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1. Editor's Note

Dear colleagues,

This newsletter summarizes recent contributions I have received. The goal of this newsletter is to integrate more women in control theory/applications development and to keep everybody posted on events. Please feel free to contribute information that you think might be useful for our community. This can include interesting articles, information on web, job openings in your schools, companies, new books, journals, software releases, conferences, workshops, etc. Please send any contributions to me following my reference below:

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2. WIC Luncheon at 2005 ACC
Contributed by Anna Maria Perdon

As usual, I expect to see all of you at the WiC luncheon at the ACC in Portland, Wednesday 8 June, from 11:30am 1:30pm. The room is not yet fixed; it will be announced on our web page and at the conference. During the lunch Karlene Hoo and Fahmida Chowdhury will organize a panel discussion on "the important aspects of mid-career change". There will be also a special session on the same topic: some of the panelists are C. Schrader, B. King, M. Burka and S. Phosh. You will shortly find more details on the web page.

Thanks, Annamaria

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3. Panel Discussion for the Mid-Career Professional at 2005 ACC
Contributed by Karlene A. Hoo

There will be a special session at the 2005 ACC. It is titled

“The Mid-Career Professional: To change or not change your job direction?”

This session provides a forum for discussing important aspects of job direction change for the mid-career professional. To make a change or to not make a change? What are the important factors to be considered? There will be presentations from successful professionals who changed jobs and moved to other positions, and there will be a question/answer period with audience participation.

Chair and co-chair are: K. A. Ho and F. Chowdhury
Panelists include: C. Schrader, S. Posh, M. Burka, and B. King

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4. Professional Development Panel for Women Faculty: Pathways and Checkpoints
Contributed by Cheryl Schrader

WiC Colleagues,

Below is an excerpt describing a panel discussion to be held June 15, 2005, 8:30-10:15am, at the 2005 American Society for Engineering Education Annual Conference & Exposition in Portland, Oregon. Several WiC members are involved and you are all

welcome to stop by if you find yourself in Portland. Feel free to email potential questions for the panelists to the moderator F. Carroll Dougherty at doughert@jaguar1.usouthal.edu even if you will not be able to attend.

Best regards,
Cheryl

PROFESSIONAL DEVELOPMENT PANEL FOR WOMEN FACULTY: PATHWAYS AND CHECKPOINTS

F. Carroll Dougherty, Cheryl B. Schrader
University of South Alabama / Boise State University

Abstract

Finishing the Ph.D. is always considered to be the hard part; but it is simply the beginning of a long string of challenges and opportunities, checkpoints and pathways. Many women are drawn to an academic career path because of their interest in teaching, research, and outreach potential to others. But sometimes the pathways to success seem unfriendly or unclear. It is not always easy to chart one's progress and define the steps needed to accomplish a goal. And it can be all too easy to get sidetracked, particularly for women. This panel brings together women faculty to address some of the paths and steps in navigating a successful academic career. Three pathways will be covered: the non-tenure research track, industry or government experience first, and the traditional academic track. Checkpoints to be addressed include tenure, promotion to full professor, and moving into the administrative track. Panelists include women from all three paths at different points in their careers. While difficulties for women in particular will be addressed, the focus of the panel will be on the positive actions women can control and use to define a thriving career in academia.

Introduction

In the 2002-2003 academic year, 17.4% of doctoral degrees in Engineering and Computer Science in the United States were awarded to women [1]. The distribution of these degrees ranged from virtually none in the Mining and Architectural engineering fields to more than 30% in the Biomedical, Environmental, Engineering Management, and Computer Science (outside of engineering) programs [1]. These women are now settling into their first positions as doctorates and are trying to determine what is next in their career lives. In that, they join with hundreds of women before them in ascertaining where they want to go and how they can best get there.

While most women engineers at entry-level positions start out even with or perhaps somewhat higher than their male counterparts in terms of salary and title, as they progress in their careers they tend to fall behind in status, pay and positions [2]. The reasons for this are extremely complex and resist easy categorization [2, 3]. Some of the reasons

given include historical gender roles, biology, economics, the academic culture, and women's choices. Issues such as these will be addressed by this panel as we look at pathways and checkpoints to a successful academic career.

