



American Society for Quality ([www.asq.org](http://www.asq.org)) – Washington DC and Maryland Metro, Section 509 ([www.asq509.org](http://www.asq509.org))

Biomed/Biotech Special Interest Group (SIG) Meeting

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## “The Evolution of Nuclear Safety”

To be presented by

**Frank Y. Chen, MS, PhD**

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**Federal Retiree**

**Thursday, May 2, 2013**

6:00 – 6:20 PM – Networking; Pizza/drink

6:20 – 8:00 PM – Program

8:00 – 8:30 PM – Door-prizes drawing; Networking

**Online Registration site:** <http://www.asq509.org/ht/d/DoSurvey/i/35817>

**Open to Public** –

**\$5:** [non-ASQ members](#) to cover pizza/drink cost;

**Free:** [ASQ members, MJ-DC members, CAPA-DC members, veterans, senior citizens, students, interns, residents, postdocs, FDA Commissioner’s Fellows, and current job-seekers](#)

**Location:** [Kelly’s Deli Conference Center, 7519 Standish Place, Rockville \(Derwood, for GPS user\), MD 20855](#)

**Registration Deadline:** Please register by **Thursday noon, May 2, 2013.**

**Question:** Please contact Dr. C.J. George Chang, Chair of Biomed/Biotech SIG, ASQ509; [gchang2008@yahoo.com](mailto:gchang2008@yahoo.com) or 240-793-8425 (cell).

**Driving directions: By Cars:** From **I-270** (N or S bound): Take Exit 9A and exit from the **FIRST** right exit; turn left (east) onto Shady Grove Dr.; turn right (south) onto Rockville Pike (**Route 355**); turn left (east) onto East Gude Dr.; turn left (north) immediately onto Crabb’s Branch Dr.; turn left (west) immediately onto Standish Place. The first building on your right side is 7519 Standish Place; open parking). **The venue is on the first floor with its entrance opposite to the left side of building main entrance.** **By Metro trains:** Off from Red Line **Shady Grove Station**, and take RideOn **Route 59 TOWARD ROCKVILLE** and get off from “**Calhoun Place**” stop. Standish Place is next to the Bus stop. Our venue is within 2 min of walking distance from the stop.

## Summary:

The **nuclear power industry** has come a long way to reach at the critical moment that we are in right now. Just like the aircraft industry which improves its **overall safety design** by learning quickly from every serious incidents/accidents, the nuclear power plants also has a system in place to improve its **safety performance** by learning in detail from every accidents as much as possible and as quickly as possible.

The **Fukushima accident** is the most serious accident in the nuclear industry since the **1979 Three Mile Island accident** and the **1986 Chernobyl accident**. The Fukushima accident revealed a significant shortcoming in the safety of nuclear plants, i.e. the lack of a **plant abandonment process**. It is therefore, providing an excellent opportunity to greatly enhance nuclear safety in future **design and operation** of all nuclear power plants by implementing this process to protect the public.

The Fukushima accident has also caused **serious erosion in public support** for continued use of nuclear power in Taiwan, ROC, among other countries. In Taiwan, for example, people are genuinely afraid and understandably concerned about the overall safety of the nuclear plants on the island especially the one that is under construction and being hotly debated at this time.

We the scientists and the professional engineers have a **duty** and the **responsibility** to explain in the simplest terms possible how the safety aspect of the nuclear power plants is being improved. Our goal is to assure the public and to rebuild their confidence because **the advantage of using nuclear energy will truly benefit the economics and the environment**.

We will explain how safety is maintained by continued supply of cooling water to the reactor under all circumstances..... We will also explain the lessons learned from Fukushima.....

## Presenter's Bio: Frank Y. Chen, MS, PhD

BS - Nuclear Engineering, National Tsing-Hua University, Taiwan, ROC, 1969  
MS and PhD - Nuclear Engineering, Kansas State University, Manhattan, Kansas, 1973, 1975  
1975 – 1980 (5 yrs) Bechtel Power Corp. Architecture engineering design of nuclear power plants  
1980 – 1981 (2 yrs) Consolidated Edison of New York, Nuclear Power Plant Operations  
1981 – 1990 (10 yrs) Toledo Edison, Nuclear power plant modifications and safety reviews  
1990 – 1993 (3 yrs) U.S. Department of Energy, New Production Reactor engineering and design  
1993 – 2010 (16 yrs) U.S. Department of Energy, Nuclear safety inspections of nuclear facilities

**This event is cosponsored by the Monte Jade Science and Technology Association of Greater Washington ([www.MonteJadeDC.org](http://www.MonteJadeDC.org)) and the Chinese American Professionals Association ([www.capadc.org](http://www.capadc.org)).**