

International Conference on High Performance Scientific Computing
 March 6-10, 2006 - Hanoi, Vietnam

SCIENTIFIC PROGRAM

Monday, March 6, 2006				
07:30-09:00	Registration			
09:00-09:30	Opening – Room 301			
	Plenary Session P1 – Room 301			
	Chair: R. Jeltsch			
09:35-10:20	<u>J. M. Ball</u> <i>Analysis and Computation of Crystal Microstructure</i>			
10:20-10:30	<u>R. Jeltsch</u> <i>ICIAM 07</i>			
10:30-10:50	Coffee break			
	Session A1 – Room 301	Session B1 (MS) – Room 303	Session C1 – Room 304	Session D1 (MS) – Room 201
	Chair: H. G. Bock	Chair: E. Kostina	Chair: N. T. Son	Chair: W. Jäger
10:50-11:20	<u>P. Deuffhard</u> <i>Mathematical Modelling and Simulation in Facial Surgery</i>	C. D. Laird and <u>L. T. Biegler</u> <i>Large-Scale Nonlinear Programming for Multiperiod Optimization and Design under Uncertainty</i>	Q. Ho-Van, T. K. Dang, <u>M. S. Tran-Le</u> , and T. T. Vo-Dang <i>Automatic Information Extraction from the Web: A HMM-Based Approach</i>	H. G. Bock, <u>S. Chuai-Aree</u> , W. Jäger, and S. Siripant <i>Inverse Problem of Lindenmayer Systems on Branching Structures</i>
11:20-11:50	<u>M. Niezgodka</u> <i>Computational Modelling of Nonlinear Structure Development Phenomena over Complex Geometries and Topologies</i>	G. Biros: <i>Cancel</i>	<u>T. Hong-Minh</u> and D. Smith <i>A Metric for Word Similarity in WordNet</i>	M. Burger, V. Capasso, and <u>D. Morale</u> <i>On the Social Behavior of Biological Populations: Nature Inspired Algorithms</i>
11:50-12:20	<u>N. N. Pham Thi</u> , B. P. Sommeijer, and J. Huisman <i>Numerical Treatment of Integro-PDEs for Phytoplankton Dynamics</i>	<u>P. Kühn</u> , M. Diehl, A. Milewska, and H. G. Bock <i>Robustified Nonlinear Model Predictive Control via a Min-Max Formulation</i>	<u>N. Q. Hung</u> , N. Thoai, and N. T. Son <i>Dynamic Feedback Load Balancing Scheduling Algorithm for Vietnamese Semantic Web Applications</i>	<u>C. Ellsaesser</u> <i>Coarse Analysis of Neuronal Network Models</i>

