



# VIRGINIA MOUNTAIN SECTION NEWSLETTER

IEEE Region 3, Council 9, Section 65

November 2001

Thursday, November 15

## Trends in Wireless Communications

Ted. S. Rappaport

P.E., Professor, VA Tech, and IEEE Fellow

The Wireless Revolution offers tremendous potential for ubiquitous broadband internet access and multimedia applications that work in the palm of your hand. During the past several years, there have been enormous strides and divergent views towards making ubiquitous wireless communications a reality. This presentation highlights the key technology decisions that have been made for the creation of worldwide Next Generation wireless access, and presents the various view points and product concepts. The talk concludes with some examples of Virginia Tech research that is helping to make Next Generation networks a reality.

### About The Speaker

Theodore S. Rappaport is the James S. Tucker Professor of Engineering and founding director of the Mobile & Portable Radio Research Group (MPRG), a university research and teaching center dedicated to the wireless communications field. Dr.

Rappaport has 25 patents issued or pending and has authored, co-authored and co-edited 17 books in the wireless field, including the popular textbooks *Wireless Communications: Principles & Practice* (Prentice-Hall, 1996), *Smart Antennas for Wireless Communications: IS-95 and Third Generation CDMA Applications* (Prentice Hall, 1999). He was recipient of the 1999 IEEE Communications Society Stephen O. Rice Prize Paper Award, and serves on numerous technical editorial boards.

Rappaport is also chairman of Wireless Valley Communications, Inc., a microcell and in-building design and management product company. He is a registered professional engineer in the state of Virginia and is a Fellow and past member of the board of directors of the Radio Club of America.

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### Reservations

Date: Thursday Nov. 15, 2001  
Social: 6:30 PM  
Dinner: 7:00 PM  
Talk: 8:00 PM

Cost: Member or Guest \$15.00  
Student \$ 8.00

### Clarion Hotel Roanoke Airport

2727 Ferndale Drive NW  
I581 Exit 3 Hershberger Rd West  
1st Rt. onto Ordway Drive,  
¼ mile, Rt. Into Parking Lot.

Reserve by 5 PM **Monday** Nov. 12

Howard Moses (540) 953-5069  
[MMoses@ieeee.org](mailto:MMoses@ieeee.org)

Please specify number of attendees.

## VMS Election

All active regular members have or soon will have received a ballot for the annual election of officers, committee chairmen and ExComm members at large.

Please take the time to fill out, sign, seal and return yours. Your signature is required to validate the ballot but will be removed before the counting begins.

Ballots must be received by the Tellers Committee on or before noon Friday, November 30.

...*editor*

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### New Senior Members

The following two VMS members were elected to Senior Member in September.

Congratulations to:

**Zhenxian Liang**

**Brian D. Woerner**

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### New Section Members

This past month seven IEEE members joined us in the VMS area.

A warm welcome to:

**Anbumani Subramanian**

Blacksburg

**Johnathan Drake**

Blacksburg

**Kishore Kotteri**

Blacksburg

**Patrick Rondinelli**

Roanoke

**Richard Buehrer**

Christiansburg

**Thomas Martin**

Blacksburg

**Willem Odendaal**

Blacksburg

Dave Kingma has sent his personal welcome to each and we look forward to greeting you at our Section or Chapter meetings.

...*Editor*

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### A MESSAGE FROM IEEE PRESIDENT JOEL SNYDER

Dear fellow IEEE member:

I'd like to tell you about an IEEE service that I've found to be invaluable in all aspects of my professional life. It's a selection of free email newsletters called "What's New @ IEEE."

<http://www.ieee.org/whats-new>

"What's New" provides the latest news on IEEE activities, industry trends, member benefits, career tips, and new IEEE products. There are 11 newsletters for engineers and other technology professionals. I subscribe to all of them, but you can select as many as you would like.

You can choose from the following "What's New @ IEEE" newsletters:

- Circuits
- Communications
- Computing
- Eye on Washington (USA)
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- Libraries
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- Signal Processing
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It's easy to subscribe or unsubscribe, so you control what information you receive. To subscribe, simply logon to <http://www.ieee.org/whatsnew>.

Then select one or more of the email newsletters, enter your email address and click "subscribe." Your email address will not be shared with anyone outside of IEEE.

I'm very pleased that IEEE has developed a service such as this. I encourage you to sign up for this free "What's New" email newsletter service and give it a try.

Sincerely,

Joel Snyder 2001 IEEE President

### SUBSCRIBE/UNSUBSCRIBE INFORMATION:

Only those parties that subscribe to one of the "What's New" email services described above will receive monthly email newsletters. To Subscribe to "What's New @ IEEE," logon to <http://www.ieee.org/whatsnew>, select one or more of the email newsletters, enter your email address and click "Subscribe."

### PRIVACY STATEMENT

Please understand you will only receive the "What's New @ IEEE" service if you choose; it's opt-in, not opt-out. And you are protected by our PRIVACY GUARANTEE: once you subscribe to a "What's New @ IEEE" email newsletter, you will only be sent the information you request and your email address will not be shared with any other party outside of IEEE.

## Update your IEEE Record

The IEEE will accept updates from volunteers (Officers, editors) and we occasionally note discrepancies, in e-mail addresses for example, and send corrections to headquarters. However, this is a slipshod method at best and IEEE's general policy is that the member is responsible for his or her own information.

