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# *The ANS Globe*

*...e-news from the ANS International Committee*

## **From the editors**

*The ANS Globe* is the Bulletin of the American Nuclear Society's International Committee. *The ANS Globe* has as its mandate the dissemination of news of international interest to International Committee members and to others.

We would like to keep *The ANS Globe* current and relevant. Please send us your letters, articles, news and/or comments for consideration towards the next issue.

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## From the Chair

Dear Friends,



The past year has been a challenging one for us all, but unlike 1987 and 1978, I sense that there is greater sense of resilience for nuclear power in the world today, certainly in parts of the world. ANS and the International Committee have been well positioned in the global “hotbeds” of nuclear over the past year; whether it was in Japan, or in China or India, ANS has made a difference. When I joined ANS as a student in 1988 I had no idea that it would take more than 20 years before another reactor would be licensed in the U.S. There is a distinctly different feeling in the U.S. this time, along with a realization that the nuclear universe does not revolve around what the U.S. is doing in nuclear.

It is fitting then that ANS Board will have its first member from the Chinese Nuclear Society in 2012, and that the International Committee welcomes our member from the Indian Nuclear Society. In my mind there has never been a more exciting time to be associated the ANS International Committee than 2012. Many nuclear professionals agree. I had the good fortune to visit nuclear professionals in 11 countries over the past year, and at conference like the PBNC, I have made new friends from many more countries. In every country I have met at least one person who has asked how they can get involved in ANS and the IC.

With unprecedented expressions of interest in the IC, we have unfortunately seen very low attendance at our bi-annual meetings, which is why at our last meeting I raised the issue of setting attendance criteria for IC members to ensure that we remain a forum of debate and discussion on the issues that matter to our profession. I have made it a point myself to attend 6 of the 7 ANS meetings since I first joined the IC in 2009, despite living in India for the past 3 years. Please give this some thought before our meeting in June, how can we capitalize on the international interest in ANS and what can we do as an organization to better respond to our mandate to coordinate international collaborations between ANS and other nuclear societies.

I look forward to seeing you all in Chicago, and I look forward to 2013 being a better year than 1988 and 1979.

Best Regards,  
Dr. Corey McDaniel

IC Chair Corey McDaniel with (on left) KP Lau (IC member) and WANG Delin, Secretary-General of Chinese Nuclear Society, after meeting at CNNC headquarters in Beijing.



## In Memoriam: Carlos Vélez Ocon

*The ANS Globe* learned with great sadness of the passing this past January of our esteemed colleague Dr. Carlos Vélez Ocon. Dr. Vélez Ocon was a member of the ANS Board of Directors and Fellow of the ANS, and President of the LAS/ANS. On behalf of the ANS International Committee, *The ANS Globe* would like to express sincerest condolences to Dr. Vélez Ocon's family and to the Sociedad Nuclear Mexicana.

Carlos Vélez Ocon was among the Spanish exiles who arrived in Mexico as a result of the civil war in Spain. Pioneer of nuclear energy and promoter of the nuclear power plants in Mexico, he was the first Mexican national who studied Nuclear Engineering. He obtained a baccalaureate in science from the Université de Paris in 1949, and an engineer degree from the Superior School of Electricity of France in 1951. After returning to Mexico, he went on to earn an MSc in 1957 and a PhD in nuclear engineering in 1959 from the University of Michigan.

His early appointments at the National Nuclear Energy Commission included heading the Reactors Program and the Plasmas Laboratory (1959-1964). As regards the academic field, he was Chairman of the Nuclear Engineering Department at the National Polytechnic Institute of Mexico (1965-1966) and afterwards, he was appointed Head of the School of Engineering of the Metropolitan Autonomous University (1974-1975). He became Executive Director of the Electrical Research Institute of Mexico (1975-1976), and served as a Nuclear Engineering Advisor in the Ministry of Energy, Mines and Industry of the Mexican government. In 1976 he was designated General Director of the National Nuclear Energy Institute, a national laboratory of nuclear research.

He spent some time as a Visiting Professor at the School of Industrial Engineering at the Polytechnic University of Madrid, and was Deputy Director General of the International Atomic Energy Agency (1980-1985). Upon his return to Mexico, he was named General Director of the National Institute for Nuclear Research (1987-1994), and later on collaborated as Project Manager of the University Energy Program at the National Autonomous University of Mexico (1997-2005). He also promoted the activities of the professional societies and was a member and Vice President of the Mexican Physics Society (1967-1968), President of the Nuclear Mexican Society (1988-1992), member of the Board Directors of the American Nuclear Society (ANS) (1990-1992), and President of the Latin American Section of the American Nuclear Society (1995-1996). He was the recipient of several awards, among them the LAS/ANS Nuclear Energy Development in Latin America Award (1988), "Fellow" of the American Nuclear Society (1996), Recognition for Lifetime Achievement Academic and Professional of the Nuclear Mexican Society (1998) and member of the Scientific Council of Électricité de France (2000-2006), and Honorary Academician of the Engineering Academy of Mexico (2007).

As General Director of the National Institute for Nuclear Research, Dr. Carlos Velez initiated several important scientific research and development projects in the nuclear area, including the construction and operation of a fuel fabrication plant.

During his lifetime Dr. Velez Ocon applied his experience and vast knowledge to promote the use of nuclear energy for peaceful purposes in Mexico and in the world, his talent to transmit his knowledge and expertise to people of all ages was well recognized and inspired generations of professionals of the nuclear area in Mexico. His enthusiasm, understanding and sense of justice are remembered by all who knew him.

## **The ANS International Committee's Web Page**

Visit the enhanced ANS International Committee's Section on the ANS website, located at <http://www.ans.org/const/international>. It includes:

- Background information about the ANS International Committee
- Connections to ANS International Local Sections
- An overview of Society alliances with international organizations (INEA, INSC, and PNC), along with contact information
- Connections to 30 ANS Agreement Societies/Organizations, and
- Current/back issues of *The ANS Globe*, which features ANS International Committee activities and related items.

