

AIP fellow Rana goes to State Department

"I've spent my entire career so far in physics, but I've always been interested in politics and international relations and just didn't know how to combine the two passions," says particle physicist Lubna Rana, this year's American Institute of Physics State Department fellow.

Rana began work in September at the Bureau of International Security and Nonproliferation (ISN). She expects that as a PhD physicist, both her technical background and her analytical abilities will help her make a meaningful contribution.

Rana says that she is looking forward to spending her fellowship year learning about the American foreign policy making process and contributing to issues she had previously followed closely on the news. "I just want to have an extraordinarily interesting life," she says, "and have the best intellectual experiences I can find that can satisfy my interests."

After her fellowship, Rana plans to return to her position as a research scientist at the University of Maryland, College Park.



Rana

Jermey N. A. Matthews

by AAAS, each fellow was placed in an appropriate office.

Audrey Ellerbee, a recent graduate with a PhD in biomedical engineering from Duke University, heard about prospects for scientists in Congress from a lab-mate. "Everyone in the lab knew that I was interested in opportunities outside of academia," she says. Her colleague told her about the S&T policy fellowship program organized annually by AAAS. "I had not heard about it before but thought it might be a great opportunity for me, so I applied," she says. Ellerbee was selected for the Optical Society of America (OSA) and SPIE Arthur H. Guenther fellowship and is currently engaged in tax and banking policy issues for Sen. Carl Levin (D-MI). Although working in a field outside her training, she is drawing from her diverse background, which includes a summer stint as a financial analyst with JPMorgan Chase and Co.



Bowen

Natural Resources. Jackson, who has a PhD in materials science and engineering from MIT, is this year's recipient of the joint fellowship from OSA and the Materials Research Society (MRS).

"I want to use my scientific knowledge to benefit society," she says, "but I didn't want to be in the lab for the rest of my life." Her personal goal while on the energy committee is to learn "where science comes to play in the policy process." She adds that more scientists need to

learn how to frame their issues in ways that policymakers can understand. As it happens, her OSA/MRS fellowship predecessor, Kevin Whittlesey, who worked for Representative Doris Matsui (D-CA) and is staying there through the end of this year, contributed guidelines for improving communication between scientists and nonscientists in the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (see PHYSICS TODAY, September 2007, page 34) that was passed into law this year.

Joining the mafia

Alicia Jackson is working on the staff of the Senate Committee on Energy and



Congressional fellows sponsored by physics-related societies this year include, from left, Alicia Jackson, Alex Apotsos, Audrey Ellerbee, and John Veysey.

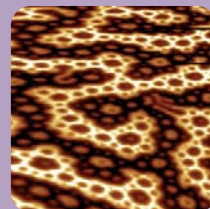
RT - SHPM Room Temperature Scanning Hall Probe Microscope



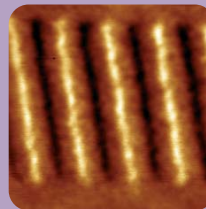
SHPM Image of
NIST
Calibration Sample



SHPM Image of
NdFeB
Demagnetised Magnet



MFM Image of
Hard Disk



RT-SHPM Head



Scanning Hall Probe Microscopy

- 50 nm spatial resolution
- Real time scanning with SHPM!
- Unprecedented sensitivity:
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- AFM or STM Tracking SHPM

Multi-Mode Operation:

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