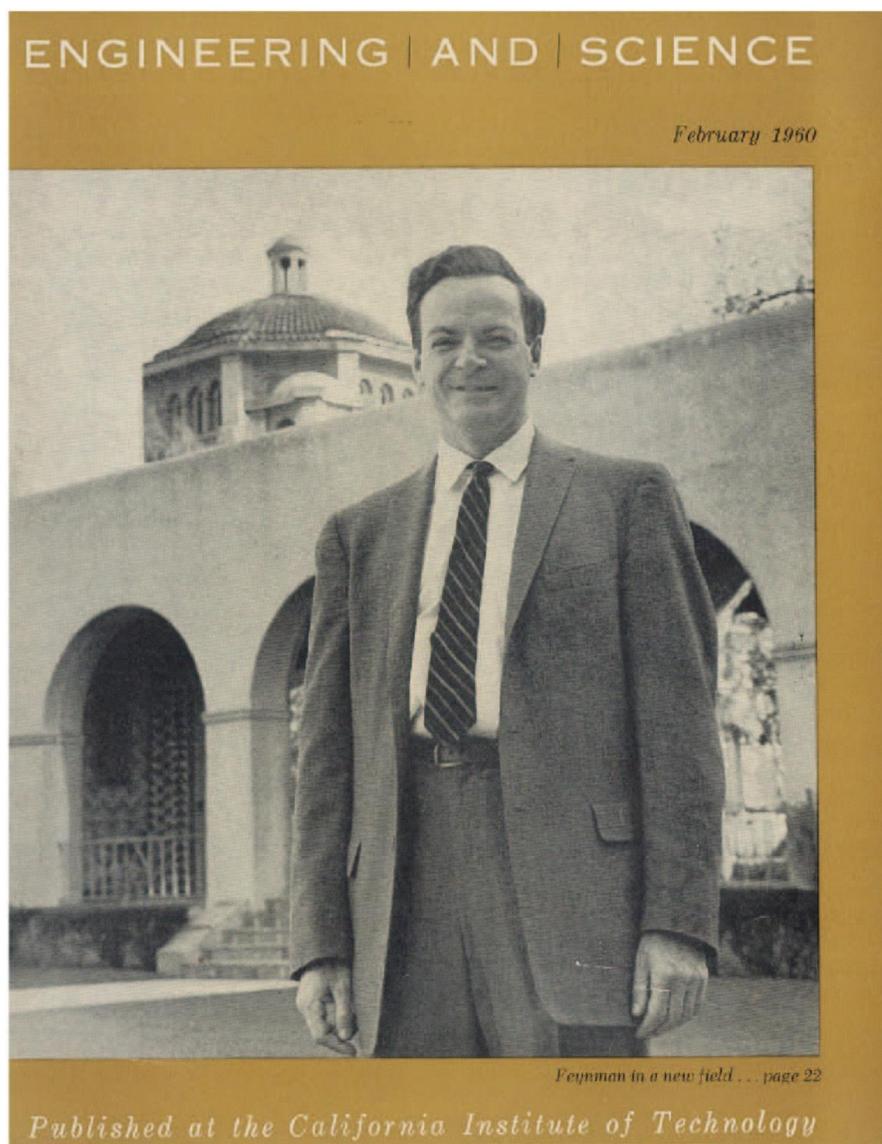


THE FEYNMAN ANNIVERSARY SYMPOSIUM

12 & 13 February 2010 at the University of South Carolina.

sponsored by the South Carolina Honors College (Dr. Davis Baird, Dean)
and the USC NanoCenter (Dr. Tom Vogt, Director)

Chris Toumey, Ph.D., Organizer: Toumey@mailbox.sc.edu



On 29 December 1959, Richard P. Feynman addressed the American Physical Society with a talk titled "There's Plenty of Room at the Bottom". This vivid and eloquent talk described a world that would become possible when scientists controlled matter precisely at the level of molecules, atoms and even electrons. This was an early vision of the field that today we call nanotechnology.

In February 1960, the Caltech magazine *Engineering & Science* published Feynman's "Plenty of Room". In subsequent years this paper was published ten more times: usually with the original title, but sometimes with other titles; sometimes full length, and sometimes abridged. This has become one of the best known scientific papers in the history of nanotechnology. In addition, a closely related talk by Richard Feynman, "Infinitesimal Machinery", has been published twice.

