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Education

- Ph.D. 1985, Hungarian Academy of Sciences. Thesis: Measurement and Model-building for the Convective Heat Transfer Examinations.
- Dr. Tech. 1976, Department of Fluid Dynamics, University of Technology, Budapest. Thesis: Matrix Analysis of Hydraulic Transients in Pipeline Flow.
- M.S. Applied Mathematics, 1975, Eotvos University of Sciences, Budapest
- M.S. Mechanical Engineering, 1968, University of Technology, Budapest

Positions held

- 7/95-present Professor, Mining Engineering Department, Mackay School of Mines, University of Nevada, Reno.
- 8/90-6/95 Associate Professor, Mining Engineering Department, Mackay School of Mines, University of Nevada, Reno.
- 09/87-8/90 Lecturer in Mechanical Engineering, College of Engineering, University of Nevada, Reno.
- 11/86-8/90 Research Associate, Mining Engineering Department, Mackay School of Mines, University of Nevada, Reno.
- 1/79-11/86 Associate Professor, Institute of Thermal Energy and Systems Engineering, University of Technology, Budapest.
- 8/78-1/79 Visiting Postdoctoral Associate, Department of Mechanical Engineering, University of Minnesota.
- 9/75-8/78 Fellow of Hungarian Academy of Sciences.
- 8/68-9/75 Assistant Professor, Department of Mechanical Engineering, University of Technology, Budapest.

Courses Taught

- MINE 305 - Differential Models
MINE 310 - Materials Handling
MINE 350 - Fluids, Pumping & Drainage

MECH 422/622 – Introduction to Robotics together with MINE 435/635
MINE 425/625 - Engineering Power
MINE 435/635 - Introduction to Robotics
MINE 495 - Special Problems
MINE 701 - Advanced Mining Equipment
MINE 702 - Adv. Mining Equipment
MINE 702F - Adv. Mining Transportation
MINE 725 - Subsurface Heat Mass Transport
MINE 799 - Graduate Thesis/Dissertation advising

Publications

Total of 22 peer-reviewed journal papers and 83 reviewed conference papers ([Link: See detailed list](#))

Patents

Ten patents have been granted, including the following five US patents:

1. "Coordinated joint motion control system", 2008 , US patent: 7457698
2. "Method and Apparatus for Underground Nuclear Waste Repository," 1994. (With Mousset-Jones, P., and Wirtz, R.A.)
3. "Underground Cooling Enhancement for Nuclear Waste Repository," 1992. (With Mousset-Jones, P., and Wirtz, R.A.)
4. "Process and Apparatus for the Determination of Thermophysical Properties," 1990. (with Cifka, I.)
5. "Method and Apparatus for the Determination of the Heat Transfer Coefficient," 1986. (With Szabo, I. and Illyefalvi, V.Zs. and Kulin, Gy.), US patent: 4568198

Grants and Awards

1. Several educational awards during university education.
2. Research grants (34 grants and awards, total \$3,937,662 since 1990, [Link: See detailed list](#))
3. Candidacy Fellowship Award, 1975-1978, Hungarian Academy of Sciences.
4. Sabbatical Development Awards, 2001 and 2008, University of Nevada, Reno,.
5. Fulbright Visiting Professor to Hungary, 2008, Fulbright Commission, USA and Hungary

CURRENT RESEARCH

Title: Near-Field Model Studies

Principal Investigator: George Danko

Co-PI: Jens Birkholzer at Lawrence Berkeley National Laboratory (LBNL)

Granting Agency: DOE Office of Science and Technology

Dollar Amount: \$460,000 over three years for UNR and LBNL starting in 2005

Summary:

A research project is completed with the purpose of improving understanding of the coupling between thermo-hydrological processes (including air and vapor movement) in the in-drift, near-field, and mountain-scale systems at Yucca Mountain (YM). Specific aims are (1) to configure, test, and verify a novel, efficient, numerical-computational, coupled model; and (2) to evaluate the coupled, in-drift heat and moisture transport with evaporation, condensation, and seepage of water into drifts from the near-field rockmass at different stages after waste emplacement. These objectives are met by developing a multi-scale modeling approach that (1) integrates in-drift and in-rock process models in a consistent, transparent, and scientifically defensible manner; and (2) allows for studying the storage environment in various emplacement drifts without applying excessive conservatism in the modeling assumptions. The research study describes the thermal-hydrologic storage environment in the emplacement drift system during both pre- and post-closure operations.

