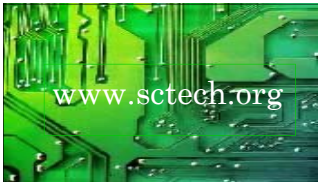


Special Interest:

- SCMEP, SCWBC & SCTA form new partnership
- IBM & Clemson join together to prepare tech workforce
- Midlands Tech Instructor named as Governor’s Professor of the year
- Ometric receives Venture Capital from Trellys Venture Partners
- Technology & Innovation Events Calendar hits all time high
- Hot Tech Jobs for 2005 paying premiums
- Southern States begin to rack up new patents



Inside this issue:

No Phishing allowed in these waters	1
Irion and Persons making plans for SCMEP & SCTA	2
SC Women’s Business Center has best year	2
Successful Entrepreneurs get venture capital	3
April is the month for technology events	4&5
Fuel Cells and Fuel Cell South	5
New patents in South Carolina for 2004	6

The Terabyte begins new year with expectations and wishes for a great year!

With each edition of **The Terabyte**, our staff pledges to make the next one stronger and more informative. We think we are getting there. The South Carolina Technology Alliance is the only organization in our state that is tracking our innovation economy. We are the only one that measures improvement and tracks our state’s patents. What is the trend year after year. According to Dr. Michael Porter of Harvard University, one of the best ways to determine if a state is making progress in the innovation economy is by tracking how many patents are being filed in your state.

How do South Carolina results measure up against the other Southern States? What is the value of these patents? Will they actually have commercial value and will they have impact on topics such as medical, biotech, nanotech, food, fuel cells, bioinformatics and the like? **The Terabyte** is now being circulated in printed format as



A message from
Thomas E. Persons, Sr.
President & CEO
South Carolina Technology Alliance

well as electronically to well over 6000 people across our state, country and in selected markets overseas.

Our staff thanks our readers for the many e-mails, phone calls and IM’s telling us how much you enjoy reading each publication. We hope to use more pictures in our next issues and have even considered publishing **The Terabyte** on a monthly basis. We are working

on finding a sponsor for each issue. This year we are also going to use some new writers to help with articles and topic areas for **Terabyte**. We are looking for sponsors for **The Terabyte** “technology news around our state and country”.

SCTA is passionate about seeing our entrepreneurial innovation community grow across our state. Technology jobs produce double the salaries of most other jobs. With the economy in an upswing, technology companies will grow this year and we will see new innovation companies grow all over our state. Can you remember just a few years ago when we only had one tech event a year? During this April and May, can you believe 6 plus tech events?

The year 2005 holds the greatest promise ever for our state. The investments are in place. The Centers of Excellence, the VC act, and Life Sciences will propel our state forward.



Posted: NO PHISHING (fish’ing) Allowed !

Be very careful about going on this Phishing Trip. This is the act of sending an e-mail to users falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity

theft. The e-mail directs the user to visit a Web site where they are asked to update personal information, such as passwords and credit card, social security, and bank account numbers that the legitimate organization already has. The Web site, however, is bogus and sets up only for them to steal

the users information. Bank and numerous gas credit cards are also being used. E-mail letters from people claiming to have found dead bank accounts with millions and wanting your bank account number are also fraudulent.

Manufacturing Extension Partnership Gets New Name and New Partners

Congress Awards \$109M To Manufacturing Extension Partnership

The omnibus appropriations bill approved by Congress recently provides \$109 million in fiscal year 2005 funds to the Manufacturing Extension Partnership (MEP) program, according to the American Small Manufacturers Coalition (ASMC). Of the total, "\$3 million is directed to help small and rural states advance outreach to manufacturers," ASMC states in its most recent legislative update. MEP, a state-federal partnership under the Commerce Department's National Institute of Standards and Technology, provides technical assistance, support services, engineering services, and business advice to small manufacturers.

The legislation also renames the initiative the **Hollings Manufacturing Extension Partnership Program** in honor of Senator Fritz Hollings, the United States Senator who first sponsored MEP and is retiring after 38 years. **The more than 300 centers in the MEP network also are renamed the Hollings Manufacturing Extension Center.**

In addition, the conference report for the bill also prohibits the Secretary of Commerce from competing any center prior to 2007, ASMC says. After an across-the-board 0.83 percent cut, MEP's actual receipts for FY 2005 will be \$108,095,300. The omnibus appropriations bill still awaits the House's final approval of a minor tax provision, which is expected to happen soon.

