



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

PROGRAM

9th Annual
**POSTER
SESSION**
of Faculty and Student Research
and Faculty Publications Exhibit
**Faculty Research
Recognition Day.**

Thursday, November 17, 2011

1:00 pm to 3:00 pm

Klitgord Gym

Program of Poster Session

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. Karl Botchway, Dean of the School of
 Arts and Sciences
 Kevin Hom, Dean of the School of
 Technology and Design
 Barbara Grumet, Esq., Dean of the School of
 Professional Studies

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. Ilyya Azaroff, Designing for Disaster: Shelter Evolution.
2. Lloyd Carr, Color You Can Expect: Online and Offline.
3. Barbara Smith Mishara, The Row Houses of Brooklyn and Queens 1930-1950.
4. Shelley E. Smith, Using Ground-Penetration Radar to Investigate Historic Masonry Buildings.
5. Jason Montgomery, Joe Smith, Excavating Icons: The Empire State Building.
6. Kenneth Conzelmann, Ehsanul Haque, Passiv Haus: Approaching a Net Zero Energy Architecture.

Biology and Health Sciences

7. Susan Nilsen-Kupsch, Maria-Elena Bilello, An Investigation into the Frequency of Oral Cancer Screening and Population Density Factors that Affect It.
8. Daniel Alter, Jennett M. Ingrassia, Collaborative Efforts in Restorative Dentistry and Radiologic Technology for Implant Placement.

9. Kara Pasner, Cataracts: Modern Optical Solutions to a Hazy Problem.
10. Elaine Leinung and Aida Egues, Healthy Work Places—Preventing Horizontal Violence.
11. Zoya Vinokur, Maritza Lopez, Joanna Fiutak, Tomer Yakov, Naval Reid, Transportation Security Administration body scanners Upclose and Personal.
12. Nicholas Manos, Renata Budny, History in the Making.
13. Liana Tsenova, A Drug that Accelerates Antibiotic Killing of M. tuberculosis and Reduces Lung Pathology in Tuberculosis.
14. Jennifer Crane, CAD/CAM: The Future of Digital Dentistry.
15. Karein Sylvain, Zirconia Restorations.
16. Richard Greenidge Jr., Improvements in Dental Technology.
17. Ryo Hashimoto, All-Ceramic Restorations.
18. Joycelyn Dillon, Marilyn Cortell, Faculty Calibration: A Calculus Detection Model.
19. Anthony DeVito, Sondra Rivera, Senior Associate Degree Nursing and Radiologic Technology Students Interdisciplinary Collaboration in Communication Skills.
20. Rosalyn Forbes, The Lecat's VentriloScope.
21. Celeste Waddy, Deidre Brown, Introducing Podcasting into the Associate Degree Nursing Curriculum.
22. Mary Frances McGibbon, A Correlational Study of Family Stress and Adaptation Among the Surviving Parents of the New York City Firefighters Who Perished in the World Trade Center Disaster.
23. Armando D. Solis, Maximal Use of Information Found in All Protein Structure Data.
24. Tatiana Voza, A New Mechanism Involved in Malaria Immunity.
25. F.S. Ozen, R. S. Gordon, G. Sullivan, D. Trotman, L. Karthikeyan, S. M. Lipson, Direct Loss of Rotavirus Infectivity by Flavonoids in the Cell-Free Assay System.
26. Josef Bohm, Data Mining the National Center for Health Statistics: Database Resources and Extraction Tools.
27. Josef Bohm, Two Factor Theory, Intersecting Health Care Delivery and Patient Satisfaction.

28. Josef Bohm, Socio-demographic Catalysts for Usage of Practitioner Based CAM.

Business

29. Lucas Bernard, Boom–bust Cycles: Leveraging, Complex Securities, and Asset Prices.
30. Charles A. Stone, Anne Zissu, Securitization of Senior Life Settlements and Liquidity Facility Issues.
31. Christine Thorpe, Health Literacy Training for Health Professionals: A Pilot Study for Practitioner Skills Assessment.
32. Josef Bohm, Relating Patient Satisfaction to Insurance Coverage: A Comparison of Market Based and Government Sponsored Health Care.

Computer Science and Engineering Technology

33. Iem Heng, Joe Kim, Robotic Navigation with Global Positioning System.
34. Edward Morton, Travis Elder, Arduino Uno Microcontroller Applications.
35. Marcos Pinto, Making Predictions of House Prices with Monte Carlo Simulation Using MatLab.
36. Eric Sabbah, A Secure Protocol for Ubiquitous Sensing and Monitoring of Patient Conditions.
37. Rashid Zaidi, Aparicio Carranza, Next Generation of Wireless Technologies.
38. Kurt Lavia, Aparicio Carranza, Exploring IPv6 Using CISCO Packet Tracer.
39. Daniel Huljev, Aparicio Carranza, Parallel Processing Shell Script Overview.
40. Fangyang Shen, Coverage-Aware Sleep Scheduling Algorithm for Wireless Sensor Networks.
41. Harrison Carranza, Aparicio Carranza, Firewall Security in Linux.
42. Katia Hristova, Efficient Datalog Queries with Complexity Guarantees.
43. Xiangdong Li, Accurate Position Service Based on Interacting Multiple Model with Unscented Kalman Filter.