## **Election of Non-US ANS Board Members**

IC Chair Corey McDaniel informed the 2011 October IC meeting that the ANS Nominating Committee approved [Zheng Mingguang](#) and [Jiang Hong](#) as the Non-U.S. Board candidates from the Asia/Oceania Region for the 2012 election.

Also, Chair McDaniel reminded that according to IC guidelines recommendations for two non-U.S. Board-member nominations from the Americas Latin America Region are to be provided to the ANS Nominating Committee for the 2013 election. The proposed IC nominees will be discussed during the 2012 June 24 IC meeting in Chicago.

## **News from Sister Societies and International News**

At the International Committee meeting in Washington, DC, 30 October 2011, [Dr. Rolland Langley of the IC](#) discoursed on the importance of the International Committee in international exchanges of communication on technology. He talked about the invitation which the IC extends at most meetings to an agreement society from developing countries to come to an IC meeting to present the state of nuclear technology in its country. He also strongly encouraged the international community to contribute articles and items to *The ANS Globe*. It's a great opportunity to let others in the international community know about the important news happening in your country.

[IC Chair Corey McDaniel](#) also talked about the importance of the IC in international exchanges. He put out a suggestion of perhaps initiating a teleconference call at future IC meetings, so that the members who are unable to attend in person can at least attend by telephone. Several members strongly endorsed the idea of a teleconference at IC meetings.

### **• Brazil**



The 2012 LAS-ANS SYMPOSIUM will be held in Rio de Janeiro, Brazil, 2012 July 2-5. The Symposium will focus on the central topic "FUKUSHIMA OUTCOMES - The Impact on Latin American Nuclear Power Programs". The program of the Symposium is available on [www.las-ans.org.br](http://www.las-ans.org.br).



- **Canadian Nuclear Society (CNS) (<http://www.cns-snc.ca>)**

The Canadian Nuclear Society is organizing a number of major conferences in 2012:

- 33<sup>rd</sup> Annual Conference of the Canadian Nuclear Society and 36<sup>th</sup> CNS/CNA Student Conference, 2012 June 10-13, Saskatoon, Saskatchewan, Canada – <http://www.cns-snc.ca/events/conf2012/>
- CNS Workshop on nuclear Education and Outreach (NEO-2012), 2012 August 26-28, Hamilton, Ontario, Canada - <http://www.cns-snc.ca/events/neo2012/>
- 24<sup>th</sup> CNS Nuclear Simulation Symposium, 2012 October 14-16, Ottawa, Ontario, Canada - <http://www.cns-snc.ca/events/24-nss/>
- 7<sup>th</sup> CNS International Steam Generators to Controls Conference, 2012 Nov.11-14, Toronto, Ontario, Canada - [http://sgc2012.ca/2012sgc\\_html/2012sgc\\_home.html](http://sgc2012.ca/2012sgc_html/2012sgc_home.html)
- And the CNS is excited that it will be hosting the 19<sup>th</sup> PBNC Conference (PBNC-2014), 2014 August 24-28, in Vancouver, British Columbia, Canada - <http://www.cns-snc.ca/events/pbnc-2014/>. The theme of PBNC-2014 is “Fulfilling the Promise of Nuclear Technology in the Pacific Basin in the 21<sup>st</sup> Century”.



The new Executive of the Canadian Nuclear Society, for the period June 2012 to June 2013, is:

- **John Roberts** (JGRChem, Inc.), President
- **Frank Doyle** (CANDU Owners' Group), Past President
- **Adriaan Buijs** (McMaster University), 1st Vice-President
- **Jacques Plourde** (Nuclear Insurance Association of Canada), 2<sup>nd</sup> Vice-President
- **Mohamed Younis** (AMEC-NSS) Treasurer
- **Colin Hunt** (Consultant), Secretary

- **European Nuclear Society**

The European has a new President and a new Secretary General:

- **President Marco Streit** (Dr. sc. nat.) is Project Leader and Quality Manager at the Hot Laboratory Division of the Nuclear Energy and Safety Department of the Paul Scherrer Institute.
- **Secretary General Jean-Pol Poncelet** was most recently Advisor to Anne Lauvergeon (CEO of AREVA) and AREVA's Senior Vice President of Sustainable Development and Continuous Improvement.

- **India**

**Dr. Ravi B. Grover**, Principal Advisor, Indian Department of Atomic Energy, has been invited to give an update on the Indian Nuclear Program at the June 24 meeting of the IC in Chicago, IL. Dr. Grover is concurrently working as Director of the Homi Bhabha National Institute (HBNI), Director of the Strategic Planning Group (SPG), Department of Atomic Energy (DAE) and Director, Knowledge Management Group, Bhabha Atomic Research Centre (BARC), DAE, India. During the first 25 years



of his career, Dr. Grover worked in the areas of reactor thermal-hydraulics, safety and process design of systems and equipments. During the past ten years, he has been working on issues related to technology transfer, energy planning, extra-mural funding and human resource development. Dr. Grover is a Fellow of the Indian National Academy of Engineering. He studied Mechanical Engineering at Delhi College of Engineering, Nuclear Engineering at BARC Training School and received a Ph.D from the Indian Institute of Science

- **India Local Section of ANS** (<http://local.ans.org/india>)  
Email: [anslocalindia@gmail.com](mailto:anslocalindia@gmail.com)



ANS-India is a non-profit organization dedicated to the advancement of science, engineering, and education pertaining to peaceful uses of nuclear science and technology and commerce.

**ANS President Eric Loewen** led an ANS Mission to the N-Safety Summit which was held for 3 days in September 2011 in Mumbai. Dr. Loewen gave a very well received talk on “Learning Lessons in Nuclear Safety”. Dr. Loewen also presented an ANS Presidential Citation to **Dr. Anil Kakodkar**, former Chair of the Indian Atomic Energy Commission and Secretary of the Indian Department of Atomic Energy, for his leadership role in negotiating the Indo-US civil nuclear agreement.

