OPTIMAL APPROACH FOR MULTICOMPONENT DISTILLATION IN A PETROCHEMICAL PLANT IN OPERATION  <i>M. OSORIO; E. MUNOZ; A. SANCHEZ</i>	270 Assessment of physical surrogate performance in the sequential approximate optimization of space trusses  <i>S. Bastos Afonso; B. Horowitz; M. da Silva</i>			
<b>11:50-12:10</b>	371 Application of PSO algorithm in Submarine Pipeline Routes Optimization  <i>C. Albrecht; B. Monteiro; J. Baioco; M. Lima Jr; B. Lima; B. Jacob</i>	163 Heat Exchanger Network Optimization using integrated specialized software from ASPENTECH and GAMS Technology  <i>A. Suarez</i>	292 Solving Constrained Structural Optimization Problems Using A Pso And An Adaptative Penalty Technique  <i>A. SILVA; A. LEMONGE; B. LIMA; B. JACOB; H. BARBOSA</i>			

**ENGOPT 2012 – Tuesday / Afternoon 01**

Schedule	STRUCTURAL		INVERSE		AERODYNAMICS	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
15:00-15:20	509 Optimal design of annular and circular plates  <i>J. Lellep; J. Polikarpus</i>				367 Aerodynamic shape optimisation using first and second order adjoint gradients, coupled with CAD sensitivities  <i>F. Christakopoulos; J. Müller</i>	
15:20-15:40	148 Structural optimization under thermal constraints via a level-set method  <i>G. Michailidis; G. Allaire; F. Jouve</i>	130 Identification and reconstruction of elastic body forces from boundary measurements  <i>C. Alves; N. Martins</i>	490 Aerodynamical Global Shape Optimization at Two Supersonic Cruising Mach Numbers, by Morphing  <i>A. Nastase</i>			
15:40-16:00	159 Stress energy approximation and solid-void interpolation schemes for structural shape optimization  <i>G. Dzierzanowski</i>	283 Inverse determination of soil characteristics with a bench-scale centrifuge  <i>B. Malengier; P. Kison; G. Di Emidio; H. Peiffer</i>	534 An Interior Point Gradient-based Optimizer for Aircraft Design  <i>D. Quang; M. Ravachol; G. Rogé; J. Herskovits</i>			
16:00-16:20	259 Optimal shaping of Middle Surface of a Dished Head of Circular Cylindrical Pressure Vessel with the help of Bezier Curve  <i>J. Lewinski; K. Magnucki</i>	340 Inverse parameter identification for a branching 1D arterial blood flow network  <i>A. Bogaers; S. Kok; T. Franz; B. Reddy</i>	549 Robust and Reliability Based Design Optimization Framework for Wing Design  <i>A. Suleman; C. Crawford; R. Paiva</i>			
16:20-16:40	271 Design Optimization Of Space Framed Structures Using Multiple Cardinality Constraints  <i>A. Lemonge; H. Barbosa</i>	555 Parameters Reconstruction In Second Order Elliptic Equations  <i>N. Roberty</i>	251 Unsteady Aerodynamic Design Optimisation of Multi-Element High Lift System using Advanced MOGA  <i>H. Espinoza; D. Lee; R. Codina; J. Periaux</i>			