South Carolina MEP, to become Hollings MEC, will continue to service our state's manufacturing industry. They serve as consultants who have a unique and holistic approach to providing services to their manufacturing clients. This methodology enables our manufacturing consultants to quickly identify the "limiting factors" in customer's facilities, regardless of where those limiting factors occur. These limiting factors often mean our clients are not making the revenue they are capable of generating through increased productivity and better business management. Exploiting these limiting factors permits rapid intervention into opportunities and shortens the time-to-value of our projects.

Our manufacturing consultants have found this approach to be the most successful for small-to-medium sized manufacturers, delivering the most bottom line savings in the shortest time possible.

Just a few of the various services we offer to our clients are as follows:

Strategic Planning, Productivity, Quality Programs, Environmental, Health & Safety, Engineering, Information Technology, Marketing, Metal Casting Programs, Plastics Program, Diversity-Based Manufacturing, Health Insurance, Logistics Management, Lockwood Greene Supply Chain Simulation, and Future-Link 40K Programs.

SCMEP teams up with the South Carolina Technology Alliance to help with technology requirements of our manufacturing sector around the state. SCTA will work with assigned companies to review new technology solutions for these companies.

The South Carolina Manufacturing Extension Partnership (SCMEP) manages the South Carolina Women's Business Center, which is headquartered in Columbia. In late 2002, SCMEP was awarded a 5-year grant from the U.S. Small Business Administration. Since that time the center has done an outstanding job helping South Carolina's women entrepreneurs by providing a wide range of resources, including business start-up assistance, marketing, training, and access to financing. The Center is the only one in the country providing assistance to businesswomen to start and improve manufacturing companies, and assists in prototyping products and processes.

The Center is serving hundreds of women entrepreneurs in various parts of South Carolina. There are more than 64,000 existing women-owned businesses in South Carolina. The Women's Business Center focuses on serving manufacturing facilities and has added other types of businesses in 2004. The Center has agreed in principle on an agreement with the South Carolina Technology Alliance to manage and handle the technology related women entrepreneurs. The SCTA will support these entrepreneurs in all areas of technology business development, sales and marketing of their products as well as networking with other tech businesses around the state. The Center is also collaborating with other organizations, such as the S.C. Export Consortium, the Technical College System, Small Business Development Centers, and Columbia Colleges Leadership Center.

Women owned business are growing all over our state and together we can help these businesses grow and increase their profits using new technology methods.



Tom Persons & John Irion discuss SC Tech Alliance & SCMEP ideas



John, Tom and Senator Hollings discussing SC technology plans



Highlights of exciting things that are happening around our state!

IBM announces Clemson as the first South Carolina institution of higher learning to join IBM's Academic Initiative to help students better prepare for the information technology jobs of tomorrow. These are the kinds of jobs that the South Carolina Technology Alliance has been working to create since our founding in mid 1998. It is a well known fact that for years our state was growing technology related jobs at unprecedented rates. During our states best years the technology work force increased by more than 40,000 jobs, having an economic impact of more than 9.8 billion in new investments.

IBM's impact on South Carolina in the area of payroll is over \$76 million. Over the last 18 months IBM has grown their work force in the Greenville area by 9 times. Mid 2003 there were 100 IBM associates in Greenville. Today they number more than 900 employees.

They also pay more than \$4.5 million in property tax.

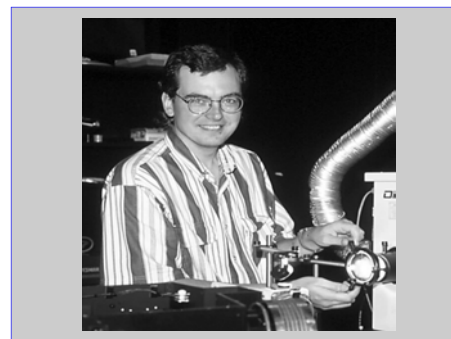
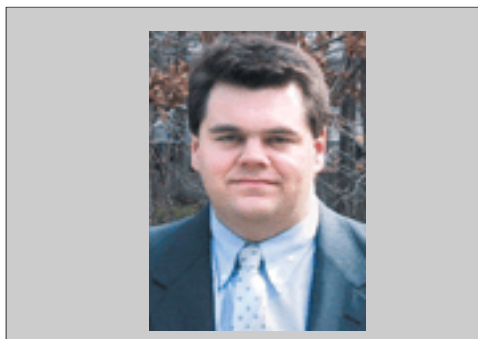
Governor's 2005 Professor of the year



Dr. Dianne Luce, an English instructor at Midlands Technical College is this years honoree. CHE makes the selection to recognize excellence in teaching. Hey Dude, listen up techies, "Yes" even Techno Geeks need English! This is the fourth time in the past four years, a Midlands Tech Instructor has been selected for this honor. Thank you Dr. Luce and also to you, Midlands Tech.



