

Women in Control Newsletter

January 1998

Chair: Cheryl B. Schrader
Newsletter Editor: Fahmida Chowdhury
Database Coordinator: Kewen Yin
Mailing List Coordinator: Dawn Tilbury

In This Issue:

1. Editor's Note
 2. From Bozenna
 3. Survey of Engineering Departments
-

1. Editor's Note:

Dear Friends,

Happy New Year, Everyone!! I hope 1998 has started for you on a positive note. One of my New Year's resolutions is that I will try to send out this newsletter on a more regular basis than I did last year. And I need your help, because if I don't receive any contributions from you, then it is indeed hard to put a newsletter together! This time, Bozenna came to my rescue ... she sent an informative and interesting article for us.

Sincerely,

Fahmida Chowdhury
email: fnchowdh@usl.edu
Dept. of EECE
University of Southwestern Louisiana
Lafayette, LA
ph. no. 318-482-5366

2. From Bozenna:

Dear Friends,

The year 1998 arrived very fast for me and it is passing even faster ... I wish you and your family happiness. I hope that this coming year will bring the best to you.

In my Christmas note to my friends I wrote "I feel terrific now in this country. I have received this kind of recognition among students, parents, colleagues, friends, neighbors, that makes you the happiest person in the world." Thanks to all of you for YOUR big contribution to my happiness. Thanks for all your wonderful letters with very kind words of your generous recognition.

The 36th CDC is gone. It was an excellent meeting and as usual we, women in control, got together for lunch. We exchanged a lot information. The purpose of this Newsletter is to share with you the article which I wrote for Control Systems Magazine with a lot of important for us information. The article will appear in April issue. Big thanks to Fahmida, Molly, Cheryl and Steve Yourkovich, editor of Control Systems Magazine, for their outstanding editing.

In this article you will find among others the information that Cheryl Schrader is Chair of our group for this year. Thank you , Cheryl for taking this position.

I also include two announcements for your interest and summary of the Symposium on Stochastic Control and Nonlinear Filtering That took place last December in Los Angeles. I hope that our group will be growing as beautifully as it has been in the past and I hope that all of you who are not members of the IEEE Control Systems Society will become members this year and bring your friends, students and colleagues to our Society. More of us means each of us and all of us will feel stronger.

Committee on Women in Control

The committee was created over 3 years ago in order to bring increased participation by women in control in the activities of the Control Systems Society, its sections and chapters, and to generally promote the role of women in control.

The committee's main thrust during the first years of existence has been to establish contacts with correspondents in different geographical regions and begin to explore the circumstances that have resulted in women's low representation in the Control Systems Society. Some findings are worth noting (statistics provided by Dawn Tilbury):

Current mailing list breakdown by domain (154 members total)		
Domain Code	Member Total	Domain
at	1	Austria
au	3	Australia
ca	8	Canada
ch	3	Switzerland
com	13	US company
cn	2	China
de	1	Germany
edu	86	US educational
ee	1	Estonia
fr	3	France
gov	5	US government
gr	1	Greece
hu	2	Hungary
il	1	Israel
it	5	Italy
jp	3	Japan
mil	3	US military

nl	1	Netherlands
no	4	Norway
ru	1	Russian federation
tw	1	Taiwan
uk	6	United Kingdom

The group of women in control has been continuously growing. There has been a very noticeable number of women in control attending our major conferences and there is a significant increase of women involved in major activities of our Society. We will soon have four female elected members of the Board of Governors. There are women on the editorial boards of our major journals; women in charge of the program, finance and publicity committees of our major conferences; many women in charge of major member activities committees: history, membership, women in control, engineers at risk, and student activities.