Monday, March 6, 2006

Monday, March 6, 2006				
	Session A2 – Room 301	Session B2 (MS) – Room 303	Session C2 – Room 304	Session D2 (MS) – Room 201
	Chair: H. Yserentant	Chair: L. T. Biegler	Chair: N. D. Ngoc	Chair: V. Capasso
14:00-14:30	<u>S. V. Meleshko</u> <i>To the Equivalence Problem of Second-Order Ordinary Differential Equations</i>	<u>E. Kostina</u> <i>Numerical Solution of Large-Scale Optimal Control Problems in Robust Optimum Experimental Design</i>	<u>T. N. Minh</u> , N. Thoai, N. T. Son, and D. X. Ky <i>Project-Oriented Scheduler for Cluster Systems</i>	<u>W. Jäger</u> and M. Neuss-Radu <i>Mathematical Modelling of Ion Transport through Membranes</i>
14:30-15:00	<u>T. Carraro</u> and V. Heuveline <i>Parameter Identification and Optimal Experimental Design for Partial Differential Equations</i>	<u>H. G. Bock</u> <i>Real-Time Computation of Closed-Loop Controls</i>	H. Oh and <u>P. A. Tan</u> <i>Cluster-Based Mobility Management for Internet Connectivity of Mobile Ad Hoc Networks</i>	<u>D. Hartmann</u> and T. Miura <i>Modelling in Vitro Lung Branching Morphogenesis</i>
15:00-15:30	<u>H. Phan</u> , M. Nguyen, Y. Inoguchi, B. Ho, and S. Horiguchi <i>High-Performance Training of Conditional Random Fields for Large-Scale Sequential Labeling Applications</i>	<u>R. Schultz</u> <i>Decomposition and Approximation Algorithms for Mean-Risk Stochastic Integer Programs</i>	N. Thoai, N. T. Son, H. Tran, <u>V. H. Doan</u> , T. N. Minh, N. C. Dat, and D. T. Nghia <i>An Adaptive Space-Sharing Scheduling Algorithm for PC-Based Cluster</i>	<u>A. Marciniak-Czochra</u> <i>Receptor-Based Models for Pattern Formation and Regulation in Developmental Systems</i>
15:30-15:50	Coffee break			
	Session A3 – Room 301	Session B3 (MS) – Room 303	Session C3 – Room 304	Session D3 (MS) – Room 201
	Chair: M. Othman	Chair: T. Koch	Chair: S. V. Meleshko	Chair: S. Siripant
15:50-16:20	<u>Q. A. Dang</u> <i>Iterative Method for Solving Boundary Value Problems for Biharmonic Type Equation</i>	<u>A. Bley</u> <i>Models and Algorithms for IP Network Optimization</i>	<u>H. M. Son</u> <i>Design Patterns for High-Performance Matrix Computations</i>	<u>C. Surulescu</u> <i>On the Stochastic Modeling of the JAK-STAT Signal Transduction Pathway</i>
16:20-16:50	E. Duchi, R. Mantaci, <u>T. H. D. Phan</u> , and D. Rossin <i>Bidimensional Sand Pile Model</i>	D. Huygens, M. Labbé, <u>A. R. Mahjoub</u> , and P. Pesneau <i>Design of Survivable Networks with Bounded-Length Paths</i>	<u>D. K. Nguyen</u> , I. Lavallee, M. Bui, and Q. T. Ha <i>A New Direction to Parallelize Winograd's Algorithm on Distributed Memory Computers</i>	<u>F. Weller</u> and W. Jäger <i>Modelling, Analysis and Simulation of Thrombosis and Haemostasis</i>

Tuesday, March 7, 2006

<p>09:00-09:45</p> <p>09:45-10:30</p>	<p>Plenary Session P2 – Room 301 Chair: P. Deuffhard</p> <p><u>P. Carloni</u> <i>Multi-Scale Simulations of Proteases Point to Evolutionarily Conserved Functional Mechanics Across the Enzyme Family</i></p> <p><u>W. Hackbusch</u> <i>The Technique of Hierarchical Matrices</i></p>			
<p>10:30-10:50</p>	<p>Coffee break</p>			
<p>10:50-11:20</p> <p>11:20-11:50</p> <p>11:50-12:20</p>	<p>Session A4 – Room 301 Chair: C. Carstensen</p> <p><u>R. Jeltsch</u> and A. Troxler <i>Inverse Aerodynamic Shape Design of Gas Turbine Blades</i></p> <p>P. Azerad, F. Bouchette, D. Isèbe, B. Ivorra, and <u>B. Mohammadi</u> <i>Progress in Global Optimization and Shape Design</i></p> <p><u>M. Othman</u> <i>A Fast, Parallel Performance of Fourth Order Iterative Algorithm on Shared Memory Multiprocessors (SMP) Architecture</i></p>	<p>Session B4 (MS) – Room 303 Chair: A. R. Mahjoub</p> <p>A. Eisenblätter and <u>T. Koch</u> <i>Coverage and Capacity Planning for Cellular Networks</i></p> <p><u>T. Kürner</u> <i>Generating Input Data for Optimization Problems in Radio Network Planning</i></p> <p>P. Belotti and <u>S. Orłowski</u> <i>An Integer Programming Approach to Two-Layer Telecommunication Network Design</i></p>	<p>Session C4 – Room 304 Chair: R. Schultz</p> <p><u>J. P. Schlöder</u> <i>Reduced Direct Multiple Shooting Algorithms for Optimization and Control of Large-Scale Dynamic Processes</i></p> <p><u>M. C. Steinbach</u> <i>DAE Index and Optimization in Pressurized Water Networks</i></p> <p><u>S. Sager</u>, H. G. Bock, G. Reinelt, and J. P. Schlöder <i>Numerical Methods for Mixed-Integer Optimal Control</i></p>	<p>Session D4 (MS) – Room 201 Chair: A. Griewank</p> <p><u>U. Naumann</u> and L. Hascoet <i>Adjoint Code Compilers</i></p> <p><u>L. Hascoet</u> <i>Automatic Differentiation with the TAPENADE Tool: Development Status and Applications</i></p> <p><u>S. Schlenkrich</u> and A. Walther <i>Differentiating Fixed Point Iterations with ADOL-C</i></p>