Each month when creating address labels and updating local records with new data from Headquarters, we notice numerous obvious errors in the data base e.g., area code 703.

When did you last update your records at IEEE? Have you moved, changed phone number, or e-mail address (most common) ? Please take a moment to reflect and then act if need be.

There are several different ways to correct member information:

There is a web based interactive "change of address" form at:  
<http://services1.ieee.org/membersvc/coa/intro.htm>

You can send an e-mail message to:  
[addresschanges@ieee.org](mailto:addresschanges@ieee.org).

Call IEEE Member Services at  
1-800-678-IEEE  
(1-800-678-4333)

Mail changes to:  
IEEE 445 Hoes  
Lane PO Box 1331 Piscataway,  
NJ 08855-1331 USA

Fax your changes to: 1-732-981-9667

In all cases you will need to include your member number for verification purposes.

## 2002 RENEWAL NOTICES MAILED, INCENTIVE FOR WEB RENEWALS

IEEE membership renewal invoices for 2002 were mailed on 5 Oct. to members in Regions 8, 9 and 10; and on 8 Oct. to U.S. and Canadian members.

Members who renew their IEEE membership at the Web site  
<http://www.ieee.org/renewal/>

by 15 Nov. will qualify for a chance to win a Sony Vaio FX Series Notebook Computer. The drawing will be held 29 Nov.

## NEW VOLUNTEER RESOURCES PAGE

The Volunteer Resources Web site at

<http://www.ieee.org/organizations/vols/> has been revised. New features include links to organizational unit's home page, quick links to sites used by volunteers, and a feedback page to suggest sites that should be linked from the Volunteer Resources Home Page.

For more information, contact John Wettlaufer, IEEE Technical Activities, at  
[j.wettlaufer@ieee.org](mailto:j.wettlaufer@ieee.org)

## WEB RESOURCE ON ENGINEERING A RESPONSE TO TERRORISM

Information on terrorism from government, advocacy groups, news agencies and the IEEE, as well as proposed solutions is now available on the IEEE-USA Web site. The information is intended to promote a discussion of measures the IEEE

and its members can take to help stop terrorism. Visit  
<http://www.ieeeusa.org/forum/terrorism.html>

## INVESTMENT OPTIONS OFFERED THROUGH IEEE MUTUAL FUND PROGRAM

The merger of Chase Manhattan Corp. and J.P. Morgan earlier this year enables the IEEE Mutual Fund Program to offer U.S. members a broader range of investment products and services.

For more information, visit  
[http://www.ieee.org/services/financial/fap/programs/financial\\_services/mutualfunds.html](http://www.ieee.org/services/financial/fap/programs/financial_services/mutualfunds.html)

Members outside the United States and Canada can invest in mutual funds through IEEE's non-U.S. Investment Program by establishing an International Financial Management Account with Smith Barney.

Find out more at  
[http://www.ieee.org/services/financial/fap/programs/financial\\_services/investment.html](http://www.ieee.org/services/financial/fap/programs/financial_services/investment.html)

## "WHAT'S NEW" NEWSLETTER HITS 100,000

Subscriptions to the "What's New @ IEEE" newsletter totaled more than 100,000 in September. E-mail subscription invitations from IEEE President Joel Snyder sent in September resulted in almost 25,000 new subscriptions. The most popular newsletters are "What's New @ IEEE for Communications" and "What's New @ IEEE for Computing." For more information, contact John Platt, IEEE Sales & Marketing, at

[j.platt@ieee.org](mailto:j.platt@ieee.org)

## 2001-2002 MEETING SCHEDULE

DATE	SPEAKER/TOPIC	MEETING PLACE
September 20 <b>Spouses' Night, 2001</b>	<b>M. von Spakovsky</b> Fuel Cell Technology	Clarion Hotel Roanoke
October 18* <b>(Joint MTTD)</b>	<b>Louis J. Guido</b> Semiconductor LEDs and Lasers: Past, Present, and Future	Clarion Hotel Roanoke
November 15	<b>T. Rappaport</b> Trends in Wireless Communications	Clarion Hotel Roanoke
January 17	<b>Student Projects</b> Details: TBD	Clarion Hotel Roanoke
February 21	<b>Kumar Krishen</b> New Technology Innovations for Space Applications	Clarion Hotel Roanoke
March 21 <b>Spouses' Night, 2002*</b>	<b>Robert Trew</b> Technology Future Directions	Clarion Hotel Roanoke
April 18	<b>Otto Szentisi</b> Fiber Optic Network Development	Clarion Hotel Roanoke
May 16	<b>Plant Tour</b>	<b>TBD</b>

\* Changed

### IEEE Virginia Mountain Section

#### VMS OFFICERS

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Vacant

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#### NEWSLETTER

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**e-mail Newsletter Subscription**  
Go to the VMS Web Site page:  
<http://www.ewh.ieee.org/r3/virginia-mountain/misc/SignUpForm.html>

**Anyone may submit material for the Newsletter**  
**Deadline:**  
**Monday following each meeting**

Submit To: Editor

#### Change of Address

US Mail: IEEE Service Center  
445 Hoes Lane, PO Box 1331  
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Fax: 732-981-9667  
IEEE Web:

<http://services1.ieee.org/membersvc/coa/intro.htm>  
(Changes are forwarded to the Newsletter)

#### Visit the VMS WEB page:

<http://www.ewh.ieee.org/r3/virginia-mountain>

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- Links to IEEE, etc.
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