

Programme
2005 WNU Summer Institute
Idaho Falls, Idaho, USA
9 July -20 August 2005

The Summer Institute was conceived during a meeting of WNU stakeholders hosted by the IAEA in Vienna in June 2004. The [Report of the IAEA Technical Meeting](#) delineates the advantages of such an institute not only for the selected participants, but also for industry, government, and institutions of higher education. The report includes guidelines that helped to shape the Summer Institute's programme.

This document, which evolves as new information becomes available, describes the 2005 WNU Summer Institute (WNU SI) programme.

Most faculty presentations will be in the mornings, allowing for a variety of other activities in the afternoons. Among the additional activities planned are the following:

On-Site Work:

- Self-directed study groups to prepare responses to challenging case studies assigned by Institute faculty.
- Facilitated discussions of case studies with the entire group of Institute participants
- Small group discussions with Institute mentors to put the topic presentations in context and encourage reactions, questions and further discussion and study
- Question and answer sessions with selected presenters based on issues that arise from the guided discussion sessions and individual participants' own interests
- Individual and group work on culminating projects to be presented to the entire Institute during the final week of the programme
- Free time to read, study, think, and have informal discussions with colleagues from around the world

Lectures on Nuclear Leadership:

- Weekly presentations, generally held in the late afternoon, will feature internationally known figures that have made significant contributions to the development, politics and peaceful uses of nuclear science and technology. Open to the public, the aim of these

lectures is to provide vivid insights about notable careers in the nuclear field, a realistic perspective on the challenges facing those engaged in applying and advancing the valuable uses of nuclear technology, and an appreciation for the capacity of dedicated individuals to make a substantial difference in our world through a career in the nuclear professions. The presenters have been asked to share (a) their experiences and lessons learned regarding developments and achievements in areas related to nuclear science and technology and (b) issues and challenges they foresee for future nuclear leaders. A question and answer period and a reception will follow. In the evening, there will be an informal gathering to enable Institute participants to interact more directly and personally with these distinguished men and women.

Field Trips:

- A field trip to Yucca Mountain Geological Waste Repository with overnight stays in Las Vegas, Nevada
- Visits to several laboratories of the Idaho National Laboratory (recently formed by combining the Idaho National Engineering and Environmental Laboratory and Argonne National Laboratory–West)

Social and Recreational Activities:

- Social activities directly connected to the Institute begin with a welcoming reception at Idaho Falls and conclude with a special celebratory banquet in Las Vegas. A reception and private tour of Idaho Falls new Science Museum is among other planned events.
- Opportunities to see some of the American West's most spectacular scenery including Yellowstone, Grand Teton and other U.S. National Parks and near-by recreational areas. A local-arrangements committee has organized these optional weekend excursions at no charge to Fellows. Self-paying guests of the Institute may join the activities on a space-available basis. Website links providing information about these opportunities are included on the password protected portion of the Summer Institute website.

If you have questions about the Summer Institute that are not answered by the material provided, please feel free to contact either of us by e-mail or telephone at the WNU Coordinating Centre (WNU-CC) in London. We will be happy to talk with you.

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09/07/05

**World Nuclear University Summer Institute
Program Schedule
July – August 2005**

Date	Activity	Place	Responsible Individual(s)/Location
<i>Fri or Sat (7/8-9)</i>			
All Day	Participants arrive and register at assigned hotel	On your own	Idaho Local Arrangements Committee
<i>Sun (7/10)</i>			
10:00 am -12 noon	Institute registration & tour of University Place campus	Shilo CC	Idaho Local Arrangements Committee
12 noon	Lunch on own		
1:30 - 5:00 pm	Introductions, orientation, overview of Institute activities, participant self introductions	Shilo Inn	E & D Klevans, mentors, and others
6:00 PM	Welcoming Event - Barbecue Dinner at Shilo Inn	Shilo Inn	All Participants and Guests