**IC Chair Corey McDaniel** sent the photo below and a report about the ANS India Local Section, just below.



ANS India Section Board meeting – Left: Ms. Devi Kompella (first ANS IC member from Indian Nuclear Society) – meeting in Mumbai

## **3<sup>rd</sup> Indo-US Nuclear Energy Summit**

ANS-India will present the 3<sup>rd</sup> Indo-US Nuclear Energy Summit, 2012 October 8-12, featuring [Patrick Moore](#) & [Anil Kakodkar](#). The focus will be Public Awareness, Education & Training. The venue will be IIT, Powai, Mumbai.

The 3<sup>rd</sup> Indo-US Nuclear Energy Summit is co-organized by DAE. It is sponsored by Westinghouse, GE, Areva, and NuScale Power.

### **Event**

ANS-India is pleased to invite you to participate in commemorating the 4th anniversary of the Indo-U.S. Civil Nuclear Agreement. The ANS 2012 program for “Acceptance through Awareness” includes a one-day Public Awareness Workshop on a one-day Public Forum on the Benefits of Nuclear Power for India.

The two-day event will educate and train the executives operating nuclear plants on how to better communicate to the public, then several top communicators in the nuclear field will take their case directly to the public in an interactive forum.

The exhibition-cum-interactive Summit marks the 4<sup>th</sup> anniversary of the historical Indo-US Civil Nuclear Energy Agreement, signed between India and the US on 8 October 2008. The landmark deal aims to change the lives of millions of people for the better in an energy-starved country.

### **Program**

The Summit is an ideal occasion and great opportunity for all stakeholders in the nuclear energy industry to interact during the following sessions.

- 1 Session: Communication Professionals
- 2 Session: Students and Academicians
- 3 Session: General public and media
- 4 Session: Industry and Government Officials

Prominent invited speakers include:

Dr. Patrick Moore, founder of Greenpeace

Dr. Anil Kakodkar, former AEC Chairman

Dr. RK Sinha, AEC Chairman

Dr. SA Bhardwaj, NPCIL CMD

Ms. Kristine Svinicki, U.S. NRC Commissioner

Mr. Geoff Pyatt, U.S. State Department PDAS

Mr. Ron Somers, USIBC President

Hon. Peter Hass, U.S. Consul General

### **Delegates**

The entry to the conference is only through invitation and registration.

### **Travel & Stay**

Mumbai is well connected with other parts of the world by air. It is also well connected by air, railways and road to all key Indian cities.

## Background

The Indo-US Civil Nuclear Energy Agreement was signed on 8 October, 2008. The framework for this agreement was a joint statement by Indian Prime Minister Manmohan Singh and then U.S. President George W. Bush, under which India agreed to separate its civil and military nuclear facilities and to place its civil nuclear facilities under International Atomic Energy Agency (IAEA) safeguards and the United States agreed to work toward full civil nuclear cooperation with India. According to the Nuclear Power Corporation of India Ltd (NPCIL), the agreement will help India meet its goal of adding 25,000 MW of nuclear power capacity through imports of nuclear reactors and fuel by 2020.

## Past Events

- Dinner with Dr. Gregory Jaczko, Chairman, U.S. NRC
- Dinner with Dr. Eric Isaacs, Director, Argonne National Laboratory
- Indo-US Nuclear Energy Safety Summit 2011
- Inaugural meeting of ANS-India
- Celebrations of the 2nd anniversary of the Indo-US Civil Nuclear Energy Agreement 2010 – felicitating Dr. Anil Kakodkar
- Celebrations of the 3rd anniversary of the Indo-US Civil Nuclear Energy Agreement 2010 – facilitating Minister of Power Shinde.

## • Italy

- Following the Fukushima accident, a popular referendum held 2011 June 12-13 condemned Italy to cancel for the second time (after Chernobyl 1986) any internal project for the development of NPPs. The Government project to install 5 EPRs or 8 AP1000s was suddenly stopped. See in previous issues of the *ANS Globe*: Dr. Ing. Stefano Monti, ENEA, Bologna.
- Several big and medium Italian companies are more and more engaged in the nuclear market, but outside Italy.
- The biggest of these companies is Ansaldo Nucleare (Genova), belonging to the industrial group “Finmeccanica”, and it is very active in this sense. Sadly, one month ago one of the top managers of Ansaldo Nucleare, Dr. Ing. Roberto Adinolfi (AD, Amministratore Delegato) was wounded by gunfire during a terrorist attack by a group of antinuclear anarchists. These people announced more such actions would take place. Dr. Adinolfi gave a long description on the Italian perspectives on nuclear in previous issues of the *ANS Globe*.
- Fortunately, in many University and Research Centres the nuclear issue is still alive. On will be hold The 8th International Conference of Nuclear and Radiochemistry (NRC8) will be held 2012 September 16-21 in Como, Italy. Delegates from 35 different countries are expected. Two sessions will be dedicated to Nuclear Energy and related technologies. The conference website is at <http://NRC8@mi.infn.it>



- [Korea](#)



Busan

## **18<sup>th</sup> PBNC**

Korea hosted the very successful 18<sup>th</sup> Pacific Basin Nuclear Conference (PBNC-2012) on 18-23 March 2012 in the port city of Busan.

PBNC-2012 was co-chaired by [Soon-Heung Chang](#), President of the Korean Nuclear Society (KNS) and Professor at the Korea Advanced Institute of Science and Technology (KAIST) and [Joong-Kyum Kim](#), Chairman of the Korea Atomic Industrial Forum (KAIF) and President of the Korea Electric Power Company (KEPCO).