**ENGOPT 2012 – Tuesday / Afternoon 02**

Schedule	STRUCTURAL		INVERSE		PLANNING	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
<b>17:00-17:20</b>	288 Shape and topology optimization for the stress-based truss design under multiple loading  <i>B. Descamps; R. Filomeno Coelho</i>	341 Simultaneous estimation of experimental and material parameters  <i>G. Jansen van Rensburg; S. Kok; D. Wilke</i>	366 Optimizing Trips of Dynamic Positioned Shuttle Tankers Between FPSOs and Onshore Facilities  <i>A. Plucenio; E. Camponogara; F. Pereira; P. Nakashima</i>			
<b>17:20-17:40</b>	290 Shape and thickness optimization of thin-walled pressure vessel end closures  <i>J. Kruzelecki; R. Proszowski</i>	388 Heat Transfer Coefficient Estimation of an Internal Combustion Engine using Particle Filters  <i>F. Hamilton; R. Carvalho; M. Colaço; A. Leiroz</i>	411 A General Variable Neighborhood Search heuristic for the Single Vehicle Routing Problem with Deliveries and Selective Pickups  <i>I. Coelho; L. Ochi; M. Souza; M. Haddad</i>			
<b>17:40-18:00</b>	352 Optimization of welded structures with hot spot stress constraints evaluated using consistent finite element meshing  <i>N. Takeda; P. Papalambros</i>	498 Estimation Of Parameters In An Inverse Heat Conduction Problem By Using A Markov Chain Monte Carlo Method  <i>R. Padilha; H. Orlande; M. Paez</i>	344 Cutset inequalities for robust network design  <i>C. Raack</i>			
<b>18:00-18:20</b>	362 Structural Optimization of Geometrically Nonlinear Trusses with Sensitivity Analysis of the Parameters in the Newton-Raphson Method  <i>M. Silva; A. Lemonge; H. Barbosa</i>	307 Optimizing Sensor Allocation Using Reconciled Data In Systems With Scarce Measurements: Minlp And Milp Approaches  <i>M. Narciso; E. do Valle; A. Kiperstok; R. Kalid</i>	277 Optimizing the Performance of Multistage Process Systems  <i>G. Hadjinicola; A. Soteriou</i>			
<b>18:20-18:40</b>	503 Reliability Based Design Optimization For Non-Linear Static Truss System Considering Reduced-Order Modeling  <i>R. Motta; S. Afonso</i>	502 Bayesian inference approach to identify constitutive parameters of viscoelastic materials  <i>H. de Souza; D. Castello; C. Matt</i>				

**ENGOPT 2012 – Wednesday / Morning 01**

Schedule	INDUSTRIAL		SURROGATE		TOPOLOGY	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
<b>08:30-08:50</b>			262 Comparison between RBF and Kriging Surrogates in Design Optimization of High Dimensional Problems  K. Elsayed; <u>D. Vucinic</u> ; C. Lacor; R. d'Ippolito		161 Energy Change to the Insertion of Inclusions Associated to an Anisotropic and Heterogeneous Heat Diffusion Problem  <u>S. Giusti</u> ; A. Novotny	
<b>08:50-09:10</b>	380 Predictor-Corrector Primal-Dual Interior Point Method In Economic Dispatch Problem With Environmental Constraints  A. Stanzani; A. Balbo; L. Oliveira		264 Adaptive Multilevel Radial Basis Function Metamodel for Engineering Optimization  <u>T. Makin</u> ; H. Kim		423 Inverse Conductivity Problem: A Bayesian-Topological Approach  <u>J. Rocha de Faria</u> ; L. Rodrigues de Oliveira	
<b>09:10-09:30</b>	521 Parameter estimation with opposite differential evolution applied to liquid chromatography  R. Hernández Torres; M. Irizar Mesa; O. Llanes Santiago; <u>L. T. Câmara</u> ; A. da Silva Neto; L. Zumalacárregui de Cárdenas		268 Sensitivity and robustness aspects in focused ultrasonic therapy simulation  D. Borsotto; T. Clees; <u>I. Nikitin</u> ; L. Nikitina; D. Steffes-lai; C. Thole		501 Topology Design of Kirchhoff Plates Based on Topological Derivative and a Level-Set Domain Representation Considering Different Volume Control Methods  <u>D. Campeao</u> ; S. Giusti; A. Novotny	
<b>09:30-09:50</b>	324 Performance optimization of a permanent-magnet excited synchronous machine for electrical automobiles		342 The asymptotic behaviour of the Gaussian correlation function in Kriging response surfaces  <u>S. Kok</u>		296 A Topology Optimization Method to Extract Optimal Beam-Like, Plate-Like or Shell-Like Structures from a Solid Finite Element Mesh  <u>J. P. Leiva</u>	
<b>09:50-10:10</b>	286 Towards automatic optimization of flow channel geometries in complex multi-level dies for film extrusion  C. Hopmann; S. Eilbracht		361 Practical guidelines to avoid ill-conditioning of the correlation matrix in Kriging response surfaces  <u>L. Haarhoff</u> ; S. Kok; D. Wilke		497 Topological Derivative of the Kohn-Vogelius Criterion Associated to the Potential Inverse Problem  <u>T. Machado</u> ; A. Novotny	