There is still so much to change. We have only 8 female senior members out of 365 female members in a Society of almost 13,000 members. We have only 3 female Fellows in the Society. The committee will work intensively on identifying qualified individuals and promoting their status. The following is an overview of the 1996 data on IEEE members (statistics provided by D. W. Repperger):

General IEEE Members		
Category	Number	Percent of Total
Fellow	4,929	1.58%
Senior Member	25,071	8.05%
Member	208,348	66.88%
Associate	32,355	10.39%
Student	40,821	13.10%
Total	311,543	100.00%
Control Systems Society Members		
Category	Number	Percent of Total
Fellow	305	2.59%
Senior Member	761	6.48%
Member	7,188	61.24%
Associate	1,189	10.13%
Student	2,295	19.55%
Total	11,738	100.00%
Women IEEE Members		
Category	Number	Percent of Total
Fellow	41	0.23%
Senior Member	309	1.71%
Member	10,194	56.47%
Associate	2,495	13.82%
Student	5,012	27.77%
Total	18,051	100.00%

Conclusions:

- CSS SM < General IEEE SM
- CSS F > General IEEE F (Multiple Societies)
- CSS Students > General IEEE (Good!)
- Women: SM decreasing, F decreasing, Students increasing
- Women = 12.3% of students but only 4.8% of Members and 0.83% of Fellows

The committee has a database, runs the electronic newsletter regularly and has a mailing list with 165 members on it. We also have a web site which I encourage you to visit:

http://www.ee.odu.edu/~org/IEEE_CSS/web/women.html.

We have established regular get-together lunches during our major conferences. These have been very successful meetings.

I would like to take the opportunity to say thank you to Fahmida Chowdhury, the editor of our newsletter, Dawn Tilbury who is in charge of the mailing list, Kewen Yin who is in charge of the data base, and Molly Shor for their outstanding contributions to the committee.

Our electronic newsletter stands as a role model for other committees. It has shown that this is a very effective way of gathering information regarding the status of women and initiatives for both within and outside of the IEEE Control Systems Society. We exchange information about job opportunities, fellowships and conferences. Fahmida has done outstanding work editing this newsletter.

The purpose of our mailing list is to provide a forum for women with interests in the control fields to communicate with each other. You might want to send requests for information or advice, notices about conferences or workshops, job advertisements, or comments on current events or your own experience to the list. To send mail to all the members of the list, address your e-mail to "women-in-control@umich.edu." The list currently has about 150 members. Requests to join or leave the group should be sent to "women-in-control-request@umich.edu." Dawn has done outstanding work updating this mailing list.

There is also a database of women-in-control maintained by Kewen Yin. You can send your information to her at kyin@ub.d.umn.edu. Her preferred format is:

Name:

Occupation:

Address:

Phone Number:

Fax Number (if available):

E-mail Address:

Research Interest (optional, 3-4 lines at the most)

Kewen has done outstanding work maintaining this database.

I would like to recognize Molly for organizing the initial Women in Control database and e-mail alias for the Women in Control network, for co-organizing early meetings at conferences, and founding a Electronic Roommate Clearinghouse to help women (and men)

find roommates at conferences. She was also a co-founder of the Newcomer Receptions at CDC and ACC and involved in discussions on Women in Control and making Society membership and conference attendance attractive to new members.

Finally, the 1998 Chair of the Committee is our active member, Cheryl Schrader. Cheryl has a long history of involvement in the Society's activities in different capacities including being an elected member of the Board of Governors, and Chair of Student Activities with the student Best Paper Award. Thank you to Cheryl for taking on this very important position. I believe that Cheryl will contribute much to our committee.

We are planning to continue working on finding the best ways to increase the participation and membership of women within IEEE CSS. We shall continue identifying female members qualified for Senior Membership which is the highest IEEE membership grade obtained for recognition of accomplishment by peers, for professional advancement and for personal satisfaction. Those who have at least ten years active professional practice, with five or more years of significant performance, accomplishments in engineering, publications, management, education or professional contributions. We highly recommend all qualified IEEE members to apply for Senior Membership. Another reason to apply for Senior Member grade is required before one is eligible for IEEE Fellow nomination. To obtain Senior Member Application forms, please contact:

IEEE Operations Center
Admission and Advancement Committee
445 Hoes Lane
P.O. Box 1331
Piscataway, NJ 08855-1331
tel.: 732-562-5502
fax: 732-981-0225
e-mail: rab.aa@ieee.org.