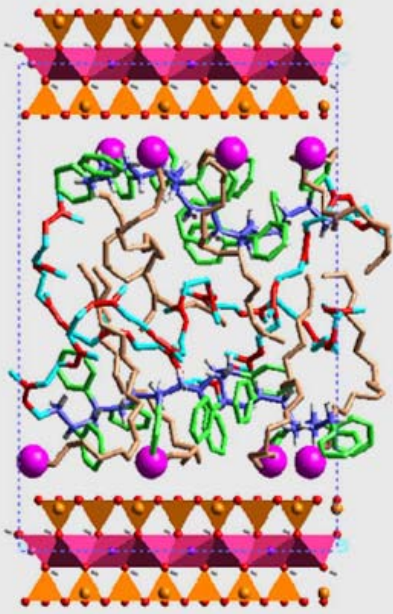
Watch these bills as they move through the legislature...**HOUSE 3006,3157,3155** are very important economic development bill for our small businesses. These will enact the 2005 JOBS CREATION ACT and will allow credit for investors of up to twenty- five percent. Also included is a capital access program which will make loans by financial institutions to small businesses who fail to qualify for conventional or other guaranteed financing. These loans will be reserved for small businesses whose revenues are less than two million annually. The SCDOC will have sole discretion in making determinations of which small businesses qualify for the Capital Access Program (**CAP**). Small businesses that have received funding from the federal SBIR Program will be given priority. Also businesses that commercialize technology for one of our state's research universities will have the upper edge for the **CAP**.



Congratulations to Jason Williamson, Scott Means and Dr. Mickey Myrick

Ometric Corporation (www.ometric.com) announced a few weeks ago that it has received an initial investment of \$250,000 from The Trelys Funds to pursue feasibility studies with several industry-leading customers and intends to raise additional capital as required to support further growth. Founded in August of 2004, Ometric is commercializing the optical spectroscopy research of Michael Myrick, an Associate Professor of the University of South Carolina and the Associate Director of the USC Nanocenter. Ometric has obtained the exclusive, worldwide rights from the USC Research Foundation for multiple patents authored by Professor Myrick and his colleagues. Thanks to Lisa Rooney and the USC Technology Transfer Office, this company is one we will all be following. There is no question in our minds that Ometric will have a great economic impact in South Carolina. Scott Means, another Columbia technology entrepreneur, who is a technology wunderkind, having joined Microsoft in 1988 at the age of 17 as a professional software developer, is also a key component of this team. Ometric has signed their first client, which happens to be one of the top three Pharma corporations in the world. They also learned on March 16, 2005 that the Department of the Navy has awarded Ometric a SBIR grant for 100k to further develop their specialized sensors to detect "RPGP". This award should lead to a phase 2 grant which would be for 750k sometime early next year.

The South Carolina Technology Alliance will miss Jason, who has been named Ometric's CEO. He has been a most valued member of the Alliance for the past four years and his leadership in the area of entrepreneurial development has been immense. He has spent countless hours teaching and mentoring start-up companies on how to succeed and he is a fine example of how persistence can pay off. It was our pleasure to nominate him this fall and see him selected as one of the "20 under 40" honorees. He was also selected for Leadership Columbia in 2003. The South Carolina Technology Alliance has encouraged and supported this new venture from its initial inception several months ago, and we will continue to offer our services and assistance in whatever way necessary to contribute to the success of Ometric. Greatest of luck to you, Jason, Scott and Mickey. Godspeed, you will go far!



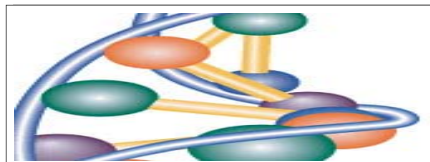
April 7-8, 2005
 Columbia Convention Center
 Columbia, SC 29208

Leaders in the field of Nanotechnology will present their latest research in the area of polymer Nanocomposites. This symposium is the first in a planned series in support of the South Carolina Research Center of Economic Excellence in the area of PNC's. All interested persons are invited to attend and meet some of the top researchers in the field, as well as Industrial and University leaders in the development of a major new industry/university cooperative research organization based around the CoEE program. For additional information call the USC Nano Center at 803-777-9927



South Carolina
 Investor Network
 May 12, 2005

SCIN's Meeting to be held at BMW. Make your plans to attend now. If you have not visited the BMW Center in the upstate, this is your chance. Chairman Dan Adams has a great meeting planned. Register today!