Title: Human Operator and Robot Control Interactions in Mining Applications

Principal Investigator: George Danko

Granting Agency: DOE with participation of Newmont Mining Corporation, Nevada and the Bobcat Company, North Dakota

Dollar Amount: \$669,362 over three years starting in 2004 through 2006

Summary:

Many excavation and loading tasks require equipment operators to simultaneously coordinate the motion of multiple machine links, in order to achieve complex tool trajectories. Efficiency, work quality, and machine wear, are all affected by the skill level and attentiveness of the operator. A software-based kinematics reconfiguration system is developed to assist the

operator with various tasks. The operator may select a job-specific, virtual motion kinematics, and control the machine in this virtual space, to be followed by the real machine, under automatic control. The implementation of kinematics transformation with a real machine to follow is a difficult task using imperfect sensors and actuators. Hydraulic control of heavy machinery adds another difficulty related to the efficiency of the actuators. In order to compensate for motion errors, and adaptive, self-tuning control system is developed and used. A mathematical model of the machine dynamics and control responses are automatically identified during real-time operation in order to incorporate it in the control loop of the imperfect machine. Two patent applications were filed, one is granted (US patent: 7457698), and one is still pending.

Title: Mining Equipment Instrumentation

Principal Investigator: George Danko

Granting Agency: Newmont Mining Corporation with matching support from ARI (Applied Research Initiative)

Dollar Amount: \$174,500 over two years, starting in 2006 through 2009

Summary:

The general objective of the research project is to implement a robot-human control interface, developed at the University of Nevada, Reno for the control of large-scale, commercial mining equipment. Small-scale machine tests are being conducted in the current research project to refine robotics assistance in excavation and loading operations. Instrumentation is underway to apply the technology to production-scale application at Newmont.

Title: Ventilation Study Support

Principal Investigator: George Danko

Granting Agency: Nye County Nuclear Waste Repository Project Office, Nevada,

Dollar Amount: \$564,000 starting in 2002 through 2009

Summary:

The general goal of the numerical simulation studies is to understand the thermal, hydrologic, and air flow processes in the proposed high-level nuclear waste storage facility at Yucca Mountain (YM), Nevada. A specific goal of the project is to support the Nye County Nuclear Waste Repository Project Office (NWRPO) in the areas of ventilation and thermal-hydrologic predictions that may affect the storage environment at YM and the safety and health in general.

Title: Safety, Health and Ventilation Cost Benefit Optimization with Simulation and Control

Principal Investigator: George Danko

Co-Principal Investigators: Davood Bahrami

Pierre Mousset-Jones

Granting Agency: NIOSH (National Institute for Occupational Safety and Health)

Dollar Amount: \$1,250,000 over 5 years starting September 2009 through August 2014

Summary:

A five-year research and educational resource development project is underway to improve the underground working conditions, meet occupational, environmental and health standards, and to decrease the risk of injuries, while remaining competitive by reducing the cost of ventilation and air cooling. The main goals are to contribute to the solution of ventilation tasks in deep and hot underground mines; to introduce and apply a new mine ventilation and contaminant transport model based on MULTIFLUX, and to educate students and technical professionals in mine ventilation.

Title: Excavator Control with Programmable Path

Principal Investigator: George Danko

Granting Agency: The Bobcat Company with matching co-support by ARI (Applied Research Initiative)

Dollar Amount: \$103,000, multiple years

Summary:

This project is the continuation of the previous project entitled "Human Operator and Robot Control Interactions in Mining Applications". The scope of the continuation is to enhance the automatic control of excavator with real-time path programming.

FUNDED RESEARCH PROJECTS

1990 "The Laboratory Test of an In Situ Thermal Probe," AMIRA, Australia, \$8,000.