The work of the committee has been divided into a number of subcommittees headed by one of the committee members:

- 1998 Chair: Cheryl Schrader, schrader@voyager7.eng.utsa.edu
- WiC (Women in Control) Electronic Newsletter (Fahmida Chowdhury): fchowdh@mtu.edu
- Mailing list (Dawn Tilbury): tilbury@umich.edu
- Database (Kewen Yin): kyin@ub.d.umn.edu

You are invited to contact any of these committee members if you would like additional information, would like to share with us initiatives you know about both within and outside of IEEE CSS or would like to work with us on any of the initiatives.

I would like to thank Dan Repperger, Vice President for Member Activities, for his invaluable involvement in helping us to grow and strengthen.

I would also like to thank the four former Presidents, H. Rauch, D. Atherton, M. Masten and P. Antsaklis, current President H. McClamroch and future President S. Yurkovich for their generous support and continuous encouragement and I would like to thank all the members of the Board of Governors for their high recognition for the Women in Control Committee and for promoting the role of Women in Control in our Society.

Bozenna Pasik-Duncan
vice President for Member Activities
Department of Mathematics
405 Snow Hall
University of Kansas
Lawrence, KS
bozenna@kuhub.cc.ukans.edu

Announcements:

- J. Message from Japan. Announcement about the 11th International Conference of Women Engineers and Scientists "Science and Technology for Global Ecology, " Chiba, Japan , July 24-27, 1999.

I thank you for your kindness to support our ICWES-11 hold in '99 July in Makuhari near Tokyo. We plan to mail 2nd announcement in May, so on the next Saturday (17th we'll meet to make it).

Exactly we can't gain enough money nor donation yet. But we try to gain it from our Japanese companies (at least now we think so) not borrow from the World Bank. What I want to ask you is to inform our ICWES-11 all over the world, please. We need attendance, advertising on the proceeding book,(1 page cost 100,000 Yen A-4 size Half page cost 50,000 Yen) and donation-,not only money but lease of machines, air tickets, coke, or so.

My dream is to invite many young female scholar and students from Asia, but as you know Financial condition of Asia is so terrible. I went to Jakarta last Nov. so I couldn't go to San Diego.I could meet Ministry Hattori to gain support ICWES in Jakarta, but he said "I think this organization is not strong enough to support." I went back to Japan and asked Dr. Tsugawa about it. She is very confirmed herself. But we think how make ourselves understood easily, by many companies to gain donation and gain attendance. Do you have an idea how we can let Asian young scholars, engineers, students attend ICWES who don't have enough money, and what's more, Asian, companies are bankrupt now.

I could meet WiC members in Jakarta,they're helping poor students and poor peoples organized by rich women (half are foreigners, half are Indonesian, including many ambassadresses). I think WiC should be very helpful. If you good network to inform about ICWES, please tell me or tell Dr. Tsugawa. If you have good advice to us would you please give me or Dr. Tsugawa. I was very happy to meet you in Kobe! And I could meet Csilla in Fukuoka last July, with her superior 2 sons.

Bozenna, thanks a lot! I'll write to Csilla, too. Take care for yourself because it'll be very cold this year.

Sincerely kyoko SANO

-
- K. Announcement about postdoctoral position at the University of British Columbia:

Dear Friends,

I would like to sponsor a postdoctoral fellow for the next academic year or two under the Pacific Institute for the mathematical sciences fellowship program (see below). The annual salary will be in the \$30,000 - \$32,000 range and come from PImS, my grant and the University. Duties would probably include teaching one course per semester to about 30 students. Candidates should show good research potential and be interested in the area of stochastic control or mathematical finance.

Unfortunately time is short; I must have the following material by January 25:

1. curriculum vitae of the candidate,
2. statement of research interests,
3. two letters of reference.

This material should be faxed (604 822-6074), emailed (letters of reference faxed), or couriered to me. Canada Post is too slow. Please pass this on to any interested individual. And all the best for the New Year.

Ulrich Haussmann

L. Call for nominations for PImS POSTDOCTORAL FELLOWS

Scientists affiliated with The Pacific Institute for the mathematical sciences are urged to nominate outstanding young researchers in the mathematical sciences for PImS postdoctoral awards. The deadline for nominations is JANUARY 30, 1998.

