Newsletter Editor: Naira Hovakimyan (naira.hovakimyan@ae.gatech.edu) Chair of WiC: Fahmida Chowdhury (fnchowdh@louisiana.edu) Database Coordinator: Dawn Roberson (robersondj@ieee.org) Mailing List Coordinator: Dawn Tilbury (tilbury@umich.edu) Advisors: Bozenna Pasik-Duncan (bozenna@math.ukans.edu) Cheryl Schrader (schrader@utsa.edu) Web Page: http://voyager1.utsa.edu/~schrader/women-in-control/ Web Team Coordinator: Dawn Roberson 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, #5, 2001:

1. Editor's Note

2. CDC WiC Luncheon, from WiC Chair Fahmida Chowdhury

3. Roommate solicitation for CDC Conference

4. Women in Engineering in far away Asia, contributed by Fahmida Chowdhury

5. New visitor from Belarus, Prof. Faina Kirillova, contributed by Bozenna Pasik-Duncan

1. Editor's Note

The goal of this newsletter is to integrate more and more women in control theory/applications development and to keep everybody posted on events, so if you come across interesting articles, useful information on web, that you think might be useful for our community, please feel free to contribute. As well please don't forget about job openings in your schools, companies, new books, journals, software releases, conferences, workshops, etc. Just drop me a line following my references below:

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2. CDC WiC Luncheon, from WiC Chair Fahmida Chowdhury

The IEEE CSS WiC luncheon at the CDC'01 will take place

time: 12:00pm - 1:00pm room: Orchard hotel: Hyatt Regency Grand Cypress, Orlando, Florida USA

We hope all of you attending the CDC'01 will be able to come to the WiC luncheon meeting. Fahmida Chowdhury Chair, IEEE CSS WiC

3. Roommate solicitation for CDC Conference

On behalf of WiC, May-Win Thein will be organizing a Roommate Location Service for CDC 2001. If you would like to share a hotel room and need assistance finding a roommate, send an e-mail to mthein@cisunix.unh.edu with your

(1) name

- (2) gender
- (3) e-mail 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 e-mail. 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 WiC nor the organizer 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 November 30. Therefore, interested individuals should send the above information well before this date.

If you have any other questions or need more information, please feel free to contact:

May-Win Thein, Ph.D. University of New Hampshire Department of Mechanical Engineering M212 Kingsbury Hall Durham, NH 03824-3591, USA phone: (603) 862-1158 fax: (603) 862-1865 email: mthein@cisunix.unh.edu 4. Women in Engineering in Bangladesh: My Fulbright Experience, by Fahmida Chowdhury

I spent four months (April - August 2001) in Bangladesh as a Fulbright Scholar.

I taught a postgraduate course on Neural Networks at the Bangladesh University

of Engineering and Technology (BUET), Dhaka, and worked with a research group on

biomedical signal processing. As many of you already know, I was born in Bangladesh, and lived there till finishing 12-th grade, after which I won a scholarship to the then-USSR to study electromechanical engineering. To make a

long story short ... I have now lived in the USA for about eighteen years, and I

have gone back to Bangladesh only on short visits. The trip this year was an exception: spending four months in Bangladesh was made possible through the Fulbright award and due to the patience and understanding of my husband and daughter. I am very grateful for that.

My long visit to Bangladesh was an eye-opener. I had to live without many of the

conveniences that I take for granted in the USA. I spent my days in an un-airconditioned office. I did research with local colleagues who get very little reward for being active in research. I taught students who are themselves

lecturers at the university - they teach lower-level courses and labs, and they

also teach at other, private universities to earn extra money. Life is not easy

in Bangladesh: not even for the best and brightest of students and professors.

The country plunges into political turmoil every now and then, terrorist attacks

are common, law and order situation is bad (to put it mildly), and traffic congestion in the capital city is terrible. In the midst of all this, many new

universities are growing, old universities are being modernized, people are buying computers, internet use is spreading, course syllabi are getting updated,

conferences and workshops are being organized - in short, life is vibrant and

intense.

I could write volumes about my experience during this stay, but I shall focus on

the situation of women at the engineering university. The first impression you

get, as you enter the campus, is that there are a lot of women there. The official estimate is around 25%, but due to their colorful clothes they are rather pleasantly noticeable, and seem to be a large number. Many of the best

students are women, but the number of women faculty members is very low, specially at the senior ranks. The Chemical Engineering department seems to be

an exception: its women faculty include one full professor, one assistant professor, and two lecturers - the total number of faculty is 14. Four out of 14

is not bad! In contrast, the electrical and electronics engineering department

has a total of 49 faculty, out of which only five are women, all lecturers. In

1981, I was one of the first two women lecturers recruited into that department.

It appears that after twenty years, not much progress has been made in recruiting and retaining women faculty. The computer science and engineering department has 26 faculty members, out of which only two are women - one lecturer, one assistant professor. The mechanical engineering department has three women, all lecturers - out of a total of 41 faculty members. You can see

that at the faculty level, this university is overwhelmingly male dominated. The

administration is 100% male - with the exception of typists and receptionists.

