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October 2000

Rock River Valley Section  
[www.ieee.org/regional/section/rock\\_river/](http://www.ieee.org/regional/section/rock_river/)

Event

Sense

The Institute of Electrical and Electronic Engineers, Inc.

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## RRV Section, IAS and PELS Chapter Meeting

# An Integrated Architectural Framework for Power Conversion Systems

### When

October 26, 2000

### Where

Rock Valley College, Technology Center, Room 117. I90 to Riverside Blvd., exit and go west to Mulford Rd. Go south to first light, turn east into RVC. Follow road to left to last building.

### Agenda

6:00 PM	Social
6:30 PM	Dinner
7:30 PM	Program

### Program

Advances in electric power conversion systems have generally lagged far behind the pace of advances in the field of digital signal electronic systems. This has been a result of the rich and complicated coupling that exist among various design variables and manufacturing processes used in power electronics. There are significant obstacles that defy scaling which hold back the progress of power electronic systems. This talk presents an integrated architectural framework capable of systematically overcoming these obstacles us-

ing a top-down conceptual approach. General principles of the proposed framework based on "Bricks and Buses" are presented along with a discussion of the details that constitute the framework.

### Speaker

Dr. Giri Venkataraman studied electrical engineering at Government College of Technology, Coimbatore, India, California Institute of Technology, Pasadena, and the University of Wisconsin, Madison. He worked at the Corporate Research and Development Center of General Electric Company, Schenectady, and at the Institute of Power Electronics and Electric Drives at Aachen University of Technology, Germany, during his graduate work. He taught Electrical Engineering at Montana State University-Bozeman from 1992 until 1999, and teaches at the University of Wisconsin-Madison since then. He is an Associate Director of the Wisconsin Electric Machines

and Power Electronics Consortium (WEMPEC) and an affiliate faculty member of Center for Power Electronics Systems. He holds four US patents in the area of electric power converters and has authored several technical papers in the area. His research interests are in high power converter topologies, control and modeling and packaging.

### Door Prizes

Sponsored by RRVS

### Meal

Dinner will be buffet style (with a min. of 15) and will consist of chicken, veggies, salad, dessert. Please reserve your space and make your meal reservations by calling **Jennifer at 815-753-9974 by Monday, October 23, (please include your e-mail address)**. The cost of the **dinner** is **\$5** for IEEE **members** and **\$14** for **non-members**. Unemployed members may call one of the officers for special arrangements.

### Note

The meeting is open to the general public. You need not be an IEEE member. Guests are welcome. However, please call to enable us to make appropriate arrangements.

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## September Meeting Recap

Dr Gary Blank briefed members on the **Chicago/Rockford Consultant Affinity Group** operations. The purpose of the group is to allow consultants and future consultants in the group to network and support each other and discuss pertinent topics of interest. They are the only joint affinity group in the United States. They operate within both the Chicago and Rock River Valley chapters. They meet in Palatine at the local public library. There are no fees or membership dues. A one time donation of \$10 to help cover the meeting room rental is all that is requested. Some benefits include the option of being listed in an IEEE publication of consultants that is also available to the public on the internet. For more information Dr. Blank can be reached at [g.l.blank@ieee.org](mailto:g.l.blank@ieee.org)

Mr Ed McCullough, Project Director for the **Rockford Futures Group** (RFG), spoke about the Rockford Futures Group's activities, goals and progress.

One of the main projects is to get high speed digital communications infrastructure into the Rockford area in order to attract industry which requires such infrastructure. RFG is currently discussing opportunities with local community leaders and several technology companies.

The "Technology Inventory" project is working to inventory the physical infrastructure, training and education programs and startup high-tech businesses in the RRV area. There are some IT/Web service small businesses in the RRV area that would benefit from a better digital communication infrastructure. Also, Rock Valley college is one of the best assets the area has for training and education.

The "Digital Divide" project has put computers in one community center and they are being used to train students on use of computers, allow students to do school homework, train senior citizens on computer use as well as being made open to the public.

The RFG encourages IEEE members to attend an Information Technology reception/networking opportunity at the Ramada Suites on Bell School road from 5-7 p.m. on Wednesday October 25 .

### Chicago/Rockford Consultants Network Meeting

The next meeting will be on Monday, November 13. Dinner is 6:15 PM at Bakers' Square (corner of US 14 Northwest Highway and N. North), and the meeting at 7:30 PM at the Palatine Public Library (700 North Court, Palatine, IL 847-358-1216).

The speaker will be Dr. Gary Blank, Chair, IEEE National AICN (Alliance of IEEE Consultants' Networks), and Chair, IEEE Chicago/Rockford Consultants' Network. He has been very successful in finding clients, and will be speaking on "How To Find Clients, Full-time or Part-time". This is a part of a seminar which Gary has presented internationally to audiences of consultants and those who would like to become consultants. Information about the network can be obtained by e-mail: [g.l.blank@ieee.org](mailto:g.l.blank@ieee.org) and at our web site <http://www.drblank.com/coaction.htm>

### November Meeting Preview

November's meeting will once again this year be hosted by the RRVS NIU Student Branch, our only student branch in the section, at NIU in the Engineering Building. More details to follow in next month's newsletter.

### Submissions to *Event Sense*

Send articles and job ads to the *Event Sense* editor, Bob Parro, via e-mail (preferred), or fax. Job ads will run for two consecutive months. Contact the *Event Sense* editor if the ad needs to run longer. Please make submissions by the twenty-fifth of the month. All submissions are subject to editing for style, clarity, and space considerations.

e-mail: [b.parro@ieee.org](mailto:b.parro@ieee.org)  
fax: (815) 425-6919

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## **2000 IEEE RRVS Executive Committee**

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*Messages for student officers can be left at the NIU Dept of  
Electrical Engineering,  
(815) 753-9974 or e-mail at sb.niu@ieee.org*

***The Rock River Valley Section gratefully acknowledges the following  
companies and university for supporting Section Officers:***

***Hamilton Sundstrand • Northern Illinois University • Telelogic***

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Rock River Valley Section  
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## Calendar

**October Section Meeting ..... October 26**

Dr. Giri Venkataramanan on "An Integrated Architectural Framework for Power Conversion Systems @ RVC

**November Joint Section and NIU Student Branch Meeting ..... November 16**

At NIU in DeKalb in the Engineering Building



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## Time-Sensitive Material

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