The theme of PBNC-2012 was “Sustaining Nuclear Energy Through Enhanced Safety and Security. The Conference venue was BEXCO, a huge and attractive convention centre, with large meeting rooms and excellent facilities. Plenary and Special plenary sessions spanned 4 days; this included 2 special sessions held on the Monday and Tuesday evening. There were also numerous technical sessions. The Conference registration was ~800 people, of which ~400 were students. There were over 260 papers in the Conference Program.

An excellent Exhibition accompanied the Conference. There were over 90 different exhibitors and over 200 booth spaces.

- [Latin American Section of ANS](#)

## **2012 - LAS-ANS SYMPOSIUM**

The Latin American Section of the ANS announced the following Symposium to be held in Rio de Janeiro, Brazil, July 2012:

“FUKUSHIMA OUTCOMES - The impact on Latin American Nuclear Power Programs”

Some topics to be covered in the Symposium:

- Geophysical Review of Theories of Tectonic Plates Movement
- Adapting Standards for Nuclear Licensing According to New Geophysical Theories
- Current Actions in Regulation Agencies and Power Companies on Installation, Maintenance and Safety of Nuclear Power Plants, newly built or in operation
- Design Changes in Nuclear Power Plant from the Fukushima experience
- Updating Nuclear Programs in Latin America following Fukushima
- Revising Technical and Scientific Education and Capacity Building Programs for Nuclear Power Plant Projects
- Paradigm Changes on Human and Environmental Protection

- **Malaysia**

IC Chair Corey McDaniel met Dr. Muhamad Lebai Juri, Director General of Nuklear Malaysia (also of Malaysian Nuclear Society) in Kuala Lumpur.



- **Mexico**

The Sociedad Nuclear Mexicana has a new President: Mr. **José-Raúl Ortiz-Magaña**. He is the Director General of the National Institute for Nuclear Researches.

- **OECD Nuclear Energy Agency (<http://www.nea.fr>)**

(Gleaned from the OECD NEA's Monthly News Bulletins)

### **NEA's Steering Committee for Nuclear Energy**

Several important issues were deliberated at the 123<sup>rd</sup> session of the Steering Committee for Nuclear Energy on 27-28 October 2011. The Committee approved funding to support Fukushima-related activities and discussed various aspects of the accident and its implications for NEA work in a policy debate. It also addressed the official request received from the Russian Federation on 24 October to join the NEA. It agreed to send a fact-finding mission to the Russian Federation to inform its decision on membership, which it expects to take at its next meeting in April 2012. If the Russian Federation is granted membership, it will be the second such country (after the Republic of Korea in 1993) to accede to the NEA prior to joining the OECD.

### **NEA's Peer Review of Swedish Spent-Fuel Repository**

At the request of the Swedish Radiation Safety Authority (SSM), the NEA organised an international, independent peer review of the Swedish Nuclear Fuel and Waste Management Company's (SKB's) reporting of post-closure safety in the license application for the spent nuclear fuel repository to be constructed in Forsmark, Sweden.

The NEA peer review supports the independent review by the Swedish decision makers by providing an international reference regarding the maturity of SKB's spent fuel disposal programme vis-à-vis best practices in long-term nuclear safety and radiological protection. Public hearings were held on 12, 13 and 15 December, during which the NEA panel posed questions to SKB representatives. On 16 December, the NEA panel presented its preliminary conclusions on the peer review. The final review report was to be issued in May 2012.

### **Dialogue with civil society in affected areas of Japan**

With the co-operation of the NEA, the International Commission on Radiological Protection (ICRP) organised a dialogue with residents of Data City, Japan on 25-26 February. This meeting was the second in a series of ICRP seminars that foster discussions among affected stakeholders in order to help identify priorities and to initiate rehabilitation programmes in follow-up to the Fukushima Daiichi nuclear accident. The agenda focused on past accomplishments, current challenges and future initiatives to improve the radiological situation and living conditions for local inhabitants. About 50 representatives of civil society as well as central, prefectural and local governments attended along with 50 residents of Fukushima prefecture. Data City is a community that has been significantly affected by contamination from the Fukushima accident. During the meeting, ways to help improve the situation were identified, including common agreements on radiological criteria (e.g. food-contamination levels), waste-management approaches and criteria for successful remediation.

### **Top Nuclear Safety Regulators Enhance Crisis Communication Following FUKUSHIMA**

On 2012 May 9-10, senior officials from nuclear regulatory organisations and key stakeholders from 25 countries and 7 international organisations met during a two-day International Workshop on Crisis Communication: Facing the Challenges to share best practices and to improve crisis communication. The workshop was organised by the OECD NEA and hosted by the Consejo de Seguridad Nuclear (CSN) in Madrid, Spain. Mrs. Carmen Martínez Ten, CSN Chair, Mr. Luis E. Echávarri, OECD/NEA Director-General, Mr. Pablo Matos, President of the Industry, Energy and Tourism Commission of the Spanish Parliament and Mr. Mike Weightman, Head of the UK Office for Nuclear Regulation and Chair of the OECD/NEA Committee on Nuclear Regulatory Activities (CNRA), opened the workshop on 9 May, stressing that the Fukushima accident had shown the extent to which information and communication are crucial in a time of a crisis. Mr. Echávarri pointed out that the communication policies of nuclear safety organisations had been addressed for many years by the OECD/NEA Committee on Nuclear Regulatory Activities (CNRA) and its Working Group on Public Communication of Nuclear Regulatory Organisations, but the accident further highlighted the need for clear plans in times of crisis, when independent, objective and fact-based information is critically needed.

The lessons learnt from the Fukushima nuclear accident were at the core of the discussions throughout the workshop. Most of the regulatory bodies and international organisations sought to communicate authenticated data during the crisis, which proved challenging as reliable information was not always available in a timely manner.