**ENGOPT 2012 – Wednesday / Morning 02**

<p align="center"><b>10:30-12:10</b></p>	<p><b>AERONAUTICS</b></p> <p>442 Navigation solution errors reduction through inertial sensors data fusion in a redundant bi-dimensional strap-down inertial navigator <i>T. Grigorie; R. Botez; D. Sandu</i></p> <p>515 Determination Of Lighting Comfort In An Aircraft Cabin <i>E. Vertamatti</i></p> <p><b>AUTOMOTIVE</b></p> <p>453 Toothed continuously variable transmission (CVT) for transport <i>K. Ivanov</i></p> <p>504 Bus suspension modeling and analysis by finite element software <i>C. Reyes; E. Ramírez; O. Ruiz; R. Schouwenaars; A. Ortiz</i></p> <p><b>BIO-INSPIRED</b></p> <p>255 Performance Analysis of Partial Use of Local Optimisation Operator on Genetic Algorithm for TSP <i>M. Djordjevic; A. Brodnik; M. Grgurovic</i></p> <p>313 Hard At Play: How Puzzles Can Improve Optimization Teaching And Research <i>M. Indrusiak; L. Indrusiak</i></p> <p>165 Artificial Bee Colony (ABC) for Engineering Problem Optimization <i>E. Gerhardt; H. Gomes</i></p>	<p><b>ENERGY</b></p> <p>160 Modeling and evaluation power distribution network considering the application of smart grids <i>J. Schreiber; P. Sausen; A. Sausen; M. Campos</i></p> <p>413 GIVMP: A Hybrid Heuristic Algorithm For Solving the unrelated Parallel Machine Scheduling Problem with Sequence Dependent Setup Times <i>M. Haddad; M. Souza; A. Martins</i></p> <p>417 An investigation about barrier parameters update strategy and Optimal Power Flow Solution <i>E. Ferreira; E. Baptista; E. Soler</i></p> <p>420 Optimized Cable Selection for Overhead Transmission Lines <i>L. Dambiski; L. Arruda; F. Neves</i></p> <p><b>INDUSTRIAL</b></p> <p>269 Inverse Computation Scheme of Turbomachinery Blade Shapes Applied to Axial Hydro-Turbine Runners <i>M. Santos; N. Manzana; W. Oliveira; L. Santos</i></p> <p>321 Layout optimization of a wind farm using Genetic Algorithm <i>R. Gasperin; M. Indrusiak</i></p> <p><b>INVERSE</b></p> <p>151 Parallelized the Feldkamp algorithm for 3D reconstruction of tomographic images using GPUs and CUDA C <i>J. Domínguez; L. Oliveira; N. Alves</i></p>	<p><b>INVERSE</b></p> <p>386 A comparison of the Iterative Regularization Technique and the Kalman Filter for the Estimation of Boundary Heat Flux in Grinding <i>R. Carvalho; H. Orlande; M. Colaço</i></p> <p>516 Thermochemical properties estimation for biodiesel related mixtures <i>D. Borghi; C. Abreu; R. Guirardello</i></p> <p><b>MATOPT</b></p> <p>293 The study of the use of an artificial neural network to optimize the numerical solution of Laplace equation <i>J. Oliveira; E. Siqueira; M. Indrusiak</i></p> <p><b>MECHANICAL</b></p> <p>530 Evaluation by simulation of the microstructure and mechanical properties in ductile cast iron due to the addition of various alloying elements <i>T. Souza; M. Aguilar; R. Nogueira</i></p> <p>333 Damping Identification Of Mechanical Systems <i>B. Silva; A. Soares; J. Gonçalves</i></p> <p><b>PLANNING</b></p> <p>250 Transportation Cost x Economic Lot <i>M. Rezende; A. Cruz; J. Benzecry; M. Ribeiro</i></p>
--	---	---	--

