New York City College of Technology
The City University of New York

PROGRAM

City Tech Fifth Annual POSTER SESSION

of Faculty and Student Research

Faculty Research Recognition Day

A 60th Anniversary Celebration

Thursday, November 15, 2007

Atrium 119
and adjoining area, formerly bookstore.

Faculty and Student Presentations
1 pm - 4 pm

Organizing Committee

Roman Kezerashvili, chair

Candido Cabo

Aparicio Carranza

Zhao Chen

Boris Gelman

Keith Muchowski

Costas Panayotakis

Alexander Rozenblyum

Stephen Soiffer

Opening – Welcome and Greetings

1:30 pm -1:50 pm Dr. Russell Hotzler, President
Dr. Bonne August, Provost
Sonja Jackson, Dean of Curriculum and Instruction
Dr. Pamela Brown, Dean of School of Arts and Sciences
Robin Bargar, Dean of School of Technology and Design

The program is organized by topics rather than by departments. Frequently the presentations are cross-disciplinary or difficult to assign to the discipline represented by the department with which the presenter is affiliated.

Architectural and Graphic Arts Technology

1. Dale Laurin and Anthony Romeo, Architecture and You.
2. Mikhel Crichlow, Alternative Models for Local and Regional Planning: Managing Explosive Growth in Trinidad and Tobago.
3. Evelyn Escalante, A Study in the Renewal of Community Space: Conservation Center, Greenwood Lake, NY.
4. Ravindra Rampersad, Investigation of Public Space on the Brooklyn Waterfront: A Museum for the 21st Century.
5. Lloyd Car, The Magic of Color Management Revealed.

Biological and Health Sciences

6. Walied Samarrai, The Differential Response of Bacillus Subtilis Ribosomal RNA Promoters to Nutritional Stress.
7. Robert Russo, Pediatric Contact Lens Fitting: The Etiology, Care, Management and Challenge of Our Youngest Wearers.
8. Isaac Barjis, Modeling of Signaling Pathway.
9. Gwen Cohen-Brown, Oral Cancer and Pre-Malignant Lesions.
10. Vasily Kolchenko, Viral Protein Structure Prediction in the Optical Biosensor Development.
11. Zongmin Li, The Cell Signaling Pathway for Cyclooxygenase-2 Upregulation in Stressed Neuronal Cells.
12. Jadrayeva Saltanat, Amy Boyer and Sanjoy Chakraborty, Expression of Estrogen Receptor in the Hypothalamic Arcuate Nucleus of ob/ob and Agouti Mice.
13. Avis J. Smith, To Determine the Degree of Difficulty in Using Manual Presses in Dentistry Based on Gender.

14. Marilyn Cortell, What the Records of 9/11 Have Taught the Dental Community.
15. Joycelyn Dillon, The Elderly: Dental Hygiene Treatment Implications.
16. Lois Dreyer, Multiple Facets of the Profession of Dental Hygiene.
17. Laina Karthikeyan, Generation of a Mouse Model of Early Onset Parkinson's Disease by Over Expressing Mutant PINK1 Protein in Dopaminergic Neurons.

Computer Systems and Engineering Technology

18. Johanna Barreto and Aparicio Carranza, The Advances in Cryptology with an Introduction to Quantum Cryptography.
19. Iulian Codescu and Aparicio Carranza, Firewall and High Security Connections.
20. Christopher Frenz, Applications of Machine Learning to Protein Engineering.
21. Iem Heng, Mobile Interactive Panel.
22. S. Yoakum-Stover and Tatiana Malyuta, Unified Architecture for Integrating Intelligence Data.
23. Edward Morton, Basic Stamp Microcontroller Sensor and Control Applications.
24. Rathika Rajaravivarma, Mobile Internet.
25. Marcos S. Pinto, Design Analysis of Linear Expert Systems.
26. Yousef Abdelmalek, Receiver Assisted Routing Enhancements in Ad Hoc Routing Protocol.
27. Candido Cabo, A Computer Model of Sub-Cellular Propagation of Cardiac Waves.
28. Xiangdong Li, The Security Study of An Elementary Electronic Voting Protocol Using RFID.

Engineering Technology

29. Djafar K. Mynbaev, Optical Access Networks Today and Tomorrow.
30. Malek Brahimi, Reliability Based Design Using Simulation for Aluminum Elements.
31. Gaffar Gailani, Roy St. Furcy and Jed Ferreras, Graphical Representation of the Solution of the Problem of Unconfined Compression of a Solid Porous Annular Disk.
32. Malek Brahimi, Measuring Damage Potential Using ARMA Models.
33. Gerarda M. Shields, Scour (Erosion) Monitoring of Long Island Bridges.