Generally, nuclear regulatory organisations activated crisis communication centres and made outstanding efforts to provide as much information as possible to governments, the public and the media, with several briefings and news items posted daily. It was also noted that the public demand for information had been overwhelming during the first weeks following the accident, inevitably triggering frustration linked primarily to diverging national recommendations on health protection measures. Closing the workshop on 10 May, [Mr. Fernando Martí Scharfhausen](#), Spanish Secretary of State for Energy, considered that the workshop had provided an excellent opportunity to update regulators' strategies with a global approach and concluded that communication is an essential part of their duties. While it was clear from the discussions that regulators should continue to enhance their crisis communication plans, it was also noted that public trust is highly dependent on credibility built over time, far before a crisis occurs. This implies that regulators should regularly demonstrate their competence and independence in their daily activities, which will help ensure that their messages will be listened to in a crisis situation. Participants also insisted that, for events of international significance, crisis communication plans should take into account the globalisation of information and include tools to address the public and media beyond national borders. Several stakeholders added that scenarios and prognoses should be part of these plans, even with uncertain data. While new tools, including social media, can significantly help disseminate information, they do not dismiss the need for regulators to formulate clear messages that are understandable by non-experts and delivered on a timely basis. Furthermore, the emotional dimension of a crisis, with perceived fears, prejudices and misconceptions, should not be overlooked.

Since the Fukushima accident, several activities have been undertaken to enhance crisis communication and were highlighted during the workshop, including the IAEA Action Plan which inter alia calls upon the IAEA Secretariat to provide information on the potential consequences of an accident as well as an analysis of the information available at the time. The International Workshop on Crisis Communication forms part of the efforts of the OECD/NEA Working Group on Public Communication of Nuclear Regulatory Organisations to draw lessons from the Fukushima accident, and will contribute to strengthening the roadmap for crisis communication of nuclear regulatory organisations. The workshop presentations are available at: [www.oecd-nea.org/nsd/workshops/crisis-comms/programme.html](http://www.oecd-nea.org/nsd/workshops/crisis-comms/programme.html).

### **Indian Nuclear Regulatory Body (AERB) Joins the Multinational Design Evaluation Programme (MDEP)**

On 4 April 2012, India's Atomic Energy Regulatory Board (AERB) became the first new member in the MDEP since its inception in 2006.

[Mr. André-Claude Lacoste](#), MDEP Policy Group Chair and Chairman of the French Nuclear Safety Authority (*Autorité de sûreté nucléaire*, ASN), noted that the Policy Group's decision was based on careful consideration of information provided by the AERB concerning its role and duties as well as India's nuclear regulatory framework. He confirmed that it meets the criteria for full membership in the MDEP.

[Mr. Luis E. Echávarri](#), Director-General of the OECD Nuclear Energy Agency (NEA), which acts as the Technical Secretariat for the MDEP, welcomed the contribution that the



AERB would be making to the convergence of nuclear safety practices among regulators in member and non-member countries alike. India has 20 operational nuclear power reactors totalling 4,780 MWe, and 6 under construction totalling 4,600 MWe. Further expansion of the nuclear fleet is planned in the decades to come.

### **Russian Federation to Join the OECD NEA**

On 2012 May 23, an official exchange of letters took place between OECD Secretary-General [Angel Gurría](#), First Deputy Minister of Foreign Affairs of the Russian Federation [Andrey Denisov](#) and Deputy Director-General of Rosatom [Nikolay Spasskiy](#) to formalise the accession of the Russian Federation to the OECD NEA and its Data Bank effective as from 1st January 2013. Russia will then become the 31st member country of the NEA. “With Russia, the NEA will have additional strength when it comes to nuclear energy, nuclear safety, waste management or economics,” said OECD Secretary-General, Angel Gurría. “It is all the more important in the post-Fukushima context: international co-operation needs to be enhanced to make sure that all the lessons learnt are fully implemented.”



“We are particularly proud to become an NEA member,” said First Deputy Minister of Foreign Affairs of the Russian Federation, Andrey Denisov. “It is also an important step in the direction of full OECD membership.”

“This is a highly significant event that will bring tremendous change to the Agency”, said NEA Director-General [Luis Echávarri](#). “The Russian Federation is indeed a major player in the nuclear field, with plant construction and operation, fuel fabrication and research institutes of world renown; it is one of the few countries in the world exporting nuclear reactor technology.”

“The Russian Federation and the NEA have a long history of co-operation,” said Deputy Director-General of Rosatom, Nikolay Spasskiy. “The Russian Federation shares the same values as the NEA member countries with regard to nuclear safety and is committed to bring its best experts to enhance NEA activities, thereby providing mutual benefit.”

Russia has the fourth largest civilian nuclear programme in the world after the United States, France and Japan. Currently, around 18% of the country’s electricity is produced by 33 nuclear reactors. Russia is steadily moving towards an expanded role of nuclear energy, with 11 reactors under construction and plans for nearly doubling output by 2020. The Russian Federation and the NEA have a long-standing relationship. Russia became an ad hoc observer in the NEA [Nuclear Law Committee](#) in 1996, and a regular observer in the NEA Committee on the Safety of Nuclear Installations and the NEA Committee on Nuclear Regulatory Activities in 1998. Russia has been a regular observer in all NEA standing technical committees since signing a [joint declaration](#) with the NEA in 2007. Russia is also a contributor to the NEA Data Bank activities and has been involved in the High-level Group on the Security of Supply of Medical Radioisotopes (HLG-MR) since 2010.

Russia is a member of the Generation IV International Forum (GIF), and its nuclear regulatory authority is a member of the Multinational Design Evaluation Programme (MDEP). The NEA acts as Technical Secretariat for both initiatives. Russia is also a member of the International Atomic Energy Agency (IAEA) and party to the main treaties and agreements on the non-proliferation of nuclear weapons and on co-operation with regard to the peaceful uses of nuclear energy.