PImS will sponsor up to twenty PImS PDF's for the academic year 1998-99, including possible renewals of current PImS postdocs. Any scientist or department at any of the founding or affiliate universities may nominate a candidate. Candidates must have a Ph.D. or equivalent (or expect to receive a Ph.D. by July 1998) and be within three years of their Ph.D. at the time of the nomination.

Award decisions will be made by the PImS Scientific Review Panel based on excellence of the candidate, potential for participation in PImS programs and potential for involvement with PImS partners. PImS Postdoctoral Fellows will be expected to participate in all PImS activities related to the Fellow's area of expertise and will be encouraged to spend time at other sites. A travel stipend of up to \$500 for visiting other PImS sites during the year of the award will also be available to each Fellow.

Ulrich Haussmann
Department of Mathematics
University of British Columbia
1984 Mathematics Rd.
Vancouver, B.C. V6T 1Z2
Tel: (604) 822-3045
Fax: (604) 822-6074
email: uhaus@math.ubc.ca

M. Some remarks after the Symposium on Stochastic Control and Nonlinear Filtering December 13-16, 1997, University of Southern California, Los Angeles.

- The Symposium was the best that we have attended during the last several years.
- It brought together 55 participants including 15 students and postdocs from different universities and companies.
- We had leading stochastic control and nonlinear filtering people including: W. Fleming, R. Khasminskii, R. Rishel, T. Duncan, B. Rozovskii, I. Karatzas, J. Baras, D. Ocone, H. Nagai and many others.
- We had 45 talks which were well prepared and beautifully presented during two and a half days with 100% participation.
- We had a four hour get-together on Sunday evening and we had a lovely and entertaining panel discussion on Monday evening.
 - Part One of the panel discussion included senior participants W. Fleming, R. Rishel, R. Khasminskii, T. Duncan, B. Rozovskii and D. Ocone.
 - Part Two was held by students and postdocs Dora Matache and Peter Zimmer from the University of Kansas, Michelle Boue, from the University of Massachusetts, Adam Szpiro from Brown University, Kavita Ramanan from Bell Labs, Omar Zane from the Chicago Bank in London, Aleksandar Zatezalo from the University of Minnesota and Andrius Jankunas from Wayne State University.

To summarize what we learned during the symposium: we discussed the status and future development of stochastic control and nonlinear filtering and we talked about control education. The following question was addressed:

Do we teach courses that prepare our students well for working for industry? The students answered "yes." The students think that they get good education. They wish that we could build the language bridge to communicate better between academia and industry. Students are extremely positive about general education in control. They love this area and they feel lucky to study or work in this area.

Let me quote some of students:

- "The conference was a great learning experience for me. I got to meet and hear from some the top researchers in my field. I deem this experience invaluable for the work for my degree!"
- "The more basic courses are the most valuable courses for students, rather than courses concentrated a small topic."
- "I feel very lucky to be studying at the Brown University."
- "I feel very lucky to study at the University of Kansas."
- "Seeing how and what real researchers present their work really helps me to prepare to try to join this group."
- "Industry is looking for people who can run into brick walls and survive."

The symposium was just perfect. I promised to organize the next one soon. Once again, thanks to all agencies for their generous support and in particular big thanks to

the NSF for its support for students. Student's joy, satisfaction and gratitude have been the most rewarding. We are very proud to say that the support has been used in the best possible way. Personally I have learned a lot, got many ideas and feel good that a good job has been done.

Bozenna Pasik-Duncan with Boris Rozovskii (organizers of the Symposium)

3. Survey of Engineering Departments:

Please take a few minutes to answer the following questions about your department if are currently a student, postdoc, or faculty:

- . How many undergraduate students are there in your department?
- A. How many graduate students are currently enrolled?
- B. How many full-time faculty members?
- C. How many lab technicians and/or engineers?
- D. How many secretaries, receptionists, etc.?

The purpose of this survey is to help me, your newsletter Editor, to help my Department Head compare our department with the "typical" department out there. Please respond if you can! Thanks for your time