Palmetto Biotechnology Alliance is presenting "The RIGHT Conference" which will focus on showcasing South Carolina's resources for supporting and recruiting new, established and expanding life-science companies. This will be the third annual conference by the South Carolina biotech industry. See what is in store for the biotech companies and researchers. This is one of the industry clusters that Dr. Porter singled out in his work with the Palmetto Institute. With the passage of the new Life Science Act, the future is very bright. **April 17-18, 2005.** For more info, www.palmettobio.org

ThinkTEC's fourth annual innovation summit will focus on knowledge-based industry growth. This year's summit will also focus on creating new realities and looking at how Charleston measures up in the next economy. **April 28-29, 2005** www.thinktec.org

HOT JOBS FOR THE FUTURE



TECHNOLOGY....Today the "Information Technology Jobs" are being driven by the taxpayers. There are thousands of help wanted signs being posted all over our country again. The Bush administration's military and national security buildup has created huge worker shortages up and down the skills ladder. If you have a security clearance, the jobs and salaries are even hotter. Your parents were correct, "Life Sciences" is one of the hottest. You should have become a doctor with a PhD in research. Firms that do research and consulting for biotech companies and Big Pharma are some of the hottest jobs across the nation. The Bureau of Labor Statistics estimates that biotech employers will create more than 400,000 high-paying

positions over the next 10 years. The visionaries for our state were right on the money. The South Carolina **Life Sciences Act** is just in time. Our state has the opportunity to step to the front of the parade. But, there are other states that have also chosen Life Sciences and Biotech related industries as their prime area. **A word to our legislative leaders ,,,, PLEASE DO NOT REDUCE ANY OF OUR "CENTERS OF EXCELLENCE" FUNDING.** If there has ever been a time to hold the course, it is now. These are the jobs that will increase per capita incomes faster than any other employment.

Job titles	2004 salary	2005 salary
Sr. program manager T	127,500	150,000
GPS systems engineer T	85,000	95,000
Sr. electronic data auditor T	77,600	88,400
Sr. Project Manager L/S	75,000	80,000
Sr. Development Scientist	72,000	80,000
Sr. QA/QC specialist	50,000	55,000

T= Technology and L/S Life Science Jobs

Biotech contractors, and drug giants are going after the same workers; Scientists with titles like "bioinformationicians" and other bio processing technicians are the jobs that are seeing offers made by the thousands.

FUEL CELLS - South Carolina's Best Chance!



At FuelCellSouth we are focused on capturing the unique window of opportunity to bring together fuel cell technology researchers, entrepreneurs and existing business in an environment that is charged and ready to deliver fuel cell-based solutions for the emerging hydrogen economy.

May 10-11, 2005 FuelCell 2005 Annual Conference and Exhibition to be held at the South Carolina State Museum.

Contact: James Barnhill; Phone: (803) 331-1062
Email: jbarnhill3@sc.rr.cobsite; www.fuelcellsouth.com

Toshiba Corporation, the world leader in fuel cell technology for handheld electronic devices, today announced that Guinness World Records has officially certified its highly compact direct methanol fuel cell (DMFC) as the world's smallest DMFC. The fuel cell will feature in the 2006 edition of Guinness World Records, the perennially popular compendium of record-breaking feats and achievements.

Designed for integration into devices as small as digital music players, Toshiba's DMFC is as long and wide as a thumb, only 22 x 56 x 4.5mm (maximum of 9.1mm with fuel tank). This size advantage offers greater design freedom to developers of handheld electronic devices, without any compromises in performance. Although small enough for integration into a wireless headset for mobile phones, the prototype is efficient enough to power an MP3 music player for as long as 20 hours on a single 2cc charge of highly concentrated methanol. The DMFC outputs 100 milliwatts of power, and can continue to do so, non-stop, for as long as users top up its integrated fuel tank—a process that is as simple as it is safe.

Commenting on today's announcement, Kazunori Fukuma, Managing Director of Display Devices & Components Control Center of Toshiba Corporation stated, "We are really honored and delighted that an organization as respected as Guinness World Records has certified our fuel cell as the world's smallest DMFC. This is welcome recognition of our efforts to stay a step ahead of our competitors in fuel cell miniaturization and operating efficiency. We will continue to develop even more compact, more efficient DMFC that can power the smallest portable devices on the market."