- [Slovakia](#)

[Dr. Jozef Markuš](#), SNUS Vice-Chairman of the Slovak Nuclear Society, sent the following report on an expedition to Chernobyl NPP

### **SNUS Scientific Expedition to Chernobyl NPP**

The Slovak Nuclear Society (SNUS) organized a scientific expedition to Chernobyl Nuclear Power Plant and its surroundings September 11-16, 2011. The expedition participants were SNUS members from universities and from utilities Slovenské elektrárne (NPPs operator), Inc. and JAVYS, Inc. (NPP decommissioning company). The main goal of the expedition was to monitor conditions in the NPP and its surroundings 25 years after the accident at the plant's Unit 4.

The program of the expedition focused on collecting information related to the preparation of step-by-step decommissioning and cleaning, the visit to the information centre and the sarcophagus over the damaged unit, the visit to the control room of shutdown Unit 1, performing measurements of radiation directly at the plant and in its vicinity, along with collecting samples from the environment with subsequent measurement in radiochemical laboratories at the plant. Of course, visit to the ghost city Pripyat was a must in our program. The city once used to be home to plant workers and their families.

Expedition members travelled by bus to Slavutich City, where plant employees currently live (about 3000 people work today at the plant). Slavutich, home to 25 000 inhabitants, was erected in a record-breaking 18 months (construction began in January 1987) and in representatives of 8 republics of the Soviet Union participated in building it. Today, employees are transferred from Slavutich to the plant by train, which commutes four times a day (about half of the railway line goes through Belarus).

On the first day of the expedition we visited newly-built equipment for processing of solid and liquid radioactive waste. This equipment was constructed with a substantial contribution from NUCEM company. The equipment is being used for training of personnel for start-up tests, and later for regular operation.

In the afternoon we moved to the "Red Forest", where measurements were carried out and samples for radiochemical measurements were collected. The "Red Forest" is the area most afflicted by the accident, which is evident even today. Decontamination work is still going on. Nonetheless, flora and fauna do not show any significant anomalies. Of course, this area is uninhabited.

Next day we visited the Information centre located close to the Unit 4 sarcophagus and got acquainted with the present status of the sarcophagus, which had been erected within 206 days. More than 90 thousand people participated in its construction, working relentlessly day and night. Due to worsening sarcophagus conditions (mainly because of weather conditions) it was decided to build a new shelter over the existing sarcophagus. The contract for that was won by the NOVARKA consortium, led by two French companies. Slovakia supported financing of the project with a contribution of 2 million €. Altogether 800 million € were collected from 28 countries around the world and from European Union.

We also had the opportunity to visit Pripjat City (a distance of about 4 km from the damaged Unit 4), in which about 49 500 people lived at the time of the accident. The city was evacuated in the afternoon on April 27, 1986, using about 1200 buses with a promise to return within three days, which of course never happened. The city is now exposed to nature and you can see what nature can do in 25 years. Members of our expedition took a lot of photographs and videos. By the way, “nuclear tourism” to the area, which had been organized until the end of June, was abandoned because money from it flew nobody-knows-where.

In the afternoon we could see the control room of Unit 1 and got information on specifics of this type of nuclear-power technology and on the operation of intact units, which had continued up to 1999 and 2000 respectively, when all units of the plant were shut down for good. Today the shift personnel consists of 20 employees per shift.

The last day we visited the Chernobyl museum in Slavutich and the radiochemical laboratory. Some members performed measurements on the samples collected in the Red Forest.

Two weeks after the expedition the government of Ukraine cancelled any further trips to Chernobyl, until further notice. Correct decision...

*Experiences and summary from this expedition were published in the 2/2012 issue of SNUS Bulletin.*



Members of  
the Expedition



Collecting Samples in  
the Vicinity of the Red  
Forest

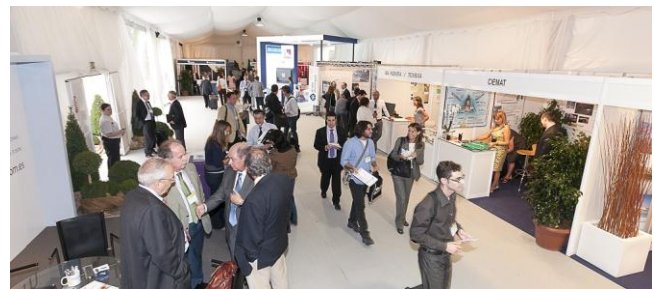
- [Spain \(www.sne.es\)](http://www.sne.es)



[Prof. Diana Cuervo](#), of the Sociedad Nuclear Española, sent the SNE news:

- The **37<sup>th</sup> Annual Meeting of the Spanish Nuclear Society was held in Burgos** in 2011 September, coinciding with the 40<sup>th</sup> anniversary of the Santa María de Garoña NPP. The meeting was supported by 32 companies participating in the parallel exhibition and attendance of nearly 600 participants and 100 companions. 290 papers were presented in the technical program.

There were two main areas: Santa Maria de Garoña and Fukushima accident and its implications. The first objective was fully covered by several sessions that addressed the issues raised by the current state of the Santa Maria de Garoña power plant. The second issue had an interesting and emotional plenary session with the presence of [Akira Kawano](#), General Manager of TEPCO that brought together a select international participation of representatives of different countries. The preliminary results of stress tests conducted by the holders of the Spanish plants were also commented.





- For another year the SNE organized the winter session “**Nuclear Power Plants in 2011. Experiences and Perspectives**”, in which Spanish nuclear industry representatives discussed issues relevant to nuclear power plant operation in the past year and the future situation of the nuclear industry. The meeting had again the presence and participation of university representatives, both teachers and students. This year the Special Session was devoted to “*Energy crossroads in Europe*” and was moderated by [Lola Morales, President of the Spanish Nuclear Society](#). The guest speakers for this special session were [Alejo Vidal-Quadras, Vice President of the European Parliament](#) and [Eduardo Montes, UNESA President](#). Their basic messages were that due to the high dependence on energy in Europe, the decision of some countries to abandon the nuclear program is likely to increase CO<sub>2</sub> emissions and electricity prices. Meanwhile, in Spain, where there is a difficult situation with a fall in 2011 demand by 1.9 % due to the economic situation, an upward trend in the final cost of electricity and accumulated deficit rate due to regulated activities, and an increase in CO<sub>2</sub> emissions by 32% due to increased coal generation, the decision to maintain the current nuclear program has been fully adequate.