Tuesday, March 7, 2006

	Session A5 – Room 301	Session B5 – Room 303	Session C5 (MS) – Room 304	Session D5 (MS) – Room 201
14:00-14:30	Chair: D. H. Chung P. Bastian and <u>M. Blatt</u> <i>Iterative Solvers Template Library (ISTL)</i>	Chair: G. Reinelt <u>V. H. Nguyen</u> and S. Kedad-Sidhoum <i>New Formulation for the Ring Star Problem</i>	Chair: S. Pickenhain U. Prüfert, <u>F. Tröltzsch</u> , and M. Weiser <i>An Interior Point Method for an Elliptic Control Problem with Pointwise State Constraints</i>	Chair: U. Naumann <u>A. Griewank</u> <i>Adjoint Based One-Shot Optimization with Bounded Retardation</i>
14:30-15:00	<u>C. Engwer</u> and P. Bastian <i>A Discontinuous Galerkin Method for Simulations in Complex Domains</i>	D. X. Duong and <u>P. H. Dien</u> <i>Solving the Lectures Scheduling Problem by the Combination of Exchange Procedure and Tabu Search Techniques</i>	<u>R. Griesse</u> , T. Grund, and D. Wachsmuth <i>Post-Correction Strategies for Perturbed Nonsmooth Equations</i>	<u>J. Albersmeyer</u> <i>Sensitivity Generation for Solutions of Differential-Algebraic Equations with an Adaptive BDF-Method</i>
15:00-15:30	<u>V. V. Quang</u> and Q. A. Dang <i>Decomposition Method for Solving a Boundary Value Problem for Biharmonic Equation</i>	A. Wiegele, G. Rinaldi, and <u>F. Rendl</u> <i>Solving Max-Cut Problems by Semidefinite Programming</i>	<u>S. Migórski</u> <i>Contact Problems in Piezoelectricity Modeled by Hemivariational Inequalities</i>	<u>U. Naumann</u> <i>Min-ops Derivative Accumulation is NP-complete</i>
15:30-15:50	Coffee break			
	Session A6 – Room 301	Session B6 – Room 303	Session C6 (MS) – Room 304	Session D6 – Room 201
15:50-16:20	Chair: T. Dhaene <u>K.-H. Hoffmann</u> <i>Simulation of Biosensors Using Distributed Computations Based on the VIOLA Network</i>	Chair: P. H. Dien <u>H. M. Le</u> , H. A. Le Thi, D. T. Pham, and P. Bouvry <i>A Deterministic Optimization Approach for Generating Highly Nonlinear Balanced Boolean Functions in Cryptography</i>	Chair: J. P. Schlöder S. Pickenhain and V. Lykina <i>Infinite Horizon Optimal Control Problems – Lebesgue and Riemann Improper Integrals</i>	Chair: N. T. Hung <u>S. Bönisch</u> <i>An Adaptive Fictitious-Domain Method for Quantitative Studies of Particulate Flow Problems</i>
16:20-16:50	<u>R. Wehrse</u> , D. T. Wickramasinghe, and R. Davé <i>Models for the End of the Dark Age</i>	<u>H. M. Wee</u> , C. C. Lo, and T. Y. Fang <i>Replenishment Policy of a Newsboy Problem for an Integrated Manufacturer-Retailer Channel</i>	<u>V. Lykina</u> and S. Pickenhain <i>Infinite Horizon Optimal Control Problems and their Applications</i>	<u>D. H. Chung</u> <i>A Tendency of Sediment Transport in Hai Hau Coastal Area</i>
16:50-17:20	T. S. Chen and <u>C. W. Tsai</u> <i>Multi-Level Merging Algorithm of Protein Detection for Two-Dimensional Electrophoresis Gel Images</i>	H. G. Bock, G. Reinelt, and <u>C. Surapholchai</u> <i>Solving City Bus Scheduling Problems in Bangkok</i>	<u>L. Neumann</u> and H. Ulbrich <i>Simulation and Optimization Tool for Continuously Variable Chain Drives</i>	<u>M. T. Gyi</u> , A. Jüngel, P. Markowich, and R. Pinnau <i>Current-Voltage Characteristics of Quantum Hydrodynamic Model for Semiconductors</i>

