



SAS Chicago

January Meeting

Tuesday, January 13, 2004

The January 2004 meeting will be held at the La Mirage, located at 3223 Algonquin Rd., Rolling Meadows. See the map on the back for more details. Entree choices: *NY Strip Steak, Chicken Breast LaMirage, or Fettuccini.*

Social Hour: 5:30 PM

Dinner: 6:30 PM

Speaker: 7:45 PM

The Role Science and Technology in National Security: From Fundemental Research to Practical Applications

by

Dr. Vahid Majidi

Department of Justice

Research and development activities sponsored by the federal government are an integral part of our national security strategy. Over the past five decades, National Laboratories have been the leading institutions in the US at the forefront of pure and fundamental research leading to both tactical and practical applications. The research conducted at these labs covers nearly all known scientific areas in many disciplines. In this talk, a short outline of the projects leading to the establishment of the Los Alamos National Laboratory will be presented. Examples of current research programs and their significance to our homeland security will be discussed. Additionally, many of these programs have a direct impact as potential novel forensic tools for law enforcement community.

The latter portion of this presentation will be focused on one of our current research projects exploiting switched plasma sources as universal detectors. For the past several years we have demonstrated the utility of transient ionization sources for elemental and structural information in complex matrices. These sources can potentially provide a wealth of information, with regard to the exact identity of constituents in complex samples, when used in conjunction with separation techniques.

Dr. Vahid Majidi

The Deputy Attorney General named Doctor Vahid Majidi, Chief Science Advisor for the Department of Justice (DOJ) in February 2003. Dr. Majidi is on a detail to the Department from the Los Alamos National Laboratory (LANL) in New Mexico. Dr. Majidi is responsible for coordinating science and technology policy among the Department's component agencies and with state and local law enforcement entities. He also serves as a Department liaison to the scientific community.

Dr. Majidi earned his BS degree in chemistry from Eastern Michigan University and his PhD degree from Wayne State University. After his graduate work, Dr. Majidi spent two years as a postdoctoral research fellow at the University of Texas (Austin).

Please make your dinner reservations for the upcoming meeting by using the form on our web page http://www.sas-chicago.org/Reg_Form.htm, by email at sas.chicago@bigfoot.com or by calling Mike Jankowski (847)970-5061. Leave your name, company affiliation, a telephone number where you can be reached in the event that the meeting is cancelled (remember 9/11/01 & Feb. 26, 2002), the number of reservations and your choice of entree on the tape. Please call by noon Friday, Jan. 9th, so that proper arrangements can be made with the La Mirage Restaurant. If you can't attend, cancel by Mon. noon: SAS is charged for no-shows.

