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The SunCoast Signal

The Institute of Electrical and Electronics Engineers, Inc.

Florida West Coast Section
<http://www.ieee.org/fwcs>

Vol. 67, No. 5, May 2021

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PE Corner

Art Nordlinger, PE, Senior Member

New Florida Engineers Management Corporation (FEMC) Director and Other Info From The Florida Board of Professional Engineers (FBPE)

Last month I wrote about the Florida Board of Professional Engineers' open board seats and that Governor DeSantis hasn't appointed new board members since taking office. To date, nothing has changed. Thankfully, the Florida Engineers Management Corporation board (of which I am the Chair) engineer members are appointed by the sitting FBPE board members.

At their recent meeting, the FBPE appointed Dr. Mark Tumeo, PE, to the FEMC board. Dr. Tumeo holds a Ph.D. and an M.S. in environmental engineering from the University of California, Davis, a J.D. from Cleveland State University, and B.S. degrees in civil engineering and biology from the University of Notre Dame. He is a registered Professional Engineer in Florida, Oklahoma, and Alaska, and is a member of the Ohio Bar. Dr. Tumeo is currently the senior engineer at Earth Systems, an environmental consulting firm with offices in four states.

The FEMC Board consists of five professional engineers appointed by the FBPE Board and two public members, appointed by the Secretary of the Florida Department of Business and Professional Regulation. At this time, one of the public member seats is open and the current public member has been submitted for reappointment to a second term. However, the DPBR Secretary has not yet reappointed this individual, though the application has been pending for a year.

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UPCOMING MEETINGS

EXCOM
Tuesday, May 4, 2021
Google Meet
Register with vTools

<https://events.vtools.ieee.org/m/269451>

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THE SUNCOAST SIGNAL is published monthly by the Florida West Coast Section (FWCS) of the Institute of Electrical and Electronics Engineers, Inc. (IEEE). THE SUNCOAST SIGNAL is sent each month to members of the IEEE on Florida's West Coast Section. Annual subscription is included in the IEEE membership dues.
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All material for THE SUNCOAST SIGNAL is due in electronic form by the end of day of the 1st Monday after the 1st Tuesday of the month, i.e. the ExCom meeting, preceding the issue month.
Address all correspondence to: Michael Mayor, 10006 Cross Creek Blvd., PMB 140, Tampa, FL 33647, michael.mayor@ieee.org, (484) 524-3264

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On another note, part of the PE renewal process requires that individuals provide a valid email address. These email addresses are considered public records under Florida's sunshine laws. As a result, you probably receive solicitations for continuing education, among other things, that are sent to many Florida PEs by individuals who get names and associated email addresses from DBPR. Unfortunately, the availability of this email list has led to a rash of phishing emails. The FBPE has put out the following notice regarding this issue.

"Please be aware of spam emails being sent to Professional Engineers and engineering firms that appear to have been sent from the Florida Board of Professional Engineers. This email was not sent by FBPE and should be deleted immediately. These emails will have FBPE as the sender, but the actual return address isn't from "@fbpe.org." All emails [actually from FBPE are] sent using our domain, fbpe.org. The body of the email has a link to view a document. *Do not click the link or open any attachments.* If you did click on the link or open any attachments, contact your technical support desk or run an anti-virus check. Unfortunately there is little we can do about the email scam attempts. The email addresses used by the phishing attempts were obtained through Florida Sunshine Law. Under Florida law, email addresses are public records."

Whether you are a PE looking to attain required CEHs, or an engineer looking to learn something new or keep current with the latest trends in the profession, IEEE has seminars that will meet your needs.

So You are Not an IEEE Senior Member yet?

Well, this is something that we need to correct!

First, you must know that elevation to the Senior Member Rank of IEEE is amazingly simple, non-problematic and free of painful requirements on your part. This is a distinction that you have earned if you have accumulated ten years of professional practice and service to IEEE. In addition, there is some leniency in these requirements because the ten years include the time you spent in education and if you have a BS, MS or PhD this time includes 3, 4, or 5 years which gives you a break in the professional practice requirement.

Continued on Page 4

Nuclear Energy Progress in India History, Current Status and Future Outlook

Date / Time: Friday, May 14, 2021; 9:00AM – 10:15 AM

Speaker: Mr. A. V. Sathish, Scientific Officer at the Kudankulam Nuclear Power Plant

Location: Online – meeting invitation will be emailed to attendees prior to seminar –
Please ensure your email is correct on signup page.

Cost: There is NO Cost for attending this meeting

CEH Credits: Are available only after you attend the event and request it via the chat feature during the session.

