Program Schedule and Content

Day 1, Monday, April 20, 1998 Mark Twain Room University Center-East

8:00 a.m. - 8:45 a.m. Registration

8:45 a.m. - 10:30 a.m. Welcome
Introduction to mine ventilation; behavior of air; properties of air; Energy equation and frictional pressure drops, volume flow and mass flow.

10:30 a.m. - 10:40 a.m. Coffee Break

10:40 a.m. - 12:00 noon
Airflow in mines; atkinson's equation, friction factors and shock losses, airway resistances.

12:00 noon - 1:00 p.m. Silver & Gold Room University Center-East Luncheon

1:00 p.m. - 2:30 p.m.
Ventilation network analysis; Kirchhoff's laws, series/parallel circuits, ventilation systems, air leakages, regulators; mine fans; fan laws, parallel/series configurations, designs and installation, booster fans, fan noise.

2:30 p.m. - 2:45 p.m. Coffee Break

2:45 p.m. - 5:00 p.m.
Natural ventilation; basic psychrometry and natural, ventilation calculations.

Face ventilation Blowing and exhausting systems, scrubbers, tubing, gas and dust control, humidity, and noise management.

New ventilation regulations coal mining, metal and non-metal mining.

Day 2, Tuesday, April 21, 1998
Mark Twain Room
University Center-East

8:15 a.m. - 10:00 a.m.

Room-and-pillar ventilation; blowing and exhausting ventilation.

Longwall ventilation; dust and gas control measures, computer simulation; other ventilation systems

Ventilation economics; fan and operating costs, maintenance cost, airway optimization.

10:00 a.m. - 10:25 a.m.

Coffee Break

10:25 a.m. - 12:00 noon

Network Simulation Basic theory and practices.
Ventilation surveys measurement of airflow, ventilation pressure surveys; airflow quantity and pressure measurements

12:00 noon - 1:00 p.m.  
Johnny's Smoke Stak

1:00 p.m. - 2:30 p.m.

Post-survey data preparation; survey data compiling, ventilation schematics.

2:30 p.m. - 2:45 p.m.

Coffee Break

2:45 p.m. - 5:00 p.m.

Post-survey data preparation

Day 3, April 22, 1998 Mark Twain Room University Center-East & G-14 McNutt Hall

8:00 a.m. - 10:00 a.m.

Computer simulation

10:00 a.m. - 10:15 a.m.

Coffee Break

10:15 a.m. - 12:00 noon

Computer Simulation

12:00 noon - 1:00 p.m. Silver & Gold Room University Center-East

Luncheon

1:00 p.m. - 4:30 p.m.

Computer Simulation Interpretation of results, short and long range planning exercise, case studies.

4:30 p.m.

Adjournment