**Fellowships**
Placing scientists with host institutions in the U.S. for training in a variety of fields.

**Group Training**
Hosting IAEA-ANL training courses for participants from around the world.

**Recruitment**
Encouraging U.S. citizens to consider IAEA employment opportunities.

# IP Newsletter

Transferring knowledge in peaceful uses of nuclear technology to developing countries.

## Letter from the IP Manager

### About the International Programs at Argonne

As U.S. President Dwight D. Eisenhower delivered the Atoms for Peace speech to the United Nations on December 8, 1953, he spelled out the necessity of repurposing existing nuclear weapons technology to peaceful ends, stating that it must be humanity's goal to discover "the way by which the miraculous inventiveness of man shall not be dedicated to his death, but consecrated to his life." This speech inspired the creation of the International Atomic Energy Agency (IAEA) in 1956.

For over 25 years, our group at Argonne National Laboratory has assisted the U.S. Department of State (DOS) with International Atomic Energy Agency (IAEA) activities. Starting in 1976, the International Programs (IP) office was designated by DOS as the U.S. host institution for participation in the IAEA's Nuclear Power Training Program. Since then, numerous training courses involving approximately 4,000 participants from 129 countries have been organized and conducted at Argonne.

Over time, the IP office activities have broadened and currently include serving as a clearing house and point of coordination for U.S. participation in the IAEA, assisting DOS with reviews and recommendations regarding the IAEA's Technical Cooperation (TC) program, managing the IAEA fellowship program (formerly handled by the National Academy of Sciences), and assisting with efforts to increase U.S. representation at the IAEA by recruiting well-qualified U.S. citizens for IAEA vacancies.

The International Programs have undergone many changes in the past eight months, and our group members have been working hard to implement them and produce high quality work in the first half of the year. In short, the procedure and process of each IP program has been streamlined to improve efficiency and effectiveness, and in May, the group moved from the Division of Educational Programs (DEP) to the Nuclear Engineering Division (NE) as the IP section under NE Associate Division Director, Tom Ewing.

Our program couldn't run so smoothly without everyone in the group stepping up to help each other whenever needed. We have such a great team and I am so proud of them. Many thanks to each of them for the great work they all have done.

And welcome to our first International Programs (IP) quarterly newsletter!

### *About the Program Manager*

*Since 2003, Dr. Hamilton has provided leadership in managing, evaluating and reporting on the IAEA Technical Cooperation (TC) program for the U.S. Department of State (DOS). Currently, she serves as a member of the Advisory Group for the United Nations (U.N.) fellowship programs. From 1996-2000, she was employed at the IAEA in the TC Evaluation Section and was an invited participant in Advisory Group Meetings organized by the U.N. to discuss best practices for project monitoring and evaluation. She also served as lecturer and course staff for IAEA training courses on energy and electricity planning and developed advanced software tools for power systems analysis, from 1989-1995. In 2008, the International Programs team received Argonne National Laboratory's Pacesetter Award in recognition of their extraordinary efforts to produce quality deliverables for U.S. government sponsors under tight time constraints.*

# Meet the Active International Programs Staff

### Allison Holiski: IP Assistant (Staffing Emphasis)

Allison began working with the International Programs at Argonne in 2007, administering the IAEA's Fellowship Program in the United States. In 2009 her responsibilities within the program transitioned to focus on efforts to increase American representation in the IAEA's professional staff. She is now responsible for initiating outreach to U.S. experts, and collaborating with Brookhaven National Laboratory which recruits for the IAEA's Department of Safeguards, to encourage Americans to consider the unique and rewarding career opportunities the IAEA offers.

### Christine Oikle: Administrative Specialist

Christine has been involved with the programs for more than 20 years. Her primary tasks are to assist the Program Manager with the main administrative activities for the IP, handling financial matters associated with each of the programs, maintaining the related databases, and updating the annual reports. In addition to these tasks, Christine provides administrative support to the Fellowship Program and the Training Courses Program.

### Bobbie Douglas: Administrative Assistant

Bobbie began working for the ANL/INTLO (International Nuclear Technology Liaison Office) from its' conception in 1987. She is responsible for processing the nomination and eCC cables for all IAEA non-Safeguards, Technical and Consultancy meetings as well as IAEA international conferences; this includes U.S. citizens living abroad. The ANL/INTLO office also occasionally processes cables for non-U.S. citizens who are working in the U.S. In addition, she distributes, processes and tracks IAEA invitational letters requesting mostly federal/contract employees with DOE and NRC.

### DeeDee Rudisel: Senior Secretary

DeeDee has worked in the Training Course Program since 2006. She has made all necessary preparations to facilitate arrival and stay of participants and lecturers for the duration of each training course. She is also responsible for making arrangements for travel, accommodation, laboratory tour, photos, transportation, daily amenities; preparing lecture materials for presentation; making lecture material into a CD for distribution, etc.