RSVP: Online at: <https://events.vtools.ieee.org/m/269480>

Questions: Sharan Kalwani sharan.kalwani@ieee.org



Abstract: Nuclear energy arises from and holds together the binding energy that is accumulated in the center of an atom. Nuclear power refers to the use of nuclear reactions that trigger nuclear energy to produce heat, which is then used most commonly in steam turbines to generate electricity in a nuclear power plant.

Electricity from nuclear power plants has a **vital** role to play in **India's energy mix and future development**. Nuclear power also has inextricably got linked to the broader issue of climate change. The passive safety relies on natural factors such as pressure differentials, gravity or natural convection to ensure protection during emergency situations. This includes the fast injection of high pressure boron and the provision of extra tanks for long term supply of borated water to the reactor in a passive way.

The reactor building has a series of passive hydrogen recombiners to convert abnormal production of hydrogen into water. The presentation will also provide an overview about Nuclear Energy, its application & future scope. We will also be discussing various reactors used in Kudankulam Nuclear Power Plant.

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Biography: Mr. A.V. Sathish is the Scientific Officer in Kudankulam Nuclear Power Plant when it became the part of Nuclear Power Corporation of India Ltd (NPCIL) in 1992. After one year training at Bhabha Atomic Research Centre (BARC), he pursued his MBA from IIM Calcutta. He has 25 years of experience in various nuclear power reactors like Boiling Water Reactor (BWR), Pressurized Heavy Water Reactors (PHWR) and Pressurized water reactors (PWR).



As a faculty in public awareness program he was involved in interaction with professionals, students and public regarding various innovative ideas such as requirement of hybrid energy resource for India's sustainable growth, choices for India's future energy security, need for nuclear energy along with safety features of nuclear power plant, radiation and environment etc. He has participated in several seminars, workshops and symposiums organized by academic institutions as well as scientific and research organizations. He has around 20 scientific publications to his credit. He is associated with the Quality Circle activities of NPCIL and presented various projects in Quality Circle national conferences.

So You are Not an IEEE Senior Member yet? (Continued from Page 2)

So, you say: "Is that all?" Well, there are a couple of additional requirements you must abide by and follow but they are not too stringent. If you examine your conscience and find out that you do have the required professional service requirement, then you must gather some courage and write a letter to me via email and let me know that you found out about Senior Membership when you read this article in the "Signal" (or any other means) and request to be elevated to the rank of Senior Member as soon as possible. Now, let me set your mind at ease because this elevation process is not something that will set you back some dough or increase your membership dues in any way, shape, or form because like I said, you have earned this distinction and honor through your professional service.

What else is there? You will need to participate in a get-to-know-you on-line Video Chat with your Reference Providers to meet the IEEE requirement of Acquaintance and discuss your resume to tell us about your accomplishments. Also, I will send you an email outlining the requirements and how to structure your professional resume, so you must include your professional experience, IEEE Service and significant performance. This is the hardest part of this process. The good part is that you will not have to do anything else since the Committee will nominate you to become a Senior Member and will assign you reference providers, because you need at least two Senior Members and we will vouch for you before the Admissions and Advancement Committee who is the final authority to grant approval of your nomination and elevation to Senior Member.

To accomplish this interview, we have structured a Virtual process where you will meet your Reference Providers and other members of the Senior Member Elevation Team online and you will be notified of the dates and times to meet.

It might interest you to know, that the Florida West Coast Section of IEEE through its Senior Member Elevation Committee has promoted to the rank more than 108 new Senior Members in the last two years, including 32 new ones in the last campaign of April 2021 and we are planning to elevate as many candidates as necessary to make sure that all worthy IEEE Members get their Senior Member Plaque.

So, I invite you all to review your professional experience and write to me informing me that you are eligible and I will take your case and run with it until we get you elevated to Senior Member. In addition, if you know of a colleague or friend that meets the requirements for elevation then let him/her know about our program and have them contact me so we can help.

I look forward to receiving your request for elevation.

Hermann Amaya
Chair, Senior Member Elevation Committee,
hamaya@tampabay.rr.com

How To Do 3D Modeling For Fun And Profit

Date / Time: Wednesday, May 19, 2021; 6:00 PM – 7:15 PM

Speaker: Dr. Jim Anderson, on the Faculty of Computer Science and Engineering at the University of South Florida

Location: Online – meeting invitation will be emailed to attendees prior to the Presentation
Please ensure your email is correct on signup page.