Hospitality Management

34. Elizabeth Schaible, The Whisk and The Pen: The Blending of Disciplines.
35. Joanne Jacus, What Will Happen to My Chocolate Chip Cookies?
36. Claire Stewart, At the Table with Leonardo da Vinci.
37. Amit Mehrotra, Assessment of the Quality of Hospitality Programs.
38. Lynda Dias, Guess Who's Coming to Dinner? Service Learning at the Table.

Humanities and Social Sciences

39. Nina Bannett, Two Views of Louisa May Alcott's 1864 Novel *Moods*.
40. Monica Berger, Compiling a Bibliography of Scholarly Writing on Popular Music: Process and Practice.
41. Patricia Rudden, Singing for Themselves: Essays on Women in Popular Music.
42. Anna Do, What does "Clifford's Kitten" Have To Do with Second Language Learners?
43. Shauna Vey, The Price of a Child: Alfred Steward's 1857 Labor Contract for a Year on the Stage.
44. Mary Nilles, A New Home in the West.
45. Tess Tobin, Libraries, Literacies and Learning: Progress and Development in South African Libraries.
46. Peter Parides, To Run with the Swift - Vannevar Bush, James Conant and the Race to the Bomb: How American Science Was Drafted into Wartime Service.
47. Benjamin Shepard, Play, Creativity, and the New Community Organizing.
48. Barbara Burke, Patty Barba and Yasemine Jones, Cultivating Grants at City Tech.
49. Marissa J. Moran, Legal Lore.
50. Jamee Moudud and Karl Botchway, Challenging the Orthodoxy: African Development in the Age of Openness.
51. Costas Panayotakis, Capitalism's Dialectic of Scarcity.

Mathematics

52. Zhao Chen, An Isomorphism Ring of the Displacement Matrices.
53. Laura Ghezzi, Valuations in Algebraic Geometry.
54. Urmi Ghosh-Dastidar, Mathematical Model of Bird Flu Propagation.
55. Mehrzad Ajoodanian and Sara Khawaja, Geometry and Imagination.

56. Hans Schoutens, Resolving Singularities in Terms of Cata-blow-ups.
57. Victoria Gitman, The Standard Systems of Nonstandard Models of Peano Arithmetic.
58. Huseyin Yuce, Mathematical Modeling in the Environment: A Hydrological Event Model of a Constructed Wetland.
59. Jonas Reitz, The Ground Axiom.
60. Delaram Kahrobaei, Graphic Arithmetic.
61. George Klimi, Augustin Mascuilli, Analytic Solutions of Differential Equations of Projectile Motion Using the Siacci Method.

Physics

62. Ari Maller, The Intrinsic Properties of SDSS Galaxies.
63. Ian Rubenstein, Reggie Blake, and Hosni Ghedira, The Development of an Advanced Technique for Mapping and Monitoring Sea and Lake Ice for the Future GOES-R Advanced Baseline Imager.
64. Oleg Berman, The True Bose-Einstein Condensation and Superfluidity of Indirect Excitons and Magnetoexcitons in a Two-Dimensional Trap in the Presence of Disorder.
65. Gregory Matloff, Kuiper Belt Objects: Determining Mass and Density from Extrasolar Probe Flybys.
66. Vasyl Hafiychuk, New Phenomena in Reaction-Diffusion Systems with Time Fractional Derivatives.
67. Edward Bear, Renee Clarke, Franklin Fung and Oleg Berman, The Many-Electron Interactions in Metals and Semiconductors.
68. Vladimir S. Boyko, Principles of Microstructure Design by Twinning in High-Temperature Superconductor YBCO for Enhanced Critical Currents at High Magnetic Fields.
69. Vladimir S. Boyko, Charge Order Formation in the Vicinity of High-Angle Grain Boundaries in High-Temperature Superconductor YBCO.
70. Roman Kezerashvili, Meson Currents in Pion Induced Nuclear Reactions.
71. Thinh Le, Impact of Rayleigh Backscattering Effects on Bidirectional Optical Communication.
72. Lufeng Leng, Brillouin/Erbium Fiber Laser for Optical Carrier Regeneration.
73. Roman Kezerashvili, Lia Margolin, and Shalva Tsiklauri, Three-Electron Quantum Dot in a Magnetic Field.
74. Boris Gelman, Quantum Viscosity.