### Kun Kaewken: IT Specialist

Kun provides hardware and software support for the IP. His main responsibilities include designing the International Program's web sites; analyzing, designing, developing, and testing web applications; and maintaining databases.

### Richard Getzinger: Senior Consultant

Dr. Getzinger serves as a member of the IAEA's Standing Advisory Group for Nuclear Applications (SAGNA), which meets annually to review and advise concerning program activities in the Agency's Department of Nuclear Sciences and Applications (NA). He has assisted DOS in providing input for the U.S. positions and statements presented at the Program and Budget Committee and the Board of Governor/General Conference meetings. His knowledge in NA has been very helpful with our recruitment efforts as well.

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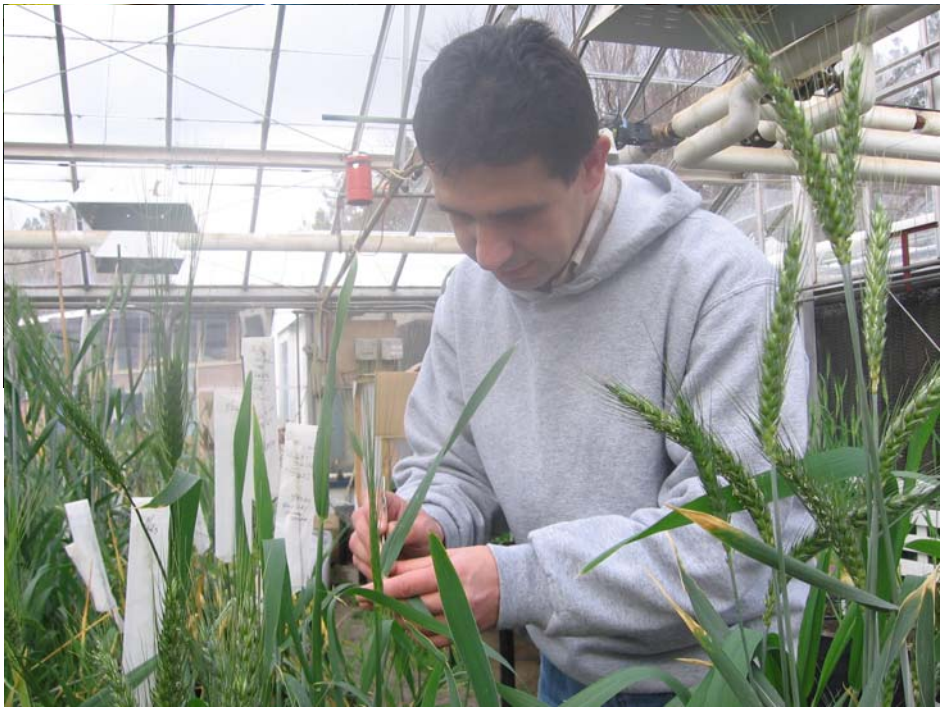
# Online Improvements

To keep up with changes taking place in the International Programs, the IP has been making some online upgrades. Each IAEA-ANL training course now has its own website. Access to the site is given to participants and lecturers, who can view the course's training and social calendars, course materials, lecturer vitas, information on Argonne and Chicago, and other preparatory materials.

Additionally, with regard to the IP's efforts to increase American representation in the professional staff at the IAEA, Argonne has built a secure website to store the resumes of well-qualified U.S. citizens who are interested in IAEA employment. The resumes are searchable by education level, gender, and fields of expertise. When the site launches, access will be given to only to IAEA recruitment staff, in the hope that it will be searched when there is a vacancy to be filled at the Agency.

# IAEA Meetings

Our office supports non-Safeguards IAEA activities related to U.S. nominations for IAEA technical meetings and the processing of the Host Country Agreements (HCA) for the U.S. to host IAEA meetings, training courses, symposia, etc. In many cases, the U.S. is asked to nominate a participant for such meetings. We ensure that these requests and the relevant information are distributed to the U.S. agencies concerned, and that the appropriate response is made in a timely manner. We also act as a general information clearing house for both the public and private sectors. Out of the 371 meeting nominations received from the IAEA so far this year, 106 nominations are active and being processed.



*Ljupcho Jankuloski from Macedonia trained in mapping and validating disease resistance and drought tolerance genes in wheat for nine months at the University of California, Davis.*

# IAEA Fellowships

## Training scientists from developing countries

Since April of 2003, Argonne National Laboratory (ANL) has been responsible for administering the International Atomic Energy Agency's Fellowship Program in the United States. Through this program, scientists, engineers and physicians from developing countries come to the U.S. for research and training in the peaceful uses of nuclear technologies and applications.

Persons who are, or soon will be, trusted with responsibilities important for the development of their country are elected for these opportunities through the IAEA. In fact, each fellow is required to return to his or her home country for at least two years after the completion of their training in the U.S. to use the knowledge they have gained.