- "Automation, Control, and Robotics in Mining and Geological Engineering," UNR Instructional Enhancement Grant, Mackay School of Mines matching fund. (Co-PI's: J. Daemen, P. Mousset-Jones, and R. Watters), \$12,000 .
- 1991 "Proof-of-principle Tests for In Situ Rock and Rock Mass Thermophysical Properties Measurement," DOE. (Co-PI: P. Mousset-Jones), \$37,000.
- "Mine Drift Diagnosis Using Integral Visual, Thermal, and Sonar Image Processing," U.S.B.M. (Co-PI's: J. Daemen, and P. Mousset-Jones), \$60,000.
- "Clarkson Valve Tests and Developments," The Clarkson Company. (Co-PI: J. Daemen), \$40,000.
- 1992 "Proof-of-principle Tests for In Situ Rock and Rock Mass Thermophysical Properties Measurement," 2nd year, DOE. (Co-PI: P. Mousset-Jones), \$39,000.
- "Mine Drift Diagnosis Using Integral Visual, Thermal, and Sonar Image Processing," 2nd year, U.S.B.M. (Co-PI's: J. Daemen, and P. Mousset-Jones), \$60,000.
- "Clarkson Valve Tests and Developments," 2nd year, The Clarkson Company. (Co-PI: J. Daemen), \$45,000.
- "Heat Flow Studies at the Homestake Mine," DOE. (PI: P. Mousset-Jones), \$40,000.
- "Robotic Concepts for an Excavator," (equipment support), Melroe Company, \$30,000.
- "Slurry Laboratory Upgrade," (equipment support), Toshiba, \$12,000.
- 1993 "Analysis of Leach Pad Hydraulic and Transport Behavior During Rinsing," (first year), U.S.B.M. Mineral Waste Treatment Center (Co-PI: S. Tyler), \$80,000.
- "Repository Climate Studies with Preclosure Ventilation and Thermal Enhancement," DOE, \$60,000.
- "The Analysis of Thermal Loading and Rock Drying," DOE. (Co-PI: P. Mousset-Jones), \$50,000.
- "Clarkson Valve Tests and Developments," 3rd year, The Clarkson Company. (Co-PI: J. Daemen), \$50,000.
- 1994 "Analysis of Leach Pad Hydraulic and Transport Behavior During Rinsing," (second year), U.S.B.M. Mineral Waste Treatment Center (Co-PI: S. Tyler), \$80,000.
- "Repository Climate Studies with Preclosure Ventilation and Thermal Enhancement," (second year), DOE, \$60,000.
- "Hydrothermal Characterization Using REKA-Plus Probes," DOE-Lawrence Livermore National Laboratory, \$36,000.
- "Robotic Excavating and Loading Operations with Dust Suppression," DOE. (Co-PI: J. Daemen), 65,000.
- 1995 "Proof-of-Principle Tests....," Continuation with No Cost Extension (Co-PI: P. Mousset-Jones), DOE.
- "Analysis of Leach Pad Hydraulic and Transport Behavior During Rinsing," 3rd year, U.S.B.M. Mineral Waste Treatment Center (Co-PI: S. Tyler); Industrial co-support for site preparation, Barrick Goldstrike Mining Co, \$47,000.
- "Repository Climate Studies with Preclosure Ventilation and Thermal Enhancement," No Cost Extension, 3rd year, DOE.
- "Clarkson Valve Tests and Developments," The Clarkson Company. (Co-PI: J. Daemen), \$50,000.
- "Thermal Loading System Study Support," LLNL, \$25,000.
- "Hydrothermal Characterization Using REKA-Plus Probes," LLNL , \$27,000.
- "Robotic Excavating with Dust Suppression," DOE. (Co-PI: J. Daemen), \$60,000.
- "Slurry Laboratory Upgrade," UNR Graduate School