Wednesday, March 8, 2006

09:00-09:45	<p>Plenary Session P3 – Room 301 Chair: K.-H. Hoffmann <u>H. P. Langtangen</u> <i>Simulation of Tsunamis Generated by Earth-Asteroid Collisions</i></p>			
09:45-10:30	<p><u>T. Tang</u> <i>Gradient Stability and Large Time Stepping Methods for Nonlinear Diffusion Equations</i></p>			
10:30-10:50	Coffee break			
10:50-11:20	<p>Session A7 – Room 301 Chair: F. Tröltzsch <u>H. Yserentant</u> <i>Multilevel Decompositions of Electronic Wavefunctions</i></p>	<p>Session B7 (MS) – Room 303 Chair: J. Nocedal <u>T. Terlaky</u> <i>Two Decades of Interior Point Methods – What next?</i></p>	<p>Session C7 (MS) – Room 304 Chair: M. R. Osborne <u>L. Stals</u> and S. Roberts <i>Hats Improve the Image</i></p>	<p>Session D7 – Room 201 Chair: D. Hänel T. V. Minh and <u>N. T. Hung</u> <i>A General Mathematical Model of Two-Dimensional Horizontal Flow of Seawater Intrusion</i></p>
11:20-11:50	<p>V. Heuveline and <u>H. Nam-Dung</u> <i>Dirichlet Feedback Control for the Stabilization of Unstable Parabolic Systems: Application to Heat Transfer Control in Fluid Flow</i></p>	<p><u>S. Zhang</u> <i>Recent Approximation Results on Quadratic Optimization</i></p>	<p><u>W. Sun</u> <i>Mathematical Modeling and Computation for Moisture Transport in Fibrous Materials</i></p>	<p><u>N. P. Moshkin</u>, G. G. Chernykh, and A. V. Fomina <i>Numerical Model of Far Turbulent Wake Behind Towed Body in a Linearly Stratified Media</i></p>