There is some room to disagree about the historical significance of Richard Feynman's "Plenty of Room", but certainly this particular vision of nanotechnology is one of the most common visions by which many people imagine what nanotechnology will be like. The fiftieth anniversary of the initial publication of Feynman's talk presents us with an opportunity to reflect upon Richard Feynman's legacy in nanotechnology, at Caltech, and in scientific writing.

The University of South Carolina has a group of scholars in the humanities and social sciences who examine the history of nanotechnology and related topics. They have convened a symposium to consider the talk, the man, and the field of nanotechnology during the past fifty years.

* * *

The Feynman Anniversary Symposium takes place at the University of South Carolina on Friday and Saturday, 12 and 13 February 2010.

Registration fee: **\$25**; no charge for USC faculty, staff or students.

For information about the program, contact Chris Toumey:
Toumey@mailbox.sc.edu

For information about logistics and accommodations, contact Mark Stevens:
mstevens@mailbox.sc.edu

This event is supported by National Science Foundation grant 0531160.
Opinions expressed in this symposium are the authors' and do not necessarily reflect those of the National Science Foundation.

The Program of the Feynman Anniversary Symposium:

Friday Afternoon, 12 February, in the Gressette Room, Harper College, on the USC Horseshoe:

- 3:10 PM** **Dr. Stephen Kresovich, Vice President for Research, USC:**
Introductory Comments.
- 3:15 PM** **Dr. Tom Vogt, Director of the USC NanoCenter:**
Welcome.
- 3:30 PM** **Ms. Michelle Feynman:**
Genius to You, Father to Me.
- 4:30 PM** **Mr. Conrad Schneiker:**
*My Conversations with Richard Feynman regarding
Nanotechnology.*

Friday Evening, 12 February, at Za's Pizza, 2930 Devine Street in Columbia:

- 7:30 PM** **Dinner at Za's Pizza;**
- 8:30 PM** **Dr. Michael Roukes:**
The Feynman Legacy at Caltech.

Saturday Morning, 13 February, in the Gressette Room, Harper College, on the USC Horseshoe:

- 9 AM** **Dr. Cyrus Mody:**
Fifty Years of Nanotechnology.
- 10 AM** **Dr. Chris Toumey:**
Reading Feynman into Nanotechnology.
- 11 AM** **Panel discussion with the symposium speakers.**

About the speakers in the Feynman Anniversary Symposium:

Ms. Michelle Feynman is the editor of *Perfectly Reasonable Deviations from the Beaten Track*, a collection of the private correspondence of her father, Richard P. Feynman. This book is a valuable addition to the literature about the intellectual life of Richard Feynman because it shows us a side of the man that is not often seen or realized in the academic and popular accounts of the life of Dr. Feynman.

Mr. Conrad Schneiker has most recently been a research and development engineer and project manager. He worked with scanning tunneling microscopes in the 1980s, and wrote the chapter on the history of nanotechnology for the proceedings of the first Los Alamos Conference on Artificial Life. His current interests include the logic of scientific realism and finding practical means of using atomic-point electron beam emitters for producing miniature arrays of near atomic resolution scanning electron microscopes.

Dr. Michael Roukes is Professor of Physics, Applied Physics and Bioengineering at Caltech, where he leads a cross-disciplinary nanoscience research group. His own interests connect fundamental science to applied research, with an emphasis on very large scale integration of complex nanostructures.



MICHELLE FEYNMAN



CONRAD SCHNEIKER



MICHAEL ROUKES

Dr. Cyrus Mody is an historian of science at Rice University. He is currently finishing a book entitled *Instrumental Community: Probe Microscopy and the Path to Nanotechnology, 1960-2000* (MIT Press). He has written historical articles on various nano and pre-nano fields, including molecular electronics, fullerene chemistry, acoustic microscopy, surface science, and microfabrication. His reflections on research into the societal dimensions of nanotechnology have appeared in *Physics Today* and *Science Progress*.

Dr. Chris Toumey is a cultural anthropologist at the University of South Carolina, where he examines societal issues in nanotechnology. He is the author of forty articles in that area: topics include democratizing nanotechnology, contested histories of nanotech, and religious reactions to nanotech. His commentaries on nanotechnology appear four times a year in *Nature Nanotechnology*.



CYRUS MODY



CHRIS TOUMEY