Date	Activity	Hours	Responsible Individual(s)
Week 1: 7/ 11-17	GLOBAL SETTING		
Mon (7/11)			
morning	Welcome from Idaho hosts		
	The Global Environmental Crisis - Climate Change	3	H. H. Rogner
afternoon	Team building project - I	2	E & D Klevans and Mentors
	Orientation meeting for Study Groups and mentors	1	Fellows and Mentors
Tues (7/12)			
morning	The Global Environmental Crisis - Clean Water Shortage	3	C. Vorosmarty
afternoon	Team building project - II (Study Groups)	2.75	E & D Klevans, Mentors & Fellows
	Final Project Planning meeting (Final Project Teams)	0.75	Fellows and Mentors
Wed (7/13)			
morning	World Energy Demand and Supply	3	J. Murray
afternoon	Discussion of recent topic presentations (Study Groups)	1.5	Fellows and Mentors
	Discussion of recent topic presentations (Whole Group)	0.75	Facilitator, Fellows and Presenters
	Lecture on Nuclear Leadership	1	Susan Eisenhower
evening	S. Eisenhower reception & tour at Museum of Idaho		
Thurs (7/14)			
morning	Nuclear Technology in Sustainable Development - Overview	3	A.Waltar
afternoon	Nuclear Technology in Sustainable Development - Examples	3	W. Burkart
Fri (7/15)			
morning	Survey of Nuclear Politics	1.5	A. McDonald
	Introduction to Center for Advanced Energy Studies (CAES)	0.75	L. Bond
	Status of Nuclear Applications in WNU Fellows' Countries	1	Fellows, Facilitators & Mentors
afternoon	Status of Nuclear Applications in WNU Fellows' Countries	1.25	Fellows, Facilitators & Mentors
Sat (7/16)			
Day Trip	Optional Trip to EBR I and Tour of Craters of the Moon		

Date	Activity	Hours	Responsible Individual(s)
Week 2: 7/ 18-24	INTERNATIONAL REGIMES		
Mon (7/18)			
morning	Nuclear Law - Introduction, Principles, Role and Safety	3	C. Stoiber, W. Tonhauser
afternoon	Nuclear Law - Liability	1.5	P. Reyners
	Case Study on Nuclear Law - intro & preparation (Study Groups)	2	Fellows
Tues (7/19)			
morning	Nuclear Law - Non-proliferation and Nuclear Security	3	L. Rockwood, C. Stoiber
afternoon	Discussion of Case Study on Nuclear Law (Whole Group)	2.25	P. Reyners and Fellows
	Final Project Preparation (Final Project Teams)	1	Fellows and Mentors
Wed (7/20)			
morning	Radiological Protection	3.5	S. St. Pierre, A. Gonzales, T. Lazo, J. Greeves
afternoon	Discussion of recent topic presentations (Study Groups)	2	Fellows and Mentors
	<i>Lecture on Nuclear Leadership; Reception follows</i>	1	James Lake
Thurs (7/21)			
morning	Nuclear Waste Management	3.25	S. St. Pierre, C. McCombie, A. Gonzales, J. Greeves
afternoon	Field Trip to Idaho National Laboratory	4.75	INL Staff
Fri (7/22)			
morning	Nuclear Waste Management & Decommissioning	3.25	S. St. Pierre, A. Bucaille, T. Lazo, J.
afternoon	Decommissioning	1	T. Lazo, J. Greeves
	Case Study on Safety - preparation (Study Groups)	2.5	Fellows and Mentors
Sat (7/23)			
Day Trip	Optional Tour of Grand Teton and Yellowstone National Parks		

Date	Activity	Hours	Responsible Individual(s)
Week 3: 7/ 25-31	INTERNATIONAL REGIMES		
Mon (7/25)			
morning	International Safety Standards & Global Safety Culture - I	3	S. Berg and F. Tollison
afternoon	International Safety Standards & Global Safety Culture - II	3	K. Brockman, L. Mampaey
Tues (7/26)			
morning	Discussion of Case Study on Safety (Whole Group)	1.5	S. Berg and Fellows
	Transport of Nuclear Materials and Waste	1	R.Fisk
	Picnic with Idaho Falls international community members	2	
afternoon	Transport of Nuclear Materials and Waste	1	R.Fisk
	Final Project Preparation (Final Project Teams)	1.5	Fellows
Wed (7/27)			
morning	Global Regimes for Emission Control	3	E. Aalders
afternoon	Discussion of recent topic presentations (Study Groups)	2.25	Fellows and Mentors
	Lecture on Nuclear Leadership; Reception follows	1	Rich Hooper
Thurs (7/28)			
morning	Non-Proliferation & Prevention of Nuclear Terrorism - I	3	T.Shea, L. Scheinman, R. Hooper
afternoon	Non-Proliferation & Prevention of Nuclear Terrorism - II	2	R. Stratford, D. Beck
evening	Panel Discussion on Non-Proliferation Issues	1.5	All Presenters on Non-proliferation and Terrorism
Fri (7/29)			
morning	Non-Proliferation & Prevention of Nuclear Terrorism - III	3	T. Shea (for S. Black), R. Nishimura, T.
afternoon	Final Project Preparation (Final Project Teams)	2.5	Fellows and Mentors
evening	Optional Mountain River Ranch Dinner and Show		
Sat (7/30)	Optional West Yellowstone Day Trip		