Wednesday, March 8, 2006, Afternoon

Excursion

Thursday, March 9, 2006

Thursday, March 9, 2006				
09:00-09:45	<p>Plenary Session P4 – Room 301 Chair: H. Tuy</p> <p>L. Chen and <u>D. Goldfarb</u> <i>Interior-Point l_2-Penalty Methods for Nonlinear Programming: Global and Local Convergence</i></p>			
09:45-10:30	<p>S. Gratton, A. Sartenaer, and <u>P. Toint</u> <i>Multilevel Optimization Using Recursive Trust-Region Methods</i></p>			
10:30-10:50	Coffee break			
10:50-11:20	<p>Session A8 – Room 301 Chair: B. Mohammadi</p> <p><u>C. Carstensen</u> <i>Survey on Convergence of Adaptive Finite Element Methods</i></p>	<p>Session B8 (MS) – Room 303 Chair: T. Terlaky</p> <p>G. Lopez-Calva and <u>J. Nocedal</u> <i>Solving Diffcult Nonlinear Programs Using Penalty Methods</i></p>	<p>Session C8 (MS) – Room 304 Chair: R. D. Russell</p> <p><u>J. Garcke</u> and M. Hegland <i>Using the Optimized Combination Technique for Regression Problems</i></p>	<p>Session D8 – Room 201 Chair: N. P. Moshkin</p> <p><u>N. T. Duc</u> <i>A Dual-Time Preconditioning Method for Unsteady Two-Phase Flows</i></p>
11:20-11:50	<p><u>D. Hänel</u>, F. Völker, and R. Vilsmeier <i>Combined Finite-Volume and Local Level-Set Approach on Unstructured Grids</i></p>	<p><u>C. Roos</u> <i>Full-Newton Step Polynomial-Time Methods for LO Based on Locally Self-Concordant Barrier Functions</i></p>	<p>H.-J. Bungartz, <u>D. Pflüger</u>, and S. Zimmer <i>Adaptive Sparse Grid Techniques for Data Mining</i></p>	<p>A. Surataneer, K. Na Nakornphanom, K. Plaimas, and <u>C. Lursinsap</u> <i>Partitioning for High Performance of Predicting Dynamical Behavior of Color Diffusion in Water Using 2-D Tightly Coupled Neural Cellular Network</i></p>
11:50-12:20	<p><u>J. Sulaiman</u>, M. Othman, and M. K. Hassan <i>Half-Sweep Algebraic Multigrid (HSAMG) Method Applied to Diffusion Equations</i></p>	<p><u>Y.-X. Yuan</u> <i>An Interior Point Method with Subspace Techniques</i></p>	<p><u>M. Hegland</u>, C. Burden, and L. Santoso <i>Sparse Grids and the Master Equation for Gene Regulatory Networks</i></p>	