**ENGOPT 2012 – Wednesday / Morning 02**

<p align="center"><b>10:30-12:10</b></p>	<p><b>PLANNING</b></p> <p>336 Sequencing Activities in a Project Network considering Resource Complementarity <i>H. Silva; A. Tereso; J. Oliveira</i></p>	<p><b>PROCESS</b></p> <p>452 Evaluation of Economic Impacts Achieved by a Control Strategy for Targeting Polymer Quality <i>P. Quirino; M. Embiruçu; K. Pontes</i></p>	<p><b>STRUCTURAL</b></p> <p>108 Performance based optimal seismic design of steel moment frames using a hybrid genetic algorithm <i>S. Choi; P. Hyo</i></p>
	<p><b>PROCESS</b></p> <p>496 Modeling and Optimization of Auto-Thermal Ammonia Synthesis Reactor using the Gravitational Search Algorithm <i>F. Lobato; R. Borges; V. Steffen</i></p> <p>258 LDM - Digital Reader to Hydrometric Windlass <i>M. Moraes; L. Gramani</i></p>	<p><b>SIGNAL</b></p> <p>247 Computer Vision Applied to Recognition Barcode <i>M. Almeida; A. Soares</i></p> <p>272 Optimization of signal-to-noise ratio in CdTe radiation detectors <i>A. Andreev; O. Sik; L. Grmela</i></p>	<p>309 Integrating automatic zone modeling with GA in a two-step approach for structural optimization of a composite wing. <i>V. Lemos; S. Castro; J. Hernandez</i></p> <p>387 Dynamic Response Optimization Of An Aeronautical Panel Subject To Beating Effects Using Equivalent Static Loads <i>H. Guerrini; J. Hernandez; E. Lucena</i></p>
	<p>403 Interior Points And Branch-And-Cut Hybrids Methods Applied In Transport Cost And Energy Generation Problems Of Sugarcane Biomass <i>C. De Lima; A. Balbo; H. Silva</i></p> <p>491 Energy Evaluation In The Process Of Evaporation-Crystallization For The Production Of Sugar Cane <i>G. Domínguez; A. Osorio; J. Lois</i></p>	<p><b>SOLIDS</b></p> <p>372 2'D Non-Orthogonal Spline Wavelets and Schneider's level dependent Scheme for 3'D BEM <i>M. Hooshmand; K. Bargi; R. Dezvareh</i></p> <p>416 Damage detection using least-squares singular value decomposition methods and techniques to select the best experimental data <i>H. Duarte; L. Donadon; R. Ferreira</i></p>	<p>171 Design Optimization Of Plate For Bucomaxilofacial Surgery Increase Mechanical Strength <i>L. Ricardo; P. Viktor</i></p> <p>548 A Semidefinite Programming Algorithm for Structural Optimization Involving Constraints on the Natural Frequencies <i>E. Bazán; M. Aroztegui; J. Roche; J. Herskovits</i></p>

