Newsletter Editor: Tannen VanZwieten (tvanzwie@uwyo.edu) Chair: Elena Zattoni (elena.zattoni@unibo.it) Mailing List Coordinator: Laurie Ricker (lricker@mta.ca) Advisors: Bozenna Pasik-Duncan (bozenna@math.ku.edu), Cheryl Schrader (schrader@ieee.org), Linda Bushnell (bushnell@ee.washington.edu), Anna-Maria Perdon (perdon@univpm.it) Homepage for WiC http://www.diiga.univpm.it/wic Disclaimer: The newsletter will be posted on the web. Any material that people do not wish to appear on the web will be removed upon request. In this Issue: Editor's Note 2. Farewell message from former WiC Chair Anna Maria Perdon

- 3. Letter from the New WiC Chair
- Roommate Location Service for 2007 ACC
- Special Invitation for Women in Control at ACC'07
- ACC'07 WiC Luncheon
- 7. Editor Needed for WiC
- Engineer Position Announcement at Florida Atlantic University
- 9. Post Doctoral Position Announcement 1 at Florida Atlantic University
- 10. Post Doctoral Position Announcement 2 at Florida Atlantic University

1	Edita	,	TAT 4
	H (1117)	71° C	NOTA

Dear Fellow Women in Control,

This newsletter summarizes recent contributions I have received. The goal of this newsletter is to integrate more women into control theory/applications development and to keep everyone posted on events. Please feel free to contribute information that you think might be useful for our community. This can include interesting articles, information from the web, job openings in your schools or companies, new books or journals, software releases, conferences, workshop or seminar announcements, invited session proposals, a call for papers, etc. Please send any contributions to me following my reference below. Also, if you have any items that you would like to see discussed or things that you would like to see added or changed in the newsletter, then please feel free to share them with me, even if you do not have time to submit something for the newsletter.

Tannen S. VanZwieten

Ph.D. Student

University of Wyoming

E-mail: <u>tvanzwie@uwyo.edu</u>

2. Farewell Message from Former WiC Chair Anna Maria Perdon

Dear Colleagues and Friends,

Please join me in congratulating our new Chair, Dr. Elena Zattoni. After five years on December 2006 I officially stepped down from the chair position of WiC.

During these five years the visibility of women within IEEE CSS has increased, also thanks to the efforts of our group. However, there is still much to do: I have the impression that this is a moment of "stagnation" and we need to multiply our commitment to integrate more and more women members from all over the world into all the CSS activities, in particular the technical ones.

Thank you, all WiC members, for the wonderful time I have had as the past chair. It has been a very enriching experience for me. I want to thank all the good friends I made through my involvement with the WiC: Cheryl, Dawn, Fahmida, Karlene, Linda, Molly, Naira, and in particular Bozenna, who founded this group and was the original inspiration behind my joining it. Thanks also to Elena, Laurie, Tannen and all the others that helped with the web site, the mailing list, the newsletter etc. This is not a goodbye. I'll surely continue to be an active member of the group and ready to serve the Society in other capacities. New people bring new ideas and I am sure that Elena has many new wonderful projects to carry on. Please welcome, Elena, as our new chair. With my very best wishes to each of you and all of you, Annamaria. 3. Letter from the New WiC Chair Dear Colleagues and Friends:

First, let me introduce myself. My name is Elena Zattoni, I am an Assistant Professor at the Faculty of Engineering of the University of Bologna, where I hold courses on Control Systems for Undergraduate Students in Electronics and Electrical Engineering. I perform my research activities in the area of Automatic Control in the Department of Electronics, Computer Science, and Systems. In the past years I also had visiting positions at Brown University and at the Institut de Recherche en Communications et Cybernetique de Nantes, France. I live in Bologna, a middle-sized Italian town renowned for the old tradition of its University, the forty kilometers of porticos, and the excellent cuisine of its restaurants (I believe that the three features I have mentioned are closely connected). Presently, my favorite pastime is attending a conversation course at an Italo-

American cultural association hosted by Johns Hopkins Bologna Center (so, please, be patient with my English: I am working to improve it!)