Thursday, March 9, 2006

	Session A9 – Room 301	Session B9 (MS) – Room 303	Session C9 (MS) – Room 304	Session D9 – Room 201
14:00-14:30	Chair: H. M. Wee <u>T. Dhaene</u> <i>Sequential Sampling and Multivariate Modeling of High-Speed Electronic Components</i>	Chair: R. W. Longman <u>N. V. Afzulpurkar</u> and V. T. Minh <i>Development of a Fault Tolerant Control System</i>	Chair: W. Sun <u>M. R. Osborne</u> <i>Stability Problems in ODE Estimation</i>	Chair: N. Thoai R. Stumptner and <u>J. Küng</u> <i>Self Learning and Similarity Recognition by Highly Parallel Working Simplest Nodes</i>
14:30-15:00	<u>U. P. Chong</u> and S. J. Cho <i>Physical Modeling of Gaygeum with Application to Sound Engine in Musical Synthesizer</i>	<u>K. D. Mombaur</u> , R. W. Longman, H. G. Bock, and J. P. Schlöder <i>Optimizing Spring-Damper Design in Human Like Walking that is Asymptotically Stable Without Feedback</i>	<u>S. G. Roberts</u> and O. M. Nielsen <i>Simulation of Tsunami and Flash Floods</i>	M. G. Kim and <u>D. M. Cuong</u> <i>EDF Scheduling Algorithm for Periodic Messages on Switched Ethernet</i>
15:00-15:30	<u>D. V. Tuan</u> , U.-P. Chong, and S.-J. Cho <i>Development of Acoustic Analysis Using Wigner Distribution for Pipeline Fault Detection in Power Plant</i>	<u>R. W. Longman</u> and K. Xu <i>Experiment Design for System Identification using Learning/Repetitive Control that is Deliberately Near Instability</i>	<u>R. D. Russell</u> , J. F. Williams, and X. Xu <i>Adaptive Software for Solving Fourth-Order Time Dependent PDEs</i>	<u>Y. Luo</u> , Y. Xue, C. Wu, Y. Wang, and J. Wang <i>InterCondor: a Prototype High Throughput Computing Middleware for Geocomputation</i>
15:30-15:50	Coffee break			
	Session A10 – Room 301	Session B10 (MS) – Room 303	Session C10 – Room 304	Session D10 – Room 201
15:50-16:20	Chair: R. Wehrse <u>T. D. Tan</u> , N. T. Long, and N. P. Thuy <i>Modeling Inertial Sensors Using Nodal Analysis Methodology</i>	Chair: M. Diehl <u>F. Leibfritz</u> <i>Numerical Design of Stabilizing Feedback Controllers for PDE Models</i>	Chair: C. Roos <u>M. Herty</u> <i>On Computing Solutions to Optimal Control Problems in Radiative Heat Transfer</i>	Chair: J. Küng <u>T. K. Dang</u> and N. T. Son <i>Providing Query Assurance for Outsourced Tree-Indexed Data</i>
16:20-16:50	<u>J. Asavanant</u> , M. Ioualalen, N. Kaewbanjak, S. Grilli, P. Watts, and J. Kirby <i>Numerical Simulation of the December 26, 2004: Indian Ocean Tsunami</i>	<u>K. D. Mombaur</u> , P. Giesl, and H. Wagner <i>Stability Optimization of Juggling</i>	<u>P. A. Nguyen</u> and J. P. Raymond <i>Control Localized on Thin Structures for the System of Navier-Stokes Equations Coupled with the Heat Equation</i>	P. H. Phu, <u>D. S. Yoo</u> , and M. J. Yi <i>Design and Implementation of a Web Services-Based Framework Using Remoting Patterns</i>
16:50-17:20	H. G. Bock, <u>S. Chuai-Aree</u> , W. Jäger, W. Kanbua, S. Krömker, and S. Siripant <i>3D Cloud and Storm Reconstruction from Satellite Image</i>		<u>N. X. Tan</u> <i>On the Existence of Solutions of Quasi-Equilibrium Problems with Constraints</i>	

Friday, March 10, 2006

<p>09:00-09:45</p> <p>09:45-10:30</p>	<p>Plenary Session P5 – Room 301</p> <p>Chair: M. Niezgódka</p> <p><u>V. Capasso</u> <i>Multiscale Modelling of Random Geometric Birth-and-Growth Processes, for Multi-Physics Problems Occurring in Material Sciences and Biomedicine</i></p> <p>G. Sand, S. Barkmann, and <u>S. Engell</u> <i>Optimization-Based Design of Reaction-Separation Systems</i></p>			
<p>10:30-10:50</p>	<p>Coffee break</p>			
<p>10:50-11:20</p> <p>11:20-11:50</p> <p>11:50-12:20</p>	<p>Session A11 – Room 301</p> <p>Chair: S. Migórski</p> <p><u>C. E. Goodyer</u>, J. D. Wood, and M. Berzins <i>Mathematical Modelling of Chemical Diffusion through Skin</i></p> <p><u>H. D. Minh</u>, H. G. Bock, H. X. Phu, and J. P. Schlöder <i>Fast Numerical Methods for Simulation of Chemically Reacting Flows in Catalytic Monoliths</i></p> <p><u>J. Antony</u>, M. J. Frisch, and A. P. Rendell <i>Modeling the Performance of the Gaussian Computational Chemistry Code on the x86 Architecture</i></p>	<p>Session B11 (MS) – Room 303</p> <p>Chair: K. D. Mombaur</p> <p><u>J. D. Bendtsen</u>, M. Bisgaard, K. K. Laursen, D. Vinther, and K. Z. Østergaard <i>Simulation and Verification of Fault Tolerant Control for a Mobile Robot</i></p> <p>J. Björnberg and <u>M. Diehl</u> <i>Approximate Dynamic Programming for Robust Model Predictive Control</i></p>	<p>Session C11 (MS) – Room 304</p> <p>Chair: R. H. Möhring</p> <p>A. Ceselli, <u>M. E. Lübbecke</u>, and I. Spenke <i>Industrial Railroad Operations: Optimal Switching, Routing, and Scheduling</i></p> <p>A. Hall, E. Köhler, <u>H. Schilling</u>, and A. Telle <i>Computing Sea Routes for Ships</i></p> <p><u>R. H. Möhring</u> <i>Routing in Traffic and Logistics</i></p>	<p>Session D11 – Room 201</p> <p>Chair: S. Zhang</p> <p><u>B. C. Cuong</u> and D. T. Long <i>Nonlinear Function Approximation by Constructive Algorithms for Structure Learning in Feedforward Neural Networks</i></p> <p>T. V. Su and <u>D. T. Anh</u> <i>Constraint Hierarchy and Stochastic Local Search for Solving Frequency Assignment Problem</i></p> <p>T. S. Chen, R. C. Chen, C. C. Lin, and <u>K. C. Lin</u> <i>A Production Scheduling System Based on Genetic Algorithm for Elastic Knitted Fabrics</i></p>