- Nuclear España Best Article Prize** has been given this year to the paper “*The added value of the replica simulators in the operation of nuclear power plants*”, written by [Pedro Díaz](#), [Norberto Rivero](#) and [Fernando Ortega](#), from TECNATOM. The Commission gave also an Honorable Mention to the issues of the magazine “40<sup>th</sup> Anniversary of the Santa Maria de Garoña Nuclear Power Plant” and “Almaraz Nuclear Power Plant”.



- The Spanish Nuclear Society has programmed a **Cycle of Three Conferences on the Accident at the Fukushima Plant** with great success of attendance. The conferences were entitled “*The development of accident: lights, shadows and opportunities*”, “*The plan of stabilization and control of the plant and the consequences of the accident from the point of view of environmental contamination*” and “*Actions after the*”

*accident: Radiological impact and measures to protect the population. IAEA missions”*

- The SNS has signed a **collaboration agreement with the Mexican Nuclear Society.**
- **The Spanish Nuclear Young Generation has scheduled a cycle of 6 conferences** on “Experience in the Construction of Spanish Nuclear Power Plants”.

### **SPANISH NPP NEWS**

- **The contribution of the Spanish nuclear power plants in 2011** to electricity production has been of 19.6%.
- The government has granted an **operating license for 10 more years to Ascó and Cofrentes NPP.**
- **Almaraz Unit II NPP has increased its electric power** by 65 MW.
- The Spanish government has decided to install the **Temporary Centralized Storage** in Villar de Cañas, a farming town of 1,000 inhabitants located in the province of Cuenca, 135 kilometers southeast of Madrid. The project will require an investment of 750 million euros and will create 300 direct jobs.
- Meeting the deadlines established by the European Union, **the Spanish nuclear power plants submitted their final reports on the stress tests to the Nuclear Safety Council.** The scenarios analyzed in this complementary reassessment of the beyond design basis safety margins basically include the following:
  - Earthquakes, floods and other extreme natural events
  - Loss of safety functions due to loss of electric power supply and loss of the final heat sink (cooling capacity)
  - Management of severe accidents in the reactor core and in the spent fuel repositories.

The results of the Spanish NPP reports reveal not only that there is compliance with the design bases stipulated for each installation, but also that there are additional margins that assure the maintenance of safe plant conditions in case of any extreme events that may be postulated beyond those design bases.

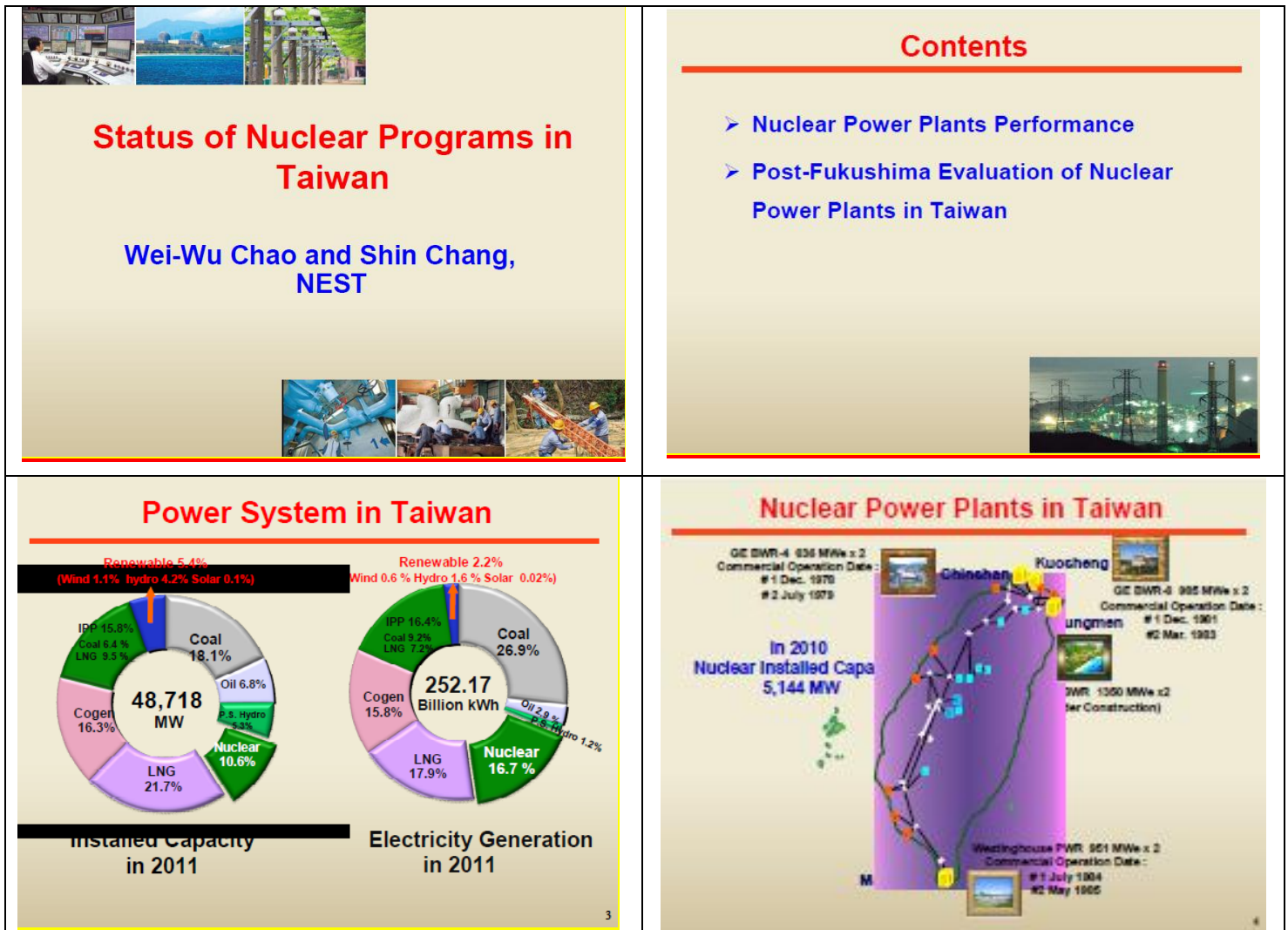
The Nuclear Safety Council has evaluated these reports with a very positive opinion about the fact that the plant owners have additionally proposed certain improvements in both equipment and resources in order to increase even more the existing safety margins, as part of the Spanish nuclear plants’ commitment to continuous improvement from the very beginning of operation.