**ENGOPT 2012 - Wednesday / Afternoon 01**

Schedule	AERONAUTICS		ENERGY		TOPOLOGY	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
15:00-15:20	252 Simultaneous Aerostructural Optimization of an Aircraft Wing Planform and Internal Stiffener Configuration Subject to Aeroelastic Constraint  <u>V. Seow</u> ; K. Lu; H. Kim	114 Enhancing the performance of the power monitoring channels in nuclear reactors  A. Mesquita; H. Rezende; A. Santos; D. Palma	120 Topology synthesis of electro-thermal compliant mechanisms using evolutionary optimization  <u>E. Veguería</u> ; R. Ansola; J. Canales; J. Tárrago			
15:20-15:40	261 Multiphysics optimization of the piezoelectric flapping wing propulsion  M. Bidakhvidi; <u>D. Vucinic</u> ; S. Vanlanduit	297 Range Optimization of Hybrid Vehicles  <u>G. Granato</u>	149 Stress constrained topology optimization of a cantilevered piezoelectric energy harvester  <u>F. Weom</u> ; M. Kaltenbacher; M. Stingl			
15:40-16:00	285 Adaptive Waveform Design Based on Multi-Objective Optimization for OFDM-STAP Radar  <u>S. Sen</u> ; C. Glover	302 An Integration of Optimum Electric Drive Control Systems with Downsized ICE to Build an Efficient Parallel Hybrid Vehicle Architecture  <u>S. RAMDASI</u> ; A. SENTHILKUMAR; S. THIPSE; N. MARATHE	169 Topology optimization of large-scale Michell trusses using the adaptive ground structure approach  <u>T. Sokol</u>			
16:00-16:20	477 An MDO Framework for Topology Optimization of Aircraft Structures  L. Felix; A. Gomes; <u>A. Suleman</u>	467 Planning for a distribution system considering load forecasting and inserting a new point of supply at medium voltage  D.Alzenira; M. Moisés; A. Sandro; M. Luciano; N. Luciane; F. Tafarel	305 Structural Optimization of Timoshenko Beam Networks  T. Kufner; C. Strohmeier; M. Stingl			
16:20-16:40	553 Balanced Approach in Airport Noise Control: A multidisciplinary optimization problem  <u>J. Slama</u> ; A. Gama	384 Direct determination of maximum loadability power flow solutions through a trust region based optimization method  R. Salgado; <u>G. Moraes</u>	308 Topology optimization of robust superhydrophobic surfaces  <u>A. Cavalli</u> ; N. Andersen; E. Søggaard; P. Bøggild; R. Taboryski; F. Okkels			

**ENGOPT 2012 – Wednesday / Afternoon 02**

Schedule	STRUCTURAL		SOLID		TOPOLOGY	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
17:00-17:20	347 Isogeometric Shape Design Sensitivity Analysis of Mindlin Plates Using Multi-Resolution Approach  <u>S. Lee</u> ; B. Koo; T. Lee; S. Cho	139 A Finite Element approach using an Augmented Lagrangian Method to simulate impact problems under large 3D elastoplastic deformation  <u>A. Bandeira</u> ; P. Pimenta	499 Computational and Experimental Validation of Heat Sink Design Obtained by Using Topology Optimization Method  <u>C. Lima</u> ; E. Lopes; H. Villa Nova; A. Koga; E. Silva			
17:20-17:40	349 Isogeometric Shape Design Sensitivity Analysis of Elasticity in GCC Systems  <u>M. Yoon</u> ; S. Bae; Y. Ha; S. Cho	260 Effective numerical solution of ill-conditioned boundary-value problems in Mechanics of Solids  <u>I. Brigadnov</u>	374 Power flow analysis based dynamic topology optimization of vibrational structures  <u>X. Xue</u> ; G. Li; Y. Xiong; J. Gong			
17:40-18:00	539 Elasto-Plastic Parameter Optimization Based On Gradient Methods  <u>T. Ribeiro</u> ; L. Malcher	469 Modelling of fatigue crack propagation using Piecewise Deterministic Markov Processes  <u>A. Ben Abdessalem</u> ; M. Touzet; A. Gégout-Petit; M. Puiggali; R. Azais; C. Elegbede	550 Band Gap Design of Piezocomposite Materials by Using Topology Optimization Method  <u>E. Silva</u> ; S. Vatanabe			
18:00-18:20	522 Optimization of Trussed Structure Considering Buckling Modes  <u>J. Siqueira</u> ; M. Silva; R. Brasil	312 On the use of neural network approximator with jackknife resampling approach for modeling a local porosity mean and variance in the case of the sintered stainless steel powder AISI 434L doped with Mn  <u>J. PIETRASZEK</u> ; A. GADEK-MOSZCZAK	427 Force Flow Method in Topology Design of Structures  <u>P. Rosko</u>			
18:20-18:40		289 Matrix Compression Strategies and their Properties for Wavelet BEM optimization  <u>K. Bargi</u> ; M. Hooshmand	172 A Sequential Piecewise Linear Programming Algorithm for Topology Optimization  F. Gomes Neto; <u>T. Senne</u>			