Friday, March 10, 2006

<p>14:00-14:45</p>	<p>Plenary Session P6 – Room 301 Chair: Y.-X. Yuan <u>S. Iwata</u> <i>Submodular Function Minimization</i></p>			
<p>14:45-15:05</p>	<p>Coffee break</p>			
	<p>Session A12 – Room 301 Chair: C. Lursinsap</p> <p>15:05-15:35 <u>I. Doktorski</u> and W. Jäger <i>A New Mathematical Model for the Growth Phase of the Biofilm</i></p> <p>15:35-16:05 <u>M. Bamrungrajhirun</u>, C. Lursinsap, and S. Siripant <i>A Dynamic 3D Structural Model of Rice Based on Morphogenesis Development</i></p> <p>16:05-16:35 <u>S. Siripant</u> and S. Chuai-Aree <i>Simulation and Visualization of Leaf Growth</i></p> <p>16:35-17:05 S. Surasak, <u>S. Siripant</u>, and C. Lursinsap <i>Approximation of the Nitrogen Deficiency in Soybean and Simulation of Soybean Leaf Color Using Neural Networks</i></p>	<p>Session B12 – Room 303 Chair: N. Dinh</p> <p>N. T. B. Kim, N. T. M. Hue, and <u>D. P. Vu</u> <i>The Efficient Outcome Set of a Bicriteria Linear Programming Problem and Application</i></p> <p><u>O. Schütze</u> and M. Dellnitz <i>Set Oriented Methods for the Numerical Treatment of (Global) Multi-Objective Optimization Problems</i></p> <p><u>N. V. Thoai</u> <i>Global Optimization over the Efficient Set</i></p> <p><u>D. M. Duc</u>, N. D. Hoang, and L. H. Nguyen <i>Lagrange Multipliers Theorem and Applications in Mathematical Programming</i></p>	<p>Session C12 – Room 304</p>	<p>Session D12 (MS) – Room 201 Chair: J. W. Halley</p> <p><u>B. H. Giang</u>, P. T. Anh, N. V. Hung, and V. L. Nguyen <i>Shot Noise in Coulomb Blockade Metallic Quantum Dot Structures: Monte-Carlo Simulation versus Master Equation Solution</i></p> <p><u>T. X. Hoang</u>, A. Trovato, F. Seno, J. R. Banavar, and A. Maritan <i>Geometry, Symmetry and Protein Folding</i></p> <p><u>H. V. Nguyen</u> and S. de Gironcoli <i>Van der Waals Coefficients in Density Functional Theory: a Simple Approximation for the Polarizability</i></p> <p><u>J. W. Halley</u>, Y. Lin, and J. K. Chung <i>Linking Scales in Materials Simulation</i></p>