I am really happy and honored to volunteer for the IEEE Control Systems Society as Chair of the Committee on Women in Control. Hence, I would like to express my deepest gratitude to the colleagues I have met since 2002, when I started coordinating the WiC web site, and who have motivated my activity with their commitment: namely, Linda Bushnell, Fahmida Chowdury, Naira Hovakimyan, Bozenna Pasik Duncan, Anna Maria Perdon, Cheryl B. Schrader, Dawn Tilbury, and many others. I would also like to say a special thank you to Tannen VanZwieten, newsletter editor, and Laurie Ricker, mailing list coordinator, for their continuous and crucial, although somehow hidden, technical support.

And now, I have come to aims and scope of my service. It is my belief that women involved in engineering and scientific fields generally are professionally outstanding, determined, and courageous individuals. However, sometimes circumstances (like, e.g., the fact that women are a minority in this kind of professions) make things more difficult than they should be. The purpose of my activity, adhering to that of the Committee, is to help coordinate actions aimed at smoothing and, hopefully, compensating such difficulties. As many of you already know, these actions are gathering and spreading information of interest to our profession (like e.g. open position announcements, member expertise, initiatives within the Control Systems Society, funding sources, internationalization programs), promoting professional meetings (as is usually done at the ACC and CDC WiC luncheons), and fostering professional networks. Certainly, the success of these initiatives is heavily dependent on the interest and participation of you all in them. Hence, I warmly invite you all to make suggestions and contribute your direct involvement.

I look forward to hear	ing from you.

Best Regards,

Elena

4. Roommate Location Service for 2007 ACC Contributed by Amanda Young

On behalf of the Women in Control (WiC), Amanda Young will be organizing a Roommate Location Service for the 2007 ACC. If you would like to share a hotel room and need assistance finding a roommate, send an email message to ayoung83@vt.edu with your: (1) name, (2) gender, (3) email address and other contact information, (4) date arriving at the Conference hotel, (5) date checking out of the Conference hotel, (6) smoking preference, (7) any other information you wish to add.

This information will be compiled into separate lists for male/female respondents and distributed by email. You will be responsible for contacting and screening prospective roommates from that list and making your own hotel reservations and arrangements.

Please note that this service is a resource to merely locate potential roommates, not to match specific individuals together. In so doing, neither the organizer nor WiC will be held responsible for any situations that arise as a result of room sharing between particular parties. In addition, this service will end after June 15, 2007. Therefore, interested individuals should send the above information well before this date.

5. Special Invitation for Women in Control at ACC'07

Contributed by Bozenna Pasik-Duncan, Chair of CSS and AACC Technical Committees on Control Education.

All women in control are kindly invited to the Early Evening Reception and the Semiannual Meeting of the CSS and AACC Technical Committees on Control Education with **Ginger Warfield**, the 2007 recipient of the AWM L. Hay Award, as a keynote speaker,

at 5:45 pm, Thursday, July 12, at the ACC'07 in New York City.

By talking about her contributions to education through her teaching, graduate student training and mentoring, work on the didactics of mathematics, and outreach and collaborations with K-16 communities, **Ginger Warfield** will be inspirational to many of us, in particular to young members of our community who are looking for new educational initiatives with a "broad impact", an important part of every NSF research proposal.

This session will help our Control Community to assist the 2007 President of the IEEE on her goals: "One of my goals as 2007 President is to foster programs and activities that promote greater visibility for the IEEE and our profession, not only to employers but also to a wide range of public", wrote Lean H. Jamieson in the President's column, in March 2007, Vol.31, No1 of the Institute.

Let me introduce my special speaker:

Virginia Warfield received her doctorate from Brown University in 1971 under the direction of Wendell Fleming, and continued to contribute to the field of stochastic analysis for several years. At the same time she became increasingly absorbed by problems of mathematics education through her work with Project SEED, a highly regarded mathematics program whose goal was to promote sense-making mathematical activities for fifth and sixth grade students.