**ENGOPT 2012 – Thursday / Morning 01**

Schedule	MECHANICAL		INDUSTRIAL		BIO-INSPIRED	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
<b>08:30-08:50</b>	441 Extending the fatigue life of a fuel vent hole in an aircraft component using shape optimization  <u>R. Das</u> ; R. Jones		249 Solving uniform coverage problems in industrial production with Abel Inversion  <u>D. Nowak</u> ; K. Küfer		334 Investigating the efficiency of the surrogates based on neural networks in assisting multi-objective optimization of test-problems performed by a non-generational genetic algorithm  <u>A. Barbosa</u> ; L. Guimarães	
<b>08:50-09:10</b>	156 Optimization In Face-Hobbed Spiral Bevel Gears  <u>V. Simon</u>		483 Improvement on the arrangement of thermocouples to estimate the wear line of a blast furnace hearth  <u>L. Magnago</u> ; L. Catabriga		343 Particle Swarm Optimization Method with New Velocity Update Scheme  <u>B. Monteiro</u> ; M. Lima Jr; C. Albrecht; B. Jacob	
<b>09:10-09:30</b>	359 Solving the non-linear Slab Stack Shuffling Problem using linear Binary Integer Programming  E. Fernandes; <u>L. Freire</u> ; A. Passos; A. Street		402 Method for Detecting High Impedance Faults with Parameter Identification by Voltage Superposition  <u>M. Ketzer</u> ; C. Jacobina; M. Campos		414 A Performance-based Generative design approach Using Multi-Objective Optimization in Architectural Design  <u>M. Nicknam</u> ; M. Elnimeiri	
<b>09:30-09:50</b>	377 Exploring the use of adjoint methods for detailed sensitivity analysis on turbomachinery  <u>A. Marta</u> ; S. Shankaran		319 A MulticriteriaConfiability Methodology Whith The Adoption Of Feasible Solutions Of A Nonlinear Programming Model  <u>L. Alves</u>		103 Heuristics for the Closest String Problem  <u>A. Lyra</u>	
<b>09:50-10:10</b>	332 Solution Of Cell Manufacturing Layout Problem Through A Discrete Hybrid Bfoa-Ga  <u>C. MejiaMoncayo</u> ; D. Garzón Alvarado; J. Arroyo Osorio		545 Sports Scheduling Using Modern Management Techniques  <u>J. Daza-Escorcia</u> ; A. Álvarez-Mendoza; M. Ferrer-Vásquez		554 Global Optimization method to parameters calibration applied on enginnering systems  <u>M. ELHAJJ</u> ; R. YOUNES	