44. See Hong Chiu, Candido Cabo, Study of the Mechanism of Ion Selectivity of Kv1.2 Potassium Channels Using Molecular Dynamics Simulations.
45. Xiaohai Li, Analysis of Dynamic Epidemiology Networks by Tensor Factorization and Spectral Measures.

Education

46. Renata Budny, Nicholas Manos, New York's Dental Laboratory Higher Education: How It All Began.
47. Aida Egues, Experiences of Mentoring Influences on the Personal and Professional Growth of Hispanic Registered Nurses.
48. Patricia Cholewka, Sondra Rivera, David Smith, Second Life in Nursing Education at New York City College of Technology.
49. Yu Wang, Enhancing Students Learning Experience in Microprocessor.
50. Jody Rosen, Jenna Spevack, Maura A. Smale, Charlie Edwards, Introducing the OpenLab: A Collaborative Space for Faculty, Students, and Staff.
51. Amit Mehrotra, Maura A. Smale, Using Emerging Media to Enhance Hybrid Instruction in Research Methods Courses.
52. John Akana, Karen Goodlad, Sean Scanlan, Shared Reading, Shared Writing, Shared Experience: The Birth of a Learning Community.
53. Reginald Blake, Janet Liou-Mark, Pamela Brown, Chinedu Chkuigwe, NSF Research Experiences for Undergraduates in Satellite and Ground-Based Remote Sensing at City Tech.
54. Janet Liou-Mark, AE Dreyfuss, Laura Yuen-Lau, Lori Younge, Connie Lu, Mursheda Ahmed, The Peer Assisted Learning Project in Mathematics.
55. Andy Zhang, Iem Heng, Farrukh Zia, Daniel DiModugno, Jeffery Lim, Mario Lalama, Olusegum Sogbesan, Maria Vanegas, Ali Harb, Cross-Departmental Collaboration to Teach Electrical and Mechanical Designs Using Chemical Detection Robots.

Engineering Technologies

56. Roy St. Furcy, Yapah Berry, Gaffar Gailani, Characterization of the Shock Table Test.
57. Yapah Berry, Sean Pratt, Olivia Reed, Gaffar Gailani, Designing Curriculum in Aerospace.

58. Olivia Reed, Fred Moshary, Comparison of Aerosol Optical Depth and Surface Particulate Matter for New York State.
59. Roy St. Furcy, Allison Martin, Z-ay-va Lareche, Gaffar Gailani, Stability of Long Bone Implants.
60. Viviana Vladutescu, Antonio Aguirre, Agossa Segla, Aerosol Optical Depth Measured During the Intensive Observational Period on the US East Coast in the Summer of 2011.
61. Djafar K. Mynbaev, Plasmonic Devices for Optical Communications.
62. Gerarda M. Shields, Assessing the Impact of Climate Change Predictions on the Hydraulic Vulnerability of Coastal Bridges.
63. Hamidreza Norouzi, Improving Instantaneous Land Surface Emissivity Retrieval Using Multi-Satellite Observations.
64. Rouzbeh Nazari, Impact of Flood and Sea Level Rise on Coastal Areas and Damages in Long Island, NY, Pilot Study for the US Coastal Regions.
65. Agossa Segla, Viviana Vladutescu, Determination of aerosol optical depth using a Micro Total Ozone Spectrometer II.

Hospitality

66. Patrick O'Halloran, The Role of Educators: School Bullying Prevention and Intervention-Introduction of School-Wide Anti-Bullying Policy.
67. Elizabeth Schaible, Relationship of Palate and Place: The Intersection of Food and Design, Then and Now.
68. Karen Goodlad, A "Taste" of South Africa.

Humanities, Social Sciences and English

69. Jane Mushabac, Writers Respond to Writers, Poems from English 1141: Creative Writing.
70. Tess Tobin, Advocating for Freedom and Equity of Access to Information to Underserved Cultural and Linguistic Communities around the World.
73. Anna H.-J. Do, Building Bridges: A Thematic Approach to College Reading and Writing.