- 1996 "Proof-of-Principle Tests....," Continuation with No Cost Extension (Co-PI: P. Mousset-Jones), DOE.
 "Analysis of Leach Pad Hydraulic and Transport Behavior During Rinsing," Continuation with No Cost Extension, U.S.B.M.
 "Repository Climate Studies with Preclosure Ventilation and Thermal Enhancement," No Cost Extension, DOE.
 "Clarkson Valve Tests and Developments," The Clarkson Company. (Co-PI: J. Daemen). \$55,000.
 "Thermal Loading System Study Support," TRW, \$27,000.
 "Ventilation/Climate Heat Flow," DOE, \$12,000, (PI: P. Mousset-Jones).
 "Hydrothermal Characterization Using REKA-Plus Probes," DOE, \$37,000.
 "Robotic Excavating with Dust Suppression," DOE. (Co-PI: J. Daemen), \$60,000.
- 1997 "Analysis of Leach Pad Hydraulic and Transport Behavior During Rinsing," Continuation with No Cost Extension, U.S.B.M.
 "Repository Climate Studies with Preclosure Ventilation and Thermal Enhancement," No Cost Extension, DOE.
 "Clarkson Valve Tests and Developments," The Clarkson Company. (Co-PI: J. Daemen), \$60,000.
 "Design Basis Modeling," TRW/LLNL, \$35,000.
 "Large Block Tests," TRW/LLNL, \$17,000.
 "Reka Probe Installation in DST," TRW/LLNL, \$25,000.
 "Reka Probe Measurements in DST," TRW/LLNL, \$12,000.
 "Volume Reduction using REX," DOE, \$50,000.
- 1998 "Reka Probe Measurements at the DST," DOE.
 "Design Basis Models," TRW/LLNL, \$39,000.
 "Assessment of Radioactive Contamination in Pipes and Vessels," DOE (Co-PI: W. Culbreth), \$52,000.
- 1999 "EBS Modeling for Alternatives," TRW, \$56,000.
 "EBS Models for Licensing," TRW "Reka Probe Measurements in DST," TRW/LLNL, \$44,000.
 "Assessment of Radioactive Contamination in Pipes and Vessels," DOE (Co-PI: W. Culbreth), \$54,000.
 "Drift Scale Tests," DOE/HRC (Cooperative Agreement, first phase), \$37,000.
- 2000 "Yucca Mountain Ventilation Studies and Associated Code Enhancements," DOE/HRC, \$218,000.
 "Drift Scale Tests," DOE/HRC, \$79,000.
- 2001 "Yucca Mountain Ventilation Studies and Associated Code Enhancements," DOE/HRC, \$203,000.
 "Drift Scale Tests," DOE/HRC, \$68,000.
- 2002 "Ventilation Study Support," Nye County Natural Resources and Federal Facilities, \$50,000.
 "Drift Scale Tests," DOE/HRC, \$98,000.
- 2003 "Ventilation Study Support," Nye County Natural Resources and Federal Facilities, \$60,000.
 "Documentation of MULTIFLUX," Bechtel-SAIC Corporation, \$29,000.
 "Drift Scale Tests," DOE/HRC, \$50,000.

- 2004 “Ventilation Study Support,” Nye County Natural Resources and Federal Facilities, \$85,000.
 “Drift Scale Tests,” unsupported continuation of 6 years of field measurement at Yucca Mountain, Nevada
 “Human Operator and Robot Control Interactions in Mining Applications,” DOE, Newmont, Bobcat, UNR Graduate School, \$230,000 (\$669,362 over 3 years).
- 2005 “Dynamic Subsidence Modeling and Acceleration Investigations at RWMS Sites,” NERP – DOE, \$95,000
 “Near-Field Model Studies” DOE, S&T Program (Co-PI J. Birkholtzer, LBNL), \$260,000 of which \$130,000 for UNR, (Total for UNR and LBNL \$460,000 over 3 years).
 “Drift Scale Tests,” unsupported continuation of 7 years of field measurement at Yucca Mountain, Nevada
 “Ventilation Study Support,” Nye County, Nevada, \$90,000.
 “Human Operator and Robot Control Interactions in Mining Applications,” DOE, Newmont, Bobcat, UNR Graduate School, \$180,000.
 “Instructional Enhancement Grant for Robotics” UNR, \$4,200.
- 2006 “Dynamic Subsidence Modeling and Acceleration Investigations at RWMS Sites,” NERP – DOE, \$20,000, 2nd year allocation.
 “Near-Field Model Studies” DOE, S&T Program, \$75,000 for UNR share, 2nd year allocation.
 “Ventilation Study Support,” Nye County, Nevada, \$90,000.
 “Human Operator and Robot Control Interactions in Mining Applications,” DOE, Newmont, Bobcat, UNR Graduate School, \$254,352.
 “Mining Equipment Instrumentation,” \$174,500, Newmont, and Applied Research Initiative co-support, multiple years.
 “Software Acquisition Grant” UNR, \$1,600.
- 2007 “Ventilation Study Support,” Nye County Natural Resources and Federal Facilities, \$90,000.
 “Mining Equipment Instrumentation,” continuation, Newmont and Applied Research Initiative co-support, continuation.
 “Near-Field Model Studies” DOE, S&T Program, \$32,000.
- 2008 “Ventilation Study Support,” Nye County Natural Resources and Federal Facilities, \$99,000.
 “Mining Equipment Instrumentation,” Newmont, \$97,000 and Applied Research Initiative co-support, \$65,000.
 “Near-Field Model Studies” DOE, S&T Program, continuation
 “Excavator Control with Programmable Path,” Bobcat Co., \$60,000, Applied Research Initiative co-support, \$43,000.
- 2009 “Ventilation Study Support,” Nye County Natural Resources and Federal Facilities, \$99,000.
 “Safety, Health and Ventilation Cost Benefit Optimization with Simulation and Control,” NIOSH, \$1,250,000, approved for five years, \$250,000 for year 1. Co-PIs: Dr. Pierre Mousset-Jones, Dr. Davood Bahrami).
 “Excavator Control with Programmable Path,” Bobcat, and Applied Research Initiative co-support, continuation.