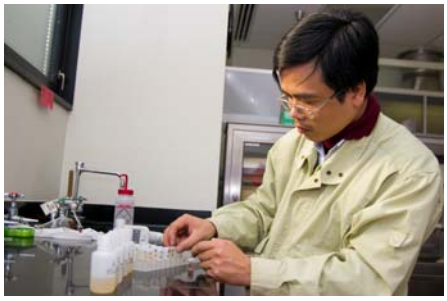
The IAEA Fellowship program is also an opportunity for U.S. institutions to share their knowledge and expertise with developing countries in order to safely transfer nuclear technology for peaceful uses. Lately, fellowships have focused on training in the areas of safety of decommissioning of nuclear facilities, radioanalytical techniques, nuclear medicine imaging, assessment of micronutrients in nutrition, radiation medicine and health, strengthening institutional capacity for sustainability and self-reliance, research reactors, quality management of radiopharmaceuticals, regulatory infrastructure for nuclear safety, accelerator applications in physics, nuclear and atomic physics, and nuclear instrumentation, electronics and reactor control. Clearly, a wide range of training opportunities are available in the U.S., which is imperative to helping each country overcome their specific needs as they develop with nuclear technologies.

Fellowships range from one week to ten months in duration and are funded through the U.S. Department of State, which provides free administrative services for this program through the International Programs at ANL.

Over the past few months, 18 fellows began training programs at laboratories, institutions, hospitals and private companies across the U.S. Three Iraqi fellows trained under the expertise of Dr. Paul Frame at Oak Ridge Associated University in Oak Ridge Tennessee for one month. Their training focused on applied health physics and they attended lectures and performed laboratory exercises using radiation detection measuring equipment. Another fellow from Turkey recently completed a three-month fellowship at the University of Maryland's department of Materials Science and Engineering that focused on radiation processing facilities and applications. A Serbian fellow spent a month at the National Institute of Standards and Technology focusing on radiation medicine and health issues.

Upcoming fellowships are scheduled to be hosted at Massachusetts General Hospital, the University of Tennessee, the National Institute of Standards and Technology, and the State University of New Jersey. One of the largest group fellowships that ANL has ever administered will take place in July with nine fellows from nine different countries who will attend a one week training intensive at Massachusetts General Hospital in the area of Medical Exposure Control under the direction of Dr. Mannudeep Kalra.

The IAEA Fellowship program at ANL works with the IAEA and host institutions with placement of fellows, travel arrangements, financial arrangements, visa support, clearance procedures and many other administrative processes to make the fellowship program run smoothly for all parties involved.



*Dat Tien Nguyen from Vietnam trained in neutron activation analysis and leaching procedures with soil at the University of Texas at Austin.*

# IAEA-ANL Training Courses

## Safety Infrastructures for Research Reactors

The IAEA/ANL Training Course Program commenced in 2011 with "Developing the Safety Infrastructure for a Research Reactor in an Emerging Nuclear Power State". This was a one week session which was held from March 7-11. Argonne hosted 17 participants from 11 different countries. The objective was to provide an introduction to the actions needed to satisfy IAEA safety requirements for a research reactor, with emphasis on the regulatory infrastructure, leadership and management, siting, safety assessment, human resource development and emergency preparedness. This was intended for individuals from research reactor project implementation organizations, research reactor operating organizations or regulatory bodies who are responsible for formulating and/or upgrading the national safety infrastructure needed for a new research reactor project. Lectures presented during this training course covered the actions needed to satisfy IAEA safety requirements for legal and regulatory infrastructure, leadership and management, siting, safety assessment, human resource development and emergency preparedness relevant to a new research reactor. The main focus was centered on discussion of the actions needed to comply with IAEA Standards and international good practices. The workshop also provided a forum for the participants to discuss their national infrastructure and to exchange their own experiences, especially between states having an existing research reactor and those considering an initial research reactor. This training course was led by Course Director, L. Walter Deitrich and assisted by Joseph C. Braun. The IAEA Scientific Secretary for the workshop was Mr. Hassan Abou Yehia representing the Research Reactor Safety Section in the Division of Nuclear Installation Safety.