David Hawksett, science and technology judge at Guinness World Records said "Today's gadgets, with their color screens and powerful processors, are pushing battery technology to its limits. This portable power station will allow us all to use our mobile technology without having to stay within a few miles of an additional power source!"

Toshiba plans to introduce commercial samples of the world's smallest DMFC for small handheld electronic devices in 2005.



April 6, 2005, at the Palmetto Expo Center in Greenville. The day will begin with speakers, emerging company presentations, and will be packed with exciting networking opportunities with venture capital companies and much more. This is a must attend event.

The day will begin with **Carl Kohrt**, President and CEO of [Battelle](#), opening the Innovation Hall. Battelle is a global science and technology enterprise with 19,000 employees and three billion in annual research and development, which develops and commercializes technology and manages laboratories for customers worldwide. Prior to Battelle, Carl Kohrt was Executive Vice President and Chief Technology Officer at Kodak. He was a Post- Doctoral Fellow at the University of Chicago and received an M.M.S. in Management Science from the Sloan School of Management, MIT.

Energy at lunch will be provided by **Jack Stone**, CEO of Stone International and champion of the [South Carolina Apparel Cluster](#), which has been formally recognized by the South Carolina Council on Competitiveness. Harvard Professor Michael Porter has advised that it is not the industry that you compete in, but rather how you compete in your industry, that is important. Jack's passion for revitalizing the apparel industry by leveraging the Internet to go directly to the consumer is inspiring and his enthusiasm is infectious.

Wrapping up the day will be our keynote speaker, [The Medici Effect](#) author **Frans Johansson**. His message is perfect for InnoVenture - powerful innovations can be found at the intersections of different disciplines, organizations and cultures. Frans was formerly CEO of the software company Inka.net and VP of Business Development for Dola Health Systems. He earned his MBA at Harvard Business School and BS at Brown University. Frans was raised in Sweden by his African-American and Cherokee mother and Swedish father.



1201 Main Street, Suite 1920
 Columbia, South Carolina 29201 USA
 Phone: 803-748-1323

Terabyte is published quarterly by the South Carolina Technology Alliance. Thomas E. Persons, Sr., Editor

E-mail hightech@sctech.org with your thoughts, ideas or suggestions for **The Terabyte**

Terabyte: A unit of computer memory or data storage capacity equal to 1024 gigabytesone trillion bytes



Your SC Technology Tag helps support our SC rural innovation economy entrepreneurs. Get yours today at any DVM office.

The South Carolina Technology Alliance is a 501c 3 non profit public/private organization serving South Carolina, both inside and outside our borders and around the world.

Southern States EOY 2004 Ranking

www.alabama.gov	381	10
www.Arkansas.org	140	13
www.fla.com	2710	1
www.state.ga.us	1368	3
www.kentucky.gov	417	9
www.state.la.us	341	11
www.state.ms.us	154	12
www.state.mo.us	801	6
www.ncgov.com	1926	2
www.state.ok.us	452	8
www.puertorico.com	16	15
www.myscgov.com	538	7
www.tennessee.org	804	5
www.state.va.us	1036	4
www.state.wv.us	103	14
Patents 2004	11187	

South Carolina is making good improvement in the numbers of new patents issued to our innovation / next economy entrepreneurs for 2004.

Florida has changed their state's drink of choice from orange juice to PJ's. That's PJ for Patent Juice. They have jumped out in the lead with new patents for 2004. They lead the traditional states that we have used as the standard setters for the technology leaders for the South. The Sunshine state is the leader for new patents issued for 2004 and in our book the new innovation economy juice creators. We called our technology friends and asked them to ship us a dozen boxes of PJ.

Many economic developers all over the USA questioned the wisdom of Florida's Department of Commerce when they paid the price for Scripps. The state's incentives for Scripps will continue to grow. As for now the number is over \$ 550 million to land this new big Pharma research and development center. The answer to the question seems to point out, after reviewing the new patents issued for 2004, that the Gators, the Seminoles and the Hurricane's research universities are the folks to watch. They must have "gotten it", sometime over the last decade. Florida moves to the front of the new innovation economy and what SCTA has called the NEXT ECONOMY.

If the old adage is true "money follows money", then the Sunshine state will see thousands of next economy innovators moving South, this of course is in spite of the hurricanes. Our state needs a few pitchers of PJ!

The base number we will start with will be the 538 for 2004. With proper recognition and support for our innovation economy inventors, we will see substantial increases in the number of patents issued in our state during 2005. We will keep you updated on our patent progress with each issue of **The Terabyte**.