PUBLICATIONS

Journal Papers

1. Imre, L., Danko, G. and Somogyi, M., (1973). "Heating-up of Contractor Lines and Terminals," *Periodica Polytechnica Electrical Engineering*, Vol. 17. No. 1. (In English).
2. Danko, G., (1974). "Matrix Analysis of Transient Phenomena in Pipeline Flow," *Periodica Polytechnica Electrical Engineering*, Vol. 18. No. 2. University of Technology, Budapest, Hungary, pp. 167-189. (In English)
3. Danko, G., (1976). "Calculation of Pipeline Transients Applying Matrix Operator," *Energia es Atomtechnika*, XXIX.evf. 8.sz. (In Hungarian).
4. Imre, L., Danko, G., (1976). "Thermal Design Considerations for Enclosures and Packaging of Electrical Equipments," *Elektrotechnika*, 69. evf.6.sz. (In Hungarian).
5. Imre, L., Danko, G., (1976). "Examination of the Thermal Effect of Coating Applied to the Front Surface of Pistons I," *Periodica Polytechnica Mech. Eng.*, Vol. 20. No. 1. Budapest. (In English).
6. Imre, L., Danko, G., (1976). "A Method for Determining the Steady State Temperature Distribution in the Winding Discs of Oil-Cooled Transformers," *Periodica Polytechnica, Electrical Engineering*, Vol. 20, No. 2. (In English).
7. Imre, L., Danko, G. and Niedemayer, P., (1977). "Measurement of the Heat Transfer Coefficient in Electrical Devices," *Elektrotechnika*, 70.evf. 5.sz. pp. 165-171. (In Hungarian).
8. Danko, G., Kulin, Gy., (1978). "Calculation of Mass and Energy Flow Networks by Analog-Digital Electrical Modeling," *Periodica Polytechnica, Mech. Eng.* Vol. 22, No. 4, Budapest. (In English).
9. Cifka, I., Danko, G., and Eszto, M., (1980). "In-Situ Determination of Heat Conductivity of Rocks," *Banyaszati es Kohaszati Lapok, Banyaszat* 113.evf. I. Budapest. (In Hungarian).
10. Danko, G. and Kulin, Gy., (1980). "Network Analysis by Analog-Digital Electrical Modeling," *Meres es Automatika*, XXVIII.evf.3, Budapest. (In Hungarian).
11. Danko, G., (1983). "The Possibility of Determining and Using a New Local Heat Transfer Coefficient," *International Journal of Heat Mass Transfer* (IF 1.347), Vol. 26, No. 11, pp. 1679-1684.
12. Danko, G. Szabo, I. and Cifka, I., (1986). "Thermic Data Bank and Precision Requirements," *Publications of the Hungarian Central Institute for the Development of Mining*, No. 27, Budapest.
13. Danko, G., Mousset-Jones, P. and McPherson, M., (1988). "Sensitivity Analysis on Selected Input Parameters for Mine Climate Simulation Programs," *AIME/SME Transactions*, Littleton, Colorado, Reprint 88-159, pp.1-11.
14. Danko, G., Rao, M., and Mousset-Jones, P., (1989). "Numerical Modeling and Control of Gas Concentration in Underground Mines," *International Journal of Microcomputer Application*. (IF 0.105) Vol. 8, No. 3., pp. 1-12.
15. Danko, G., and Mousset-Jones, P., (1991). "High-temperature Mine Climate Simulation Model for Predicting the Effect of Mine Fire," *Transactions of the Institution of Mining and Metallurgy, Section A* (IF 0.119), Vol. 100, pp. 51-58.
16. G. Danko, (1993). "Thermal loading Studies Using Cooling Enhancement and Ventilation," *J. Nuclear Technology* (IF 0.326), Vol. 104, December, pp. 358-371.