Her work with Project Seed led to her becoming the leader of the University of Washington mathematics department's entry-level mathematics courses, which she restructured in ways that have stood the test of time and which she continues to oversee. Eventually, teacher preparation and enhancement, both of K-12 teachers and mathematics graduate students, became a major focus of her activity. She significantly revised the courses for future teachers and has served as a mentor for graduate students throughout her years at the university.

From 1994 to 2001, she was project director for "Preparing Future Faculty" in which, among other things, she arranged for graduate students to spend time at local community or four-year colleges, took them to conferences on educational issues, and arranged conferences with guest speakers. She also began a series of "brown bag lunches" for faculty and graduate students to talk over issues related to their teaching, and since 1994 she has posted electronic newsletters based on those discussions. A letter written jointly by eight recent students states: "Her vision of education and her sense of optimistic possibility have encouraged us to reflect upon our development as teachers of mathematics and to seek ways in which we might contribute to a stronger, more effective mathematics education. Most important, though, is our recognition that Ginger has been instrumental in fostering a supportive and exciting environment in which to investigate and explore the many dimensions of mathematics education."

In the broader community she was instrumental in creating Washington Teachers of Teachers of Mathematics (WAToToM), at which members of departments of mathematics and mathematics education from around the State get together for a week-end of conversation and idea-sharing. Vaughn Foster-Grahler of The Evergreen State College wrote that "it has been her leadership that had kept [WAToToM] a vibrant and integral component of math education in Washington State...Ginger is a tireless advocate for strengthening the level of preparation of K-12 math teachers and supporting the types of pedagogies that lead to success for all students."

During the past ten years she has played a leading role in three major NSF-funded teacher enhancement projects: Creating a Community of Mathematics Learners, Extending the Community of Mathematics Learners, and Graduate Teaching Fellows in K-12 Education (GK-12), all of which partner University of Washington faculty and graduate students with in-service teachers of mathematics. Warfield is described as a master in integrating various

levels of math learners and creating relationships between grade school teachers and mathematicians and as having special concern for students from economically disadvantaged backgrounds and underrepresented groups. At one GK-12 elementary school the percentage of students who passed the state mathematics standard rose in two years from under 10% to about 55%, which is above the State average. Currently, she is Co-PI of a new project, Teaching for the Environment: Active Mathematics on the Olympic Peninsula. In discussing the impact of her work, Selim Tuncel, chair of the University of Washington mathematics department, praised "her commitment to improving mathematics education at all educational levels, her clear vision of the key elements for achieving this goal, her gentle persistence, and her ability to work effectively within a research department as well as in collaboration with the K-16 education communities."

Warfield has also made significant contributions to mathematics education research through her collaboration with the French mathematician Guy Brousseau, a pioneer in the "didactics of mathematics," the scientific study of issues in mathematics teaching and learning. This collaboration has led to publication of several articles, translation and co-editorship of a book, and, most recently, a monograph about Brousseau's work and the nature of didactics.

Among her many professional activities, Warfield has been a member of the National Faculty (by election), of Sigma Xi, of the Association pour Recherche en Didactiques des Mathématiques, and of the Mathematical Association of America committees on Professional Development and the Mathematical Education of Teachers. For the Association for Women in Mathematics she has served in several capacities: Chair of the Education Committee, Member of the Association Review Group for the revision of the NCTM Standards, Member-at-large of the Executive Committee, and Education Column Editor for the AWM Newsletter.

To describe her work, Janet P. Ray, professor emerita from the Seattle Central Community College wrote: "It would be difficult to overstate the contributions Ginger has made to mathematics education. Whether through the organizations she has founded, the events she's sponsored, or the connections she's forged, Ginger's work has had a huge impact. She has also made a difference in more subtle, though no less profound ways – through example and through innumerable small acts of kindness."

AWM has been proud to honor Virginia M. Warfield for her contributions to education through her teaching, graduate student training and mentoring, work on the didactics of mathematics, and outreach and collaborations with K-16 communities.

The WiC luncheon will take place at the 2007 ACC on Wednesday, July 11. More details regarding the topic of discussion as well as the speakers will be sent out at a later date.

7. Editor Needed for WiC

Contributed by Tannen VanZwieten

WiC is looking for a new newsletter editor. This is a great opportunity to become involved with WiC. If you are interested in this position, please contact me at tvanzwie@uwyo.edu.