I did not come across any active organizations for women in BUET, and I suspect

that the women students have no role models or senior mentors. However, I noticed that the women students were quite self-confident, and mingled easily

with the male students - I did not see them in separate, all-women clusters. This was very encouraging to me - it indicated that the women students do not

feel lonely in the engineering departments. Moreover, the proportion of women in

the engineering departments in Bangladesh is not any lower than what I see in

the USA. This year, in my senior-level control systems class, there are only two

women among 44 students, and I am one of only two women faculty in the College

of Engineering at the University of Louisiana Lafayette. At nearby Louisiana State University, the department of electrical and computer engineering has NO

women faculty, and the entire College of Engineering at LSU has only five. This

seems to be a global pattern. I encourage readers of this newsletter to

think

about ways to attract more girls into the field of engineering. Let each one of us be an ambassador in our own schools and institutions, our own cities and countries - let us become more active in educating the general public, specially women, about the field of engineering. I would like to hear about some specific ideas from you. Email me at fnchowdh@louisiana.edu with your ideas. Getting back to my Bangladesh experience: one encouraging aspect I noticed is that many young girls in middle and high schools aspire to become engineers. They typically think that engineering is hard, but that does not stop them from dreaming. Nonetheless, the number of women in the field of engineering remains low (although those who enter the field do very well), and the number of women engineering faculty members remains pathetic. My final thought before ending this piece - I encourage all of you to explore the Fulbright program - you may find a number of possibilities for study programs, research and/or lecturing awards that suit you. Check out the web site http://exchanges.state.gov/education/fulbright. I shall be happy if I can help you in any way. Fahmida N Chowdhury Associate Professor, Electrical and Computer Engineering Chevron/BoRSF Regents Professor University of Louisiana Lafayette Tel. 337-482-5366, Fax. 337-482-6687 Email: fnchowdh@louisiana.edu

5. New visitor from Belarus, Prof. Faina Kirillova, contributed by Bozenna Pasik-Duncan

Dear Friends,

I would like to bring your attention to our special visitor from Belarus, Prof. Kirillova,

an outstanding scholar, advisor to 46 Ph.D students, (see her short bio below) .

Professor Kirillova is one of six " Selected Women Contributors to Control Systems Theory, Applications, and Technology", in the article that will appear in the CSM written jointly with N. Harris McClamroch from The University of Michigan, Ann Arbor, Michigan and on which you had assisted me so beautifully. As the result of this learning process about women in control as great contributors to control theory, Professor Kirillova has just arrived at Lawrence,

Kansas from Minsk, Belarus (a very long trip !) for the conference on Stochastic Theory and Control.

Control,

http://www.math.ukans.edu/ksacg/stcwshop.html,

which we organize and which will start this coming Thursday, October 18. Prof. Kirillova will spend one week in Lawrence, Kansas. She came during the time that it is not the best for traveling to States. Several other invited speakers cancelled their trips but Professor Kirillova made a commitment and she is here, ready to speak about her true love for control! She has been sharing this love with her husband, Professor Rafail Gabasov, and she has passed this love to her daughter, Dr. Olga Gabasov.

This is truly exciting and ... emotional event for me. First I knew Professor Kirillova from doing my homework on her work and now ... I am going to meet her in a moment ...

We feel very honored having her here, I will be particularly honored and very proud to introduce her as the first plenary speaker at the Conference that I organized to honor Professor Tyrone Duncan , my husband and my best mentor, and an important contributor to stochastic control theory. There will be 45 outstanding invited talks and over 100 participants, I will share my thoughts with you after the conference .

With my very very best wishes to you and your families - Bozenna

Faina M. Kirillova' brief bio

Faina Kirillova was born September 29, 1931, in Zuevka, Kirov region, Russia, USSR. Her research areas include qualitative theory of optimal control, general theory of extremal problems, optimization algorithms, synthesis of optimal control systems, and control stabilization. Kirillova received an M.S.degree from the Ural State University, Ekaterinburg (Sverdlovsk), Russia, in1954 and a Ph.D. degree (under the supervision of Academician N.N. Krasovskii) from Moscow State University, Moscow, in 1961. She was the first woman mathematician in Belarus to receive the Doctor of Science degree from State University of St. Petersburg, in 1968. Her professional experience included serving as Head

of the Department of Control Processes Theory, Institute of Mathematics. She was the first woman mathematician to become a corresponding member of the National Academy of Sciences of Belarus, Minsk, Belarus, in 1969. She was Professor, Department of Applied Mathematics and Informatics, Belarusian State University, Minsk, Belarus, from 1968 to 1976 and 1986 to 1992. She supervised 46 theses dealing with the qualitative and constructive theory of optimal control, feedback control, stabilization, and control applications. Kirillova has published widely, including nine monographs and over 300 papers in the fields of optimal control, constructive methods of optimization, fast optimization algorithms, feedback control, stabilization, and economical cybernetics. Kirillova has received numerous awards recognizing her control contributions. These include the Prize of the Council of Ministers of the USSR in 1981, the Prize of the Council of Ministers of the USSR in 1986, and the Prize of the National Academy of Sciences of Belarus in 1995. Kirillova was elected a corresponding member of the National Academy of Sciences of Belarus in 1996 for her work in mathematical cybernetics. She has been actively involved in many professional activities, especially in the International Federation of Automatic Control (IFAC). She was a member of the IFAC Working Group on Control Applications of Nonlinear Programming, 1975-1989, Vice-Chairman of the IFAC Committee on Mathematics in Control, 1981-1990, Chairman of the IFAC Working Group on Control Applications of Optimization, 1990-present, and Chairman of the IFAC Technical Committee on Optimization Methods, 1994-1996. She is President of the Belarusian Association of Control and Management, 1994-present, and is a member of the editorial boards of the journal Optimization (Germany) and the journal Control and Cybernetics (Poland).

Kirillova has three daughters. One of her daughters, Olga Gabasova, works on control applications in economics after having completed her Ph.D. thesis in 2000. Kirillova's husband Rafail Gabasov is a Professor and he was for 31 years head of the Department of Optimal Control at Belarusian State University.