Date	Activity	Hours	Responsible Individual(s)
Week 4: 8/ 1-7	NUCLEAR INDUSTRY OPERATIONS		
Mon (8/1)			
morning	Nuclear Fuel Market	2	S.Kidd
	Final Project Preparation (Final Project Teams)	1.25	Fellows and Mentors
afternoon	Final Project Preparation (Final Project Teams)	2.5	Fellows and Mentors
evening	Optional International Folk Dance Festival Parade & Street Festival		
Tues (8/2)			
morning	Industry Economics	3	D. Beutier, N. Delloero
afternoon	Comparative Risk Assessment	2	R. Budnitz
Wed (8/3)			
morning	Excellence in Management and Operations	1.75	M.Sellman
	Knowledge Management	1.75	Y. Yanev
afternoon	Discussion of recent topic presentations (Study Groups)	2.25	Fellows and Mentors
	Lecture on Nuclear Leadership; Reception follows	1	Demetrius Perricos
Thurs (8/4)			
morning	Public Communication I	3	A. Bisconti, S. Peterson
afternoon	Field Trip to Idaho National Laboratory	5.75	INL staff
evening	Case Study on Public Communication - preparation (Study groups)		Fellows
Fri (8/5)			
morning	Public Communication II (including Case Study discussion)	3	A. Bisconti, S. Peterson
afternoon	Review and Summary of Lessons Learned	3	A. Bisconti, S. Peterson
Sat (8/6)			
Day Trip	Optional Scenic Float &/or Whitewater Trip or Jackson, WY visit		

Date	Activity	Hours	Responsible Individual(s)
Week 5: 8/ 8-14	TECHNOLOGY INNOVATION		
Mon (8/8)			
morning	Advanced Nuclear Fuel Cycle	3	J. Sackett, M. Salvatores, P. Pradel
afternoon	Final Project Preparation (Final Project Teams)	3.5	Fellows and Mentors
Tues (8/9)			
morning	Next-Generation Nuclear Reactors	3	J. Bouchard, R. Bennett, M. Khoroshev
afternoon	Final Project Preparation (Final Project Teams)	2.25	Fellows
	<i>Lecture on Nuclear Leadership; Reception follows</i>	1	Geoffrey Ballard
Wed (8/10)			
morning	Hydrogen Economy	3	A. Eggert
afternoon	Discussion of recent topic presentations (Study Groups)	2.25	Fellows and Mentors
Thurs (8/11)			
morning	Space Applications of Nuclear Power	3	S. Borowski, R. Cataldo, B. Schnitzler
afternoon	Final Project Preparation (Final Project Teams)	2.25	Fellows
	<i>Lecture on Nuclear Leadership; Reception follows</i>	1	Zack Pate
Fri (8/12)			
morning	Controlled Fusion	3	M. Campbell, N. Sauthoff
afternoon	Final Project Preparation (Final Project Teams); Project Due	3.5	Fellows and Mentors
Sat (8/13)			
Day Trip	Annual Indian Festival and Rodeo		

Date	Activity	Hours	Responsible Individual(s)
Week 6: 8/15-20	CULMINATING ACTIVITIES		
Mon (8/15)			
morning	Final Project Presentations (Final Project Teams)	3	Fellows
afternoon	Final Project Presentations (Final Project Teams)	3	Fellows
evening			
Tues (8/16)			
morning	Preparing for Leadership in the 21st Century	1.5	J. Grossenbacher, J. Kotek, M. Simpson
	Programme Evaluation & Preparation of Action Plans	1.5	Fellows and Klevanses
	Lunch with Study Group (in cafeteria)	1.5	Fellows and Mentors
afternoon	Discussion and Completion of Action Plans	2	Fellows and Mentors
evening	Special Dinner: Farewell to Idaho Falls		Shane Johnson, Speaker
Wed (8/17)			
morning	Travel to Las Vegas, Nevada		All
afternoon	Travel to Las Vegas, Nevada		All
evening	Free evening in Las Vegas		All
Thurs (8/18)			
morning	Tour of Yucca Mountain site	All morning	Fellows, Mentors, Special Guests
afternoon	Tour of Yucca Mountain site	All afternoon	Fellows, Mentors, Special Guests
evening	Return to Las Vegas		Fellows, Mentors, Special Guests
Fri (8/19)			
morning	Perspectives on Yucca Mountain Project	1.25	J. Ralston, A .Robison
	University Research	0.25	A. Hechanova
afternoon	Optional trip to tour Hoover Dam	4.5	
evening	Farewell Dinner; Leadership Lecture; Present Certificates		Hans Blix, Speaker
	Institute Adjourned; Enjoy final evening in Las Vegas		
Sat (8/20)	Participants depart from Las Vegas		