## Decommissioning and Environmental Remediation

Through detailed preparation and coordination, the Argonne International Program team hosted their second training course of 2011; the International Decommissioning Network (IDN) and the Network of Environmental Management and Remediation (ENVIRONET) jointly sponsored the "Regional Training Course in Nuclear Facility Decommissioning and Environmental Remediation Skills." This was a two week session held from April 4-15 in which 21 participants from 17 different countries were welcomed to Argonne. The purpose of this training course was to provide implementing and regulator organizations with appropriate analytical and project management tools for the implementation and oversight of safe, appropriate, and cost-effective strategies in the fields of decommissioning and environmental remediation. This was intended for management level and senior staff at organizations working on (or eventually to be designated as being responsible for) Decontamination & Decommissioning and Environmental Remediation projects. This would include state or national resource management and regulatory agencies, operators of facilities or sites needing or undergoing large scale cleanup actions, and national research organizations. Several interactive exercises were conducted to help convey key concepts. Lectures were presented by experts on the following topics: project planning and decision-making, stakeholder involvement, regulation and policy, safety assessments, characterization, sampling, and analysis, risk assessment and communication, waste management and material clearance, remediation technology selection, decontamination and dismantling, and site closure. This training course was co-directed by Larry Boing for Decontamination & Decommissioning, and Karen Smith for Environmental Remediation. Horst Monken Fernandes represented the IAEA as the Technical Officer.

# IAEA Recruitment and Employment

## An American's experience working at IAEA in Waste Management

The United States encourages qualified U.S. citizens to consider employment opportunities at the IAEA, and as part of that effort the IP seeks to ensure Americans are well-informed about what to expect. John Kinker, an American Waste Management Information Specialist at IAEA, answers questions below regarding his work, spousal employment, and advice for future applicants.

*Q: What did you do before working at the IAEA?*

A: I was a consulting engineer in radioactive and hazardous waste management, working primarily for DOE clients like the National Labs. My career development was centered around environmental remediation, hazardous and radioactive waste management, and regulatory compliance consulting.

*Q: How did you become aware of or interested in IAEA opportunities?*

A. Someone I worked with mentioned IAEA and that he knew that a colleague had applied for a job. I checked on the IAEA home page for vacancies out of curiosity and found my current position advertised there.

*Q: Opponents of nuclear power often site radioactive waste as a major issue. What does IAEA do with regard to radioactive waste, and how might these activities ease concerns of nuclear opponents or Member States considering nuclear power programs?*

A. With respect to radioactive waste, IAEA strives to provide support, education and training, and peer review services to member States in order to boost their capabilities and to promote the implementation/adoption of best practices. We also collect, analyze, and disseminate information on this topic for the public and stakeholders to help increase transparency. We provide direct consultations and/or find international experts to consult with our Member States when they require assistance. We develop and promote safety standards and guides on best practices to increase the cost-effectiveness, safety, and efficiency of nuclear operations in our Member States. Most important of all (I think), we are trying to guide countries who are interested in developing new nuclear power programs to learn from the mistakes of the past and to avoid creating the same problems that most of the more developed countries now face, particularly in the area of radioactive and nuclear waste management.

*Q: What do you do at IAEA?*

A. My job title is "Waste Management Information Specialist", and my main focus is on the collection, analysis, and dissemination of global information and data on radioactive waste management programs. I also support Member States in developing and implementing their radioactive waste management information systems, and I manage several projects with a related focus, such as the implementation of a radioactive waste benchmarking system for operators of WWER power plants. I am also managing the implementation of a next-generation web platform that will facilitate direct interactions between our Member State colleagues and the Agency via our waste management "networks", and provide a direct source for online education and training in nuclear technology and safety.

*Q: Spousal employment is difficult for many couples accepting opportunities overseas, but your wife also works at IAEA. Can you tell me how that came about?*

A. My wife has a long career history in nuclear safety, particularly in the area of radioactive waste management facility operations, so it was not unreasonable to think that it would be easy for her to find a position with the IAEA. However, the IAEA does not function like a commercial enterprise, and because of former problems with nepotism at the UN in general, rules against the employment of family members were developed and enforced. However, spousal employment is not prohibited, as long as the regular issues of conflict of interest are avoided. Monika started her work at the IAEA as a contractor to the Nuclear Safety Department, and after that worked also on contract for our Technical Cooperation Department. She eventually applied for a regular post and was selected. I think this is a unique situation, where we both have direct and significant experience in the nuclear industry. But it worked out very nicely for us.

*Q: What advice would you give someone considering IAEA employment?*

A. It really depends on the person and what their goals and expectations are. First, consider how open you really are to change, big change, in the way you live and work. IAEA is not just international, but it is truly multicultural, and that can be both fascinating and extremely difficult/ frustrating at times. Second, moving to a foreign country sounds exciting (and is) but it is also psychologically difficult and stressful. But we have found it to be a rewarding experience and I am really pleased that I took the plunge. On the other hand, I miss my former job, our friends, and New Mexico green chile! Even with the excitement and opportunities to travel and see new places, moving to a new country and dealing with all of the problems, language barrier, isolation, etc., can be hard on families and relationships. The additional stress of one spouse not being able to find employment can be a deal breaker. So consider your priorities carefully and expect a rough ride in the beginning. In the end, Austria is a nice country with many advantages over the USA from a quality-of-life perspective, and the experience of working in an international organization is worth the sacrifice.