Dinner Cost

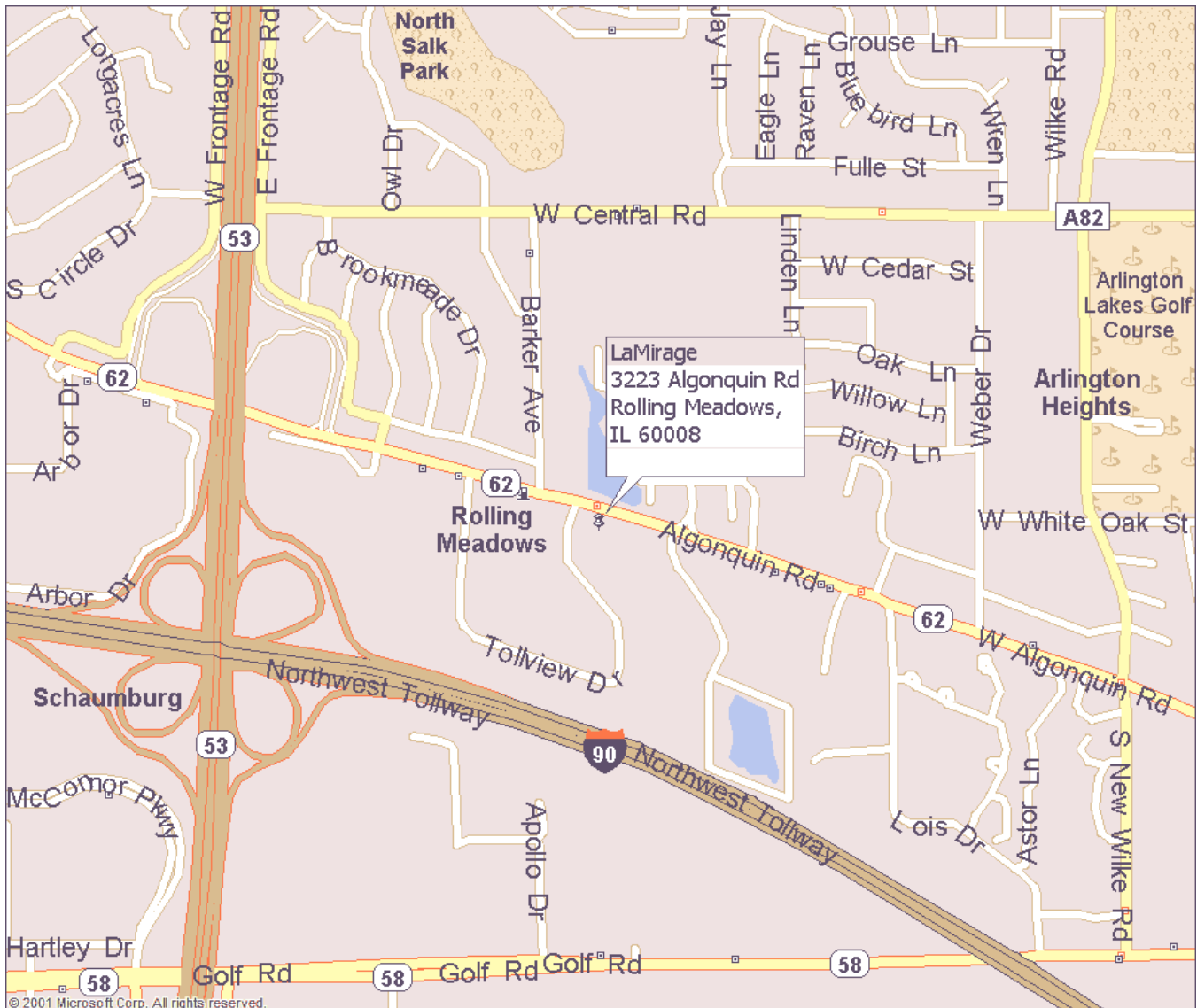
Members: \$25

Students and Unemployed Members: \$10

Non-members: \$30

DIRECTIONS TO THE LA MIRAGE RESTAURANT

La Mirage is located at 3223 Algonquin Road in Rolling Meadows. It is located about 0.5 mile east of Route 53 on Algonquin Road. The La Mirage restaurant is on the south side of the road.



Speaker Bio:

Prior to his assignment at DOJ, Dr. Majidi was the Group Leader for Actinide Analytical Chemistry Group (C-AAC) at Los Alamos. The Group's main objectives were to serve the laboratory in national security and the nuclear materials characterization arena. Specifically, the Group provided specialized chemical analysis for the pit manufacturing, 238-heat source, MOX (mixed Pu/U oxides), surveillance, and ARIES (nuclear material recovery) programs. Research efforts were concentrated on development of new technologies for materials characterization, development of in-situ sensors, fiber-optic based analysis and process analytical chemistry for the intelligence community.

Dr. Majidi was also the Group Leader for Analytical Chemistry Sciences Group at LANL. This Group was responsible for evaluating biological and environmental samples to ensure that LANL was compliant with all legal requirements established by EPA, New Mexico Environmental Department, and OSHA. Research efforts were concentrated on development of new technologies for biological detection, hand-held sensor platforms, biological mass spectrometry, process analytical instrumentation and real-time analyzers.

Dr. Majidi was a tenured associate professor at the University of Kentucky where he conducted research on laser-based techniques, gas phase chemistry, and solid substrates from 1989-1996.