



# VIRGINIA MOUNTAIN SECTION NEWSLETTER

IEEE Region 3, Council 09, Section 65

September 2005

Thursday, September 29, Moody Hall, Virginia Military Institute

## Biometrics: Government Activities and Growth Opportunities *Recognizing an individual based on measurable biological characteristics*

**Duane Blackburn**  
Federal Bureau of Investigation

### Abstract

*“Strategies for finding terrorists can be complicated by their efforts to disguise themselves among innocent civilians. As a counter to this, the implementation of biometric technologies (identifying an individual based on physical characteristics, such as fingerprinting, facial recognition, iris scans, etc.) shows great promise in improving the accuracy, consistency, and efficiency of identification devices.”*

- Science and Technology: A Foundation for Homeland Security (April 2005)

This talk will provide an overview of biometrics and related federal research activities, as well as discuss the need for additional research in this important field.

### Speaker Bio

Duane Blackburn is the FBI's representative to the National Science & Technology Council (NSTC). As such, he splits his time between the FBI's

Operational Technology Division, Video Surveillance Unit, and the White House's Office of Science and Technology Policy (OSTP), Homeland and National Security. Mr. Blackburn previously worked at the DoD Counterdrug Technology Development Program Office, and was detailed to the DOJ's National Institute of Justice, where he managed RDT&E programs in technology areas such as biometrics, data analysis, interdiction technologies, drug detection and screening, tagging and tracking, communications and GIS systems. He is most known for his work in biometrics technologies. Through OSTP, Mr. Blackburn regularly advises White House personnel on biometric issues associated with major programs and policies, and coordinates U.S. Government biometric activities through his leadership of the NSTC's Subcommittee on Biometrics. At the FBI he co-sponsors and manages multiple RDT&E efforts in face and iris recognition. He also co-chairs the

Justice Biometrics Cooperative, a collaboration-building working group on biometrics within the Department of Justice. Mr. Blackburn holds B.S. and M.S. degrees in Electrical Engineering from Virginia Tech, and was a finalist for a 2002 Service to America Medal, a national award program honoring the accomplishments of America's public servants.

**Note that this will be a joint meeting with the Virginia Blue Ridge Section of the American Chemical Society.**

Date: Thursday, September 29, 2005

Location: Moody hall, VMI

Social: 6:00 PM

Dinner: 7:00 PM

Talk: 8:00 PM

Cost: Member or Guest \$15.00

Student: \$ 8.00

Note extended social hour to renew and make new acquaintances.

Reserve by **4 PM Friday Sept. 23**  
**Dr. James Squire (540) 464-7548**  
<mailto:squirejc@vmi.edu>

### **Directions to Moody Hall, VMI From I-81 Northbound**

Exit at 188-B (60 West) and proceed to Lexington (a couple of miles). Turn right at the light on Main St/11N (which is one way north at this point). Immediately move into the left lane. After 2 blocks the left lane is forced to turn left onto Jefferson St (one way south). Immediately move into the right lane and make a hard right onto Letcher Avenue entering into VMI. Left at the Parade Ground; Moody Hall is first building on left facing Parade Ground. Park along the Parade Ground.

### **From I-81 Southbound**

Exit at 191 onto I-64. Take first exit from I-64, turning left at the end of the exit ramp onto 11S. In one mile, just after crossing the Maury River Bridge, the road will Y. Bear right to stay on Main Street (not the 11 Bypass). A few hundred feet after passing under the stone bridge inscribed "Virginia Military Institute" the two-way road will split into two one-way roads, forcing you to the right into Jefferson Street. Immediately make a hard right onto Letcher Avenue and proceed as above.

### **FUTURE MEETINGS**

Monday, October 17  
Fuel Cell Technologies  
Dr. Michael von Spakovsky  
Virginia Tech

Thursday, November 17  
Synthetic Vision Systems for  
Commercial and Transport Aircraft  
Prof. Dr.-Ing. Uwe Klingauf  
Institute of Flight Systems

Looking ahead to 2006, the Student Paper contest will be held during the February meeting, and April will be devoted to student reports from

Southeastcon. Programs for the January, March, and May meetings will be announced later.

### **IEEE Teacher in Service Program**

The IEEE Teacher In Service Program (TISP) brings engineers together with K-12 teachers. To date about 15 lesson plans have been developed. The lessons are aligned with national math, science, and technology education standards and many have a design component. The Florida West Coast section began the program and it is now being expanded throughout Region 3. Drs. Carl Dietrich and Allen MacKenzie represented VMS at a TISP Workshop in Atlanta in July, and are discussing the possibility of having a TISP Workshop for science teachers in the Montgomery County Schools.

### **Virginia Mountain Section Membership Statistics as of 7/31/05**

Life Fellows	9
Fellows	16
Life Senior Members	20
Senior Members	62
Life Members	20
Members	255
Associates	11
Students	209
<b>TOTAL</b>	<b>602</b>

This is about a 5% decrease from one year ago.

There were two Senior Members of the section who were elected to Fellow in 2005. We congratulate

Thomas Novak  
"For contributions to electrical safety in the mining industry."

Jeffrey Reed  
"For contributions to software radio and communications signal processing, and for leadership in engineering education."

### **VMS OFFICERS**

**Chairman: Cy Harbourt**  
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### **VMS EXECUTIVE COMMITTEE**

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**Junior Past Chairman: Shawn Addington** [AddingtonJS@vmi.edu](mailto:AddingtonJS@vmi.edu)

### **VMS Chapter Chairs**

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**Industrial Applications**  
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**VA Council Representative -open**  
**PACE** – Howard Moses  
**Publicity-** Jim Squires  
**Student Activities** – D. Livingston  
**Awards** –Shawn Addington  
**Membership Development** I. Jacobs

### **NEWSLETTER**

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Contact Newsletter Editor to be added to the VMS listserv

### **WEBSITE**

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