Discussion

Many women are drawn to an academic career, and it is certainly a viable option for a professional with a doctorate degree. Entrance to an academic career may come immediately following the earning of a doctorate or after one or more stints in an industrial or government laboratory as a research associate/scientist or post-doctorate. Once inside academia, a professional chooses among tenure track or non-tenure track pathways. While traditionally women were relegated to the non-tenure track roles [2, 3], more women are taking charge of their careers and making informed decisions with respect to tenure versus non-tenure track positions. The percentage of women tenured/tenure-track faculty members has slowly been increasing (9.9% of all engineering faculty in 2003 versus 8.9% in 2001 [1]). Women held 17.4% assistant professorships, 12.3% associate professorships, and 5.2% full professorships in 2003 [1]. Women are making slower inroads into administration: from data collected in 2000 from Association of American Universities (AAU), 2.7 % women were department chairs [4]. It is more difficult to find up-to-date data on women holding assistant, associate or full dean positions. Rough data suggest that 4.6% of approximately 350 engineering schools/colleges nationwide are headed by women. Some of the checkpoints to be addressed in this forum are tenure, promotion to full professor, and moving onto the administrative track.

The focus of this panel will be to discuss some of the steps towards a successful academic career and the importance of making plans, considering options, and setting goals. Decisions about a woman's career development seem more complex when marriage and family plans are factored in to the equation. Does a non-tenure track position provide a better balance of professional and personal goals? Is it possible to have a successful faculty career and a family? What is the trade off in early versus late entry into academia? How does one determine the ramifications of a decision on a career? Since a pathway that works for one woman may not be possible for another, how do women professionals support and promote other women to succeed in academia? While pitfalls, discrimination, and dead-ends may be addressed, the emphasis will be on each professional recognizing the various pathways to success and making informed decisions as she navigates her way toward her goals.

At the beginning of the session, the moderator will describe the three pathways under consideration: the non-tenure track, industrial or government experience before entering academia, and the traditional academic track. She will then introduce each panelist. The panelists, described in detail in the next section, come from all three paths and are at different points in their careers. Each will be given the opportunity to say a few words about her choices and steps in career development. Some of the panelists may have questions for other panel members, and questions will also be accepted from the

audience. Participants are also welcome to email potential questions for the panelists to the moderator F. Carroll Dougherty at doughert@jaguar1.usouthal.edu.

Panelists

The six panelists are Dr. Linda Bushnell, Research Professor, University of Washington; Dr. Molly Shor, Research Professor, Oregon State University; Dr. Molly Gribb, Professor, Boise State University; Dr. Janet Hampikian, Professor and Associate Dean of Academic Affairs, Boise State University; Dr. Amy Moll, Chair and Associate Professor, Boise State University; and Dr. Cheryl Schrader, Dean and Professor, College of Engineering, Boise State University. The moderator is Dr. F. Carroll Dougherty, Assistant Professor, University of South Alabama.

Expected Outcomes

While it is unlikely that a single, clear-cut path will be defined, an understanding of different pathways and choices for women in academia will emerge from the anecdotes and experiences of the women on the panel. The authors hope that women participating in the panel will have a better idea of the various pathways and checkpoints necessary to achieve their goals. They will then be able to make their own informed decisions as they attend to their careers.

Bibliography

1. ASEE Profiles of Engineering and Engineering Technology Colleges, 2003 Edition.
<http://www.asee.org/about/publications/profiles/index.cfm>.
2. Women's Science: Learning and Succeeding from the Margins, Eisenhart, M.A. and Finkel, E. The University of Chicago Press, 1998.
3. The Woman Scientist: Meeting the Challenges for a Successful Career, Yentsch, C.M. and Sindermann, C.J. Plenum Press, 1992.
4. "Breaking into the Guild Masters Club: What We Know about Women Department Chairs at AAU Universities," Niemeier, D. A. and Gonzales, C.
<http://www.weli.eng.iastate.edu/data.asp>

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5. WiC Panel Discussions
Contributed by Anna Maria Perdon

Dear Friends,

Unfortunately I could not be with you in Bahamas, because my mother, 89 years, fell and got a hip fracture shortly before. Now things are under control and the recovering process, however slowly, is going well.