Cost: There is NO Cost for attending this meeting

CEH Credits: No CEH Credits are offered for this Presentation

RSVP: Online at: <https://events.vtools.ieee.org/m/269482>

Questions: Dr. Jim Anderson jim.anderson@ieee.org

Abstract: So what would you make if you could? Just in case you had not noticed, 3D modeling and 3D printing. For just a little bit over \$100 you can buy a 3D printer. Great, now you've got a 3D printer, what are you going to print? If your life is anything like mine, you have 100's of things that you could print if only you knew how. Let's start with drawer handles. How about knobs for devices in your car? Replacement parts for all of the things that have either been broken or lost? Let's agree that if you could 3D print things, then you would be busy doing so. However, there is that stumbling block of just exactly how to create the things that you want to print. Who's got the software to do this and, even if we had it, who knows how to use it? Your local IEEE Florida West Coast Section Computer Society hears your need and we've got just the solution for you. Join us for an online seminar in which we show you how to use free (!) software to model anything that you want. Once you've modeled the thing that you want to design, you can then save it to a file, download it to a 3D printer and ta-da! You have the thing that you designed. It really is that easy and we'll show you how to do it from start to finish.

Biography: Dr. Jim Anderson received his Ph.D. in Computer Science from Florida Atlantic University, Boca Raton. He then went on and earned an MBA from The University Of Texas, Dallas. He has published over 125 books including CRC Press's "Software Defined Networking".



Jim has worked for 16 different companies during his 33 year career including startups as well as Boeing, Siemens, Alcatel, Verizon, AAA, and Amgen. He has had opportunities to teach at Florida Atlantic University, The University of South Florida, and Florida Polytechnic University. Despite his busy work schedule, Jim has been able to publish 5 papers and has been an invited speaker 8 times. Jim has been an active member of the IEEE for over 30 years and has held numerous leadership positions at both the local and regional level. Jim has been a member of Toastmasters for 22 years. He manages 5 highly successful blogs and is the owner of LinkedIn's most successful product management user group. His favorite movie is "The Fugitive", he owns a 70 lb Boxer and he is a fairly good cook. Jim's research areas focus on securing electrical and healthcare networks and detecting when intruders have gained access.



Symmetrical Components and Fault Locations

Date / Time: Friday, May 21, 2021; 9:30AM – 2:00PM

Speaker: Thomas H. Blair, Senior Engineering Fellow, Tampa Electric

Location: Online – meeting invitation will be emailed to attendees prior to seminar –
Please ensure your email is correct on signup page.

Cost: \$100 Members, \$150 Non-Members, \$10 Students

CEH Credits: The level of difficulty of this course is Intermediate.

Four (4) Continuing Education Hours will be awarded.

Be sure to enter your name and PE number on the signup website as it appears on your license. Florida provider #0003849.

RSVP: Online at: <https://events.vtools.ieee.org/m/264558>

Questions: Tom Blair at tom_blair@ieee.org

Your local IEEE PES/IAS Chapter is offering this 4-hour seminar on Symmetrical Components and Fault Calculations

The level of difficulty of this course is Intermediate.

The seminar will include:

- Review of Basics
 - o Phasors, Per-Unit
- Symmetrical Components
 - o Physical Example of Vector Components
 - o Application of Symmetrical Components to Three-Phase Power Systems
- Electrical Characteristics of the Sequence Currents
 - o The Delta-Wye Transformer
- Sequence Networks
 - o Thevenin Reduction of the Sequence Networks
- Fault Calculations
 - o Momentary versus Interrupting
 - o Short-Circuit Faults

Speaker: Tom Blair is a Senior Engineering Fellow with Tampa Electric. He performs electrical system analysis and uses the results to specify electrical equipment ratings, protective relay settings, and electrical system arrangement.

Tom has also been adjunct professor in the past at the University of South Florida and has presented courses at the university on topics such as Electrical Machines and Drives, Energy Production Systems Engineering, and the FE and PE (power) exam preparation course at USF.

Mr. Blair is a Senior Member of IEEE.

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| 1/2 Page | \$75 | \$98 | \$360 | \$450 | \$630 | \$756 |
| 3/4 Page | \$110 | \$143 | \$530 | \$663 | \$925 | \$1,110 |
| Full Page | \$140 | \$182 | \$670 | \$838 | \$1,175 | \$1,410 |
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Or Fax your address changes to (732) 562-5445

| May 2021 - Calendar of Events <i>(For more information see Page 1 in this Signal)</i> | | | | | | |
|--|-------------------------------|-------------------------------|-----------------------------------|------------|---------------------------------------|------------|
| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| | | | | | | 1 |
| | | | | | | |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | *EXCOM Google Meet | | | | |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| | *Signal Inputs Due | | | | *Nuclear Energy in India | |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | | | *How to do 3D Modeling | | *Symmetrical Components... | |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| | | | | | | |
| 30 | 31 | | | | | |
| | Memorial Day | | | | | |