17. Danko, G., Zhan, G., Mezei, Cs., Daemen, J., and Mousset-Jones, P. (1994). "Tunnel Roof Diagnosis Using a Robotic Sensor Test Bed," Transactions of the Institution of Mining and Metallurgy, Section A(IF 0.119), Vol. 103, pp. 129-136.
18. G. Danko, (2006). "Functional or Operator Representation of Numerical Heat and Mass Transport Models," ASME J. of Heat Transfer (IF 0.776), Vol. 128, pp. 162-175.
19. P. Kar, G. Danko, J. S. Armijo, M. Mishra, and D. Bahrami, (2006). "Thermal Design of an Alternative Boiling Water Reactor Spent Nuclear Fuel Package Design for Yucca Mountain Repository," J. Nuclear Technology (IF 0.326), Vol 155, pp. 90-104.
20. D. Bahrami and G. Danko, (2006). "Thermal-Hydrologic Model of an Alternative Waste Package Design for Yucca Mountain Repository," J. Nuclear Technology (IF 0.326), Vol 154 pp. 247-264.
21. Danko G., Walton J., Bahrami D. (2008) , "Increased storage capacity at Yucca Mountain favors thermal management for a cold repository." Nuclear Technology, Vol. 163, No. 1, July 2008, pp. 47-61.
22. Danko G., Bahrami D., Birkholzer J. (2008), "Coupled in-rock and in-drift hydrothermal model study for Yucca Mountain." Nuclear Technology, Vol. 163, No. 1, July 2008, pp. 110-128.

Conference Papers

1. Danko, G., (1981). "New Results of Determining and Applying the Heat Transfer Coefficient," The 1st Session of the International Bureau of Mining Thermophysics, Transactions of the First Session of Working Group No. 1, Główny Instytut Górnictwa, Katowice, pp. 331-342. (In English).
2. Imre, L., Danko, G. and Niedermayer, P., (1976). "Experimental Determination of Heat Transfer from Surfaces," Proc. Vth All-Union Heat and Mass Transfer Conference, Minsk, USSR. (In English).
3. Cifka, I., Danko, G. and Eszto, M., (1981). "Determination of Thermal Conductivity of Rock Around Mining Workings," The 1st Session of the International Bureau of Mining Thermophysics, Transactions of the First Session of Working Group No. 1, Główny Instytut Górnictwa, Katowice.
4. Danko, G. and Cifka, I., (1984). "Measurement of the Convective Heat-Transfer Coefficient on Naturally Rough Tunnel Surfaces," Third International Mine Ventilation Congress, Harrogate, England, Conference papers, pp. 375-380.
5. Danko, G. and Cifka, I., (1985). "In-Situ Measurement of Coefficients for Heat Transfer Processes in Mines. Part I: The Measurements of Thermal Characteristics of Rocks," The 4th Session of the International Bureau of Mining Thermophysics, Bretby, United Kingdom, pp. 1-15.
6. Danko, G. and Cifka, I., (1985). "In-Situ Measurement of Coefficients for Heat Transfer Processes in Mines. Part II: The Measurement of Surface Heat Transfer Coefficient," The 4th Session of the International Bureau of Mining Thermophysics, Bretby, United Kingdom.
7. Danko, G. and Mousset-Jones, P., (1986). "In-Situ Measurement of the Local Heat Transport Properties and Characteristics," Proc. 2nd. U.S. Mine Ventilation Symposium Addendum, pp. 893-897, Reno, Nevada USA.