74. Hugh P. McDonald, Creative Actualization as a General Theory of Value.
75. Costas Panayotakis, Remaking Scarcity: From Capitalist Inefficiency to Economic Democracy.
76. Geoff D. Zylstra, Whiteness, Freedom, and Technology: The Racial Struggle over Philadelphia's Streetcars, 1859-1867.
77. Lauren Park, Opening the Black Box: Reconsidering Needs Theory through Psychoanalysis and Critical Theory.
78. Sean P. MacDonald, Who Enters the Foreclosure Process?
79. Mary Nilles, "HEMECHT:" A Film on Luxembourger Immigration and Culture in the Midwest.
80. Ruth G. Garcia, "O That All Neglected Wives and Fond Abandoned Nymphs Would Take This Method!": Women's Community in Eliza Haywood's Fantomina.

Mathematics

81. Delaram Kahrobaei, Bobby Koupparis, Vladimir Shpilrain, A Public Key Exchange Using Matrices over Group Ring.
82. Laura Ghezzi, Conjectures on Hilbert Polynomials in Local Rings.
83. Delaram Kahrobaei, Dan Sadatian, A Study on Estimation of Computational Complexity in Codes and Algorithms.
84. Delaram Kahrobaei, Daniel Bui, Identity Based Encryption.
85. Delaram Kahrobaei, Stephanie Trochez, Cloud Computing.
86. Delaram Kahrobaei, Kelsey Rauber, Cloud Cryptography.
87. Samar ElHitti, Being Dependant Seems to Have Nothing to Do with Failing Strong Monomialization.
88. Andrew Douglas, Representation Theory and Structure Theory of Nonsemisimple Lie Algebras.
89. Lin Zhou, Wormlike Micellar Solutions in Shear Deformation.
90. Holly Carley, Copulas, Doubly Stochastic Measures, and Markov Operators.
91. Hans Schoutens, Discrete Pigeonhole Principle.
92. Ezra Halleck, Michael Walz, In the Game of Heads and Tails, Always Ahead or Finishing Even: Probabilities Are the Same!

93. Sheila Miller, Coupled Cell Networks and Leatherback Sea Turtles.
94. Andrew Parker, Intersection Theory and Obstructions.

Physics

95. Justin Vazquez-Poritz, Colorful Black Holes.
96. Boris Gelman, Nucleon-Nucleon Scattering and Large-Nc Quantum Chromodynamics.
97. Andrea Ferroglia, Resummation in Top Quark Pair Production.
98. Giovanni Ossola, Automated Computation of One-Loop Scattering Amplitudes.
99. Ariyeh Maller, Gas Aggregates around the Milky Way.
100. Oleg L. Berman, Seyedhamidreza Sadatian, Michal Faryniarz, German V. Kolmakov, Non-linear Dynamics of the Exciton Bose-Einstein Condensate: Numerical Simulations with Graphics Processing Units.
101. German V. Kolmakov, How Waves in Quantum Fluids Help Us to Understand Turbulence.
102. Lufeng Leng, Thinkh Le, Study of the Raman Gain Dependence on the Pump Wavelength.
103. Matthew Delgado, Pierre Gideon, Modeling Material Phase Transitions with the Ising Model.
104. Oleg L. Berman, Shalva M. Tsiklauri, Trions in Coupled Quantum Wells and Wigner Crystallization.
105. Reginald Blake, Johnny Luo, Marsha-Ann Cadougan, Global Water Distribution from the Space-Borne Microwave Instrument.
106. Reginald Blake, Tarendra Lakhankar, Dugwon Seo, Juan Meijia, Validation of Flash Flood Guidance System by Statistical Analysis.
107. Reginald Blake, Nir Krauker, Kibre Tesfagorgis, Amelise Bonhomme, Spectral Analysis of Soil Moisture Time Series.
108. Reginald Blake, Shayesteh Mahani, Ousmane Savane, Folashade Alawiye, Evaluation of Multi-sources Cloud-top Heights Estimate.

Ursula C. Schwerin Library

109. Partners in Research, Scholarship, and Pedagogy.
110. Supporting Open Access at City Tech.

City Tech Poster Session features the results of the research of faculty and students. The Poster Session has become a tradition at the College to highlight the research achievements of our faculty and students. Each year our Poster Sessions have grown and become more interesting and successful. This year we have 110 presentations of faculty and student research.

The Poster Session is generously supported by
The New York City College of Technology Foundation

and

The School of Arts and Sciences

We extend our appreciation to
Omayma Stephan, Image/Visual Communications
and Reproduction Center for their efforts and support



Organizing Committee

Roman Kezerashvili, chair

Renata Budny

Candido Cabo

Bronwen Densmore

Boris Gelman

Delaram Kahrobaei

German Kolmakov

Alexander Rozenblyum

Hans Schoutens

Stephen Soiffer



NEW YORK CITY COLLEGE OF TECHNOLOGY
THE CITY UNIVERSITY OF NEW YORK

300 Jay Street, Brooklyn, NY 11201-1909
www.citytech.cuny.edu