8. Engineer Position Announcement at Florida Atlantic University

Contributed by Frederick R. Driscoll

The Institute of Ocean and Systems Engineering at Florida Atlantic University seeks Mechanical, Electrical, Aerospace, Naval, and Ocean Engineers to work on Ocean Energy and advanced Navy projects. Responsibilities include systems engineering, applied engineering design, and testing of advanced ocean systems. The selected engineer will also be expected to manage system design, supervise technical staff and machinists, and complete documentation. Some projects underway at FAU include an ocean energy system, offshore remote sensors, a novel rapidly deployable craneship, a multi-mission rapidly deployable intermediate transfer station, air-deployable self-mooring A-Sized navigation and communications buoys, and autonomous unmanned surface vessels. Applicant must have at least a bachelor's degree in Engineering with 1-3 years min. experience in engineering design. The successful candidate should have hands on experience and work well with teams of engineers, technicians and machinists. The successful candidate should be self-motivated and possess experience in system engineering, engineering design, advanced control, electronics, programming in C/Matlab/Simulink, and CAD/CAM. The position is based at the SeaTech campus in Dania Beach, Florida and is available immediately. Interested persons should contact Rick Driscoll following the reference below.

Frederick R. Driscoll, Ph.D. Associate Professor and Director of the Center for Ocean Energy Technology

Department of Ocean Engineering Florida Atlantic University, SeaTech Campus, 101 North Beach Road, Dania Beach, FL, 33004 954.924.7221 rdriscol@oe.fau.edu

9. Post Doctoral Position Announcement 1 at Florida Atlantic University

Contributed by Frederick R. Driscoll

A funded postdoctoral position is available starting immediately, in the Institute of Ocean and Systems Engineering at Florida Atlantic University. Projects will focus on hull design, optimization, control, and stability of novel vessel designs. This position requires an earned Ph.D. in Naval Architecture, Ocean, Marine, Mechanical, or Electrical Engineering with a strong background in ship control and applied design. Experience with systems engineering and hydrodynamics would be a plus. The successful candidate should be self-motivated and possess strong written and oral communication skills. The position is based at the SeaTech campus in Dania Beach, Florida. Interested persons should contact Rick Driscoll following the reference below.

Frederick R. Driscoll, Ph.D.
Associate Professor and Director of the Center for Ocean Energy Technology Department of Ocean Engineering
Florida Atlantic University, SeaTech Campus,
101 North Beach Road,
Dania Beach, FL, 33004
954.924.7221
rdriscol@oe.fau.edu

10. Post Doctoral Position Announcement 2 at Florida Atlantic University

Contributed by Frederick R. Driscoll

Two funded postdoctoral positions are available starting immediately, in the Institute of Ocean and Systems Engineering at Florida Atlantic University. Projects will focus on the design, optimization, and control of an ocean energy system – ocean current and ocean thermal. This position requires an earned Ph.D. in Ocean, Marine, Mechanical, or Electrical

Engineering with a strong background in ship control and applied design. Experience with systems engineering, structures, power systems, and hydrodynamics would be a plus. The successful candidate should be self-motivated and possess strong written and oral communication skills. The position is based at the SeaTech campus in Dania Beach, Florida. Interested persons should contact Rick Driscoll following the reference below.

Frederick R. Driscoll, Ph.D.
Associate Professor and Director of the Center for Ocean Energy Technology Department of Ocean Engineering
Florida Atlantic University, SeaTech Campus,
101 North Beach Road,
Dania Beach, FL, 33004
954.924.7221
rdriscol@oe.fau.edu

May-Win Thein, Ph.D.

Associate Professor Department of Mechanical Engineering University of New Hampshire W117 Kingsbury Hall Durham, NH 03824-3591 USA

phone: (603) 862-1158 fax: (603) 862-1865

e-mail: mthein@cisunix.unh.edu

Currently on Sabbatical

phone: (603) 397-0109

Applied Math Section School of Applied Mathematics and Statistics G9, Hicks Building University of Sheffield S10 2TN United Kingdom