8. Danko, G., (1986). "Formation of the Generalized Convective Boundary Condition with the Physical Heat Transfer Coefficient," Proc. of the 8th Int. Heat Transfer Conference, EF-23. San Francisco.
9. Danko, G., (1987). "Measurement of the Physical Heat Transfer Coefficient," Proc. of the 30th Heat Transfer and Fluid Mechanics Institute, California State University, Sacramento, CA, pp. 109-125.
10. Mousset-Jones, P., Danko, G., and McPherson, M., (1987). "Heat Transfer in Mine Airways with Natural Roughness," Proceedings, 3rd U.S. Mine Ventilation Symposium, Pennsylvania State University. University Park, PA, pp. 42-52.
11. Danko, G., Mousset-Jones, P. and McPherson, M., (1987). "Development of an Improved Method to Measure In-Situ Rock Properties in a Single Drill Hole," Proceedings, 3rd U.S. Mine Ventilation Symposium, Pennsylvania State University, University Park, PA, pp. 33-41.
12. Danko, G., Mousset-Jones, P. and McPherson, M., (1988). "Heat, Mass and Impulse Transport Analogies for Underground Airways," Proceedings, 4th International Mine Ventilation Congress, University of Queensland, Brisbane, Queensland, Australia, pp. 237-248.
13. Danko, G., Mousset-Jones, P. and McPherson, M., (1988). "Air Temperature Calculation in Hot Airways: A Critique and a New Solution," Proceedings, 1st Canadian Conference on Computer Applications in the Mineral Industry (CAMI), Universite Laval, Quebec City, Quebec, Canada, pp. 613-624.
14. Danko, G., Mousset-Jones, P. and McPherson, M., (1988). "Heat Transfer and Pressure Drop Correlations in Underground Airways," 5th Plenary Session of International Bureau of Mining Thermophysics. Mining Geological and Metallurgical Institute of India, Vigyan Bhawan, New Delhi, India, pp. 174-184.
15. Danko, G. and Mousset-Jones, P., (1989). "A Simultaneous Measurement of In-Situ Thermal Conductivity and Diffusivity at the Waldo Mine," Proceedings, 4th U.S. Mine Ventilation Symposium, University of California, Berkeley, pp. 287-296.
16. Danko, G. and Mousset-Jones, P. (1989). "An In Situ Technique for Rock Thermophysical Property Measurement and Site Characterization," Proceedings, 31st Heat Transfer and Fluid Mechanics Institute, California State University, Sacramento, pp. 397-417.
17. Rao, M., Danko, G., and Mousset-Jones, P., (1989). "A Novel Control of Gas Flow Rate by Computer," Proceedings of the International Society of Mini & Microcomputers Conference, University of Nevada, Reno, pp. 243-244.
18. Yang, G., McPherson, M.J., Widzyk, E., Danko, G., and Mousset-Jones, P., (1989). "The Gob Effects on Transients in Gas Emission and Concentration," 7th Annual Workshop, Generic Mineral Technology Center, Mine Design and Ground Control, VPI, Blacksburg, VA, pp. 1-12.
19. Calizaya F., Yang G., McPherson M.J., G. Danko, and Mousset-Jones, P., (1990). "Investigation of the Dispersion Coefficient in Mine Ventilation," 8th Annual Workshop, Generic Mineral Technology Center, Mine Design and Ground Control, Reno, NV, pp. 1-12.
20. Danko, G., and Mousset-Jones, P., (1990). "The Analysis of Horizontal Cooling Enhancement for Nuclear Waste Container Emplacement," Proceedings, First Annual High-level Radioactive Waste Management Conference, Las Vegas, NV., pp. 667-674.

21. Danko, G., Mousset-Jones, P., and R.A. Wirtz, (1990). "The Analysis of a New High-Level Nuclear Waste Container Emplacement Layout," Proceedings, International Symposium on Unique Underground Structures, Denver, Colorado, pp. 55:1-18.
22. Danko, G., and Mousset-Jones, P., (1990). "An In Situ Technique for Rock Thermophysical Property Measurement and Site Characterization," Proceedings, ASHRAE-FRIGAIR 90 Conference, Pretoria, South Africa, pp.1-13.
23. Danko, G., (1991). "Emplacement Drift Temperature Reduction by Cooling Enhancement and Ventilation," Proceedings, Second Annual High-level Radioactive Waste Management Conference, Las Vegas, NV., pp. 1585-1593.
24. Danko, G., and Mousset-Jones, P., (1991). "A Probe Method for Measuring In Situ Rock Thermophysical Properties," Proceedings, Second Annual High-level Radioactive Waste Management Conference, Las Vegas, NV., pp. 555-563.
25. Calizaya F., Yang G., McPherson M.J., G. Danko, and Mousset-Jones, P., (1991). "Transients in Gas Concentrations within a System of Controlled Recirculation in Mines," Proceedings, 5th U.S. Mine Ventilation Symposium, West Virginia University, Morgantown, WV, pp. 97-108.
26. Gillies, A.D.S., Creevy, P., G. Danko, and Mousset-Jones, P., (1991). "Determination of the In Situ Mine Surface Heat Transfer Coefficient," Proceedings, 5th U.S. Mine Ventilation Symposium, West Virginia University, Morgantown, WV, pp. 288-298.
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