**ENGOPT 2012 – Thursday / Morning 02**

Schedule	MECHANICAL		RELIABILITY		TOPOLOGY / STRUCTURAL	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
<b>10:30-10:50</b>	457 Normal boundary intersection to solve a multi-objective stochastic optimization of rotor dynamics  R. Lopez; <u>T. Ritto</u> ; R. Sampaio; J. Souza de Cursi		265 Introduction of a RESTfulWebservice Framework for Complex Engineering Optimization  <u>T. Makin</u> ; H. Kim; J. Padget		461 Design Of Structures Considering Nonlinear Elastic Deformation Using Topology Optimization Method  <u>R. Lahuerta</u> ; E. Silva; E. Simões; E. Campello; P. Pimenta	
<b>10:50-11:10</b>	484 Multiobjective Optimization based on Multiphysics Models of High Frequency Electric Resistance Welding Process for pipes manufacture  <u>D. Cherioni</u> ; L. Karhan; R. Hoya Sánchez; D. Lanzetti; M. Coggiola; R. Garrera		133 RBDO with Non-Gaussian Variables by using a LHS- and SORM-based SLP approach and Optimal Polynomial Regression Models  <u>N. Strömberg</u>		368 Compliance Minimization Using 3d Topology Optimization Method With H-Adaptive Refinement  M. Aroztegui; <u>J. Arantes</u>	
<b>11:10-11:30</b>	526 Sensitivity analysis of the mechanical parameters of the sheet metals - a tool to predict the Forming Limit Band  G. DRAGOS; <u>D. BANABIC</u>		267 Reliability analysis of river bed simulation models  T. Clees; I. Nikitin; <u>L. Nikitina</u> ; R. Kopmann		399 Topology optimization in two-dimensional granular crystals  <u>M. Silva Sohn</u> ; D. Tortorelli; I. Szelengowicz; C. Daraio	
<b>11:30-11:50</b>	485 Kinetic optimal Watt design of knee prosthesis  <u>J. Urrego</u> ; J. Ordoñez; C. Henao; F. Rodríguez		273 The Simultaneous Computation Of The Equilibrium And The Reliability Of Rc Cross Sections Using Optimization Techniques  <u>M. SILVA</u> ; R. BRASIL		356 Optimization of elastic plastic circular plates made of homogeneous and composite materials  J. Lellep; <u>B. Vlassov</u>	
<b>11:50-12:10</b>	481 Centrode Synthesis for a four-bar mechanism  <u>I. Cabezas</u> ; F. Rodríguez		295 Reliability Based Design Optimization for Nonlinear Static Truss System Considering Reduced-Order Modeling  <u>R. Motta</u> ; S. Afonso		459 Passive vibration controllers with zero dynamic reaction  <u>A. Sohoul</u> ; Z. Dimitrovová; H. Rodrigues	

**ENGOPT 2012 – Thursday / Afternoon 01**

Schedule	INDUSTRIAL		BIO-INSPIRED		STRUCTURAL / MECHANICS	
	Room	ANGRA A	Room	ANGRA B	Room	ANGRA C
	Chaired by		Chaired by		Chaired by	
<b>15:00-15:20</b>	278 Analysis Of Diverse Optimization Algorithms For Pump Scheduling In Water Supply Systems  B. Coelho; A. Tavares; A. Andrade-Campos		166 Shape and size optimization of mechanical structures with stress and dynamic constraints by the Firefly algorithm  E. Rodrigues; H. Gomes		237 Structural optimization in conjunction with model order reduction  M. Jokic; M. Stegic; N. Vrankovic	
<b>15:20-15:40</b>	488 Optimal design of transportation networks by means of a continuum model  V. Cortinez; P. Dominguez		410 Global Optimization based on Metamodeling using Radial Basis Functions with Adjustment of the Shape Parameter c  E. Silva; N. Manzanares-Filho; R. Camacho		487 Robust Inverse Design Of Airfoils And Turbomachinery Cascades  N. Manzanares-Filho; L. Tônio Marcos Gonçalves	
<b>15:40-16:00</b>	355 A MILP model for simultaneous supply chain and facility design considering production scheduling  Y. Fumero; J. Montagna; G. Corsano		458 Multiobjective optimization of finite queueing networks  N. Brito; A. Duarte; F. Cruz		474 Mesh optimisation for the inverse modelling of the Vickers test and its application to a tribologically modified surface layer  M. Ramírez; C. Figueroa; V. Jacobo; A. Ortiz; R. Schouwenaars	
<b>16:00-16:20</b>	508 Synchronisation and control of proliferation in cycling cell population models with age structure  O. Fercoq		492 Solution of Flow Shop Scheduling Problems using the Differential Evolution Algorithm  F. LOBATO; R. GEDRAITE; S. NEIRO		284 Defining analytical rigid curves and surfaces in tool optimization problems  R. de-Carvalho; A. Andrade-Campos; R. Valente	
<b>16:20-16:40</b>			152 Genetic Algorithms And Vascular Graft Optimization  C. Castro; C. António; L. Sousa		537 Sensitivity analysis of the mechanical parameters of the sheet metals - a tool to predict the Forming Limit Band  G. DRAGOS; D. BANABIC	