As a result of the evaluation there have been proposed improvements to increase those safety margins and strengthen the existing measures of accident management. These measures, as is being seen in the European process of peer reviews currently underway, are comparable to those implemented in other European nuclear power plants.

- In July 2009, the CSN considered that **Garoña met the requirements for renewing its operating license until 2019**. However, the past government decided to dictate its closure on July 6, 2013. The current Government is considering the possibility of extending plant operation until 2019, so that they asked for a report to the Regulatory Body on the limits and conditions that it would be necessary to apply, if the ministerial order would be modified in order to leave open the possibility of renewing the current operating license for a new period of six years as of its expiration date. The Safety Council recently issued its report, currently under evaluation by the Spanish government.

- **TAIWAN**

Reproduced below is the latest version of a presentation made by Dr. Wei-Wu Chao and Dr. Shin Chang of NEST at PNC meetings in 2011 and 2012 on the Status of Nuclear Programs in Taiwan.





## Nuclear Performance in 2011



## Nuclear Performance in 2011

- **Generation: 42.13 Billion Kwh (best record)**
- **Capacity Factor: 93.06% (best record)**
- **Scram: 0 for all 6 units (best record)**
- **Continuous operation : 500 Days ( MS2)**
- **Outage duration: 32.9 Days (KS1 EOC-22 refueling/change of LP Rotor)**



## Post-Fukushima Evaluation of Nuclear Power Plants in Taiwan

- After Japan's Fukushima Daiichi Accident, Atomic Energy Council (AEC) asked Taiwan's Nuclear Power Plant operator (TPC) to re-evaluate its capability to cope with extreme natural disasters, including earthquake, tsunami.
- The re-evaluation comprises following parts:
  - Nuclear Safety
  - Radiation Protection
  - Emergency Response Preparedness



## Post-Fukushima Evaluation (2/3)

- By reference to measures recommended by various major nuclear authorities or organizations, such as NRC, NEI, WENRA (later ENSREG), WANO and NISA, AEC requested the TPC to verify the capability of NPPs to respond both the DBA and beyond-DBA accident.
- Two-Stage Approach
  - Near-Term Evaluation (by June, 2011)
  - Mid-Term Evaluation (by December, 2011)
- The preliminary results show no imminent concerns for plant continuous safe operation, while some areas need improvement, such as water tightness of emergency cooling building, backup mobile diesel engine and air compressor, seismic re-assessment, revising emergency operation procedure, etc.
- AEC requested TPC the efforts to adopt by USNRC NTF Report Tier 1 Recommendations (SECY 12-0026)
  - Special Measures for issues with related to the Seismic, Tsunami, and SBO
- Follow-up the Tier 2 & Tier 3 Recommendations by USNRC



## Post-Fukushima Evaluation (3/3)

- AEC requests TPC more countermeasures in the nuclear regulation cases to further enhance the capability to cope with catastrophic destruction by natural disasters
- Taiwan has been adopting stress test (EU)
  - Compliance the ENSREG specification
  - Utilities Final Report for operating NPPs: Early March, 2012
  - National Report : Late April, 2012
  - Utilities Final Report for constructed NPP: Late of April, 2012
  - Peer Review by domestic and International Experts





- [USA](#)

## [ANS International Awards](#)

The American Nuclear Society would like to publicize its International Awards:

### [Alvin M. Weinberg Medal](#)

This award was established in 1995 to honor Alvin M. Weinberg and to provide international recognition for contributions to the understanding of the social implications of nuclear technology. The award is made to an individual in recognition of outstanding international technical and policy leadership in nuclear science and technology and for consistently and effectively illuminating the human dimensions of the nuclear enterprise. The recipient must have demonstrated such achievements over a sustained period of several years. Nominees need not be ANS members, but must be living at the time of nomination, and may be from any nation.



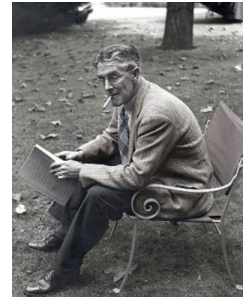
Please visit <http://www.ans.org/honors/va-weinberg> to learn more and download the nomination form.

**Nomination Deadline: July 1. Presented: Winter Meeting. Monetary Award: \$1,000**

### [Henry DeWolf Smyth Nuclear Statesman Award](#)

The award was established in 1972 by the ANS and the Nuclear Energy Institute (NEI) to recognize outstanding and statesmanlike contributions to the many aspects of nuclear energy activities.

The candidate must have international stature in a broad sector of the nuclear energy field. A significant segment of the candidate's work must have been directed toward the peaceful uses of nuclear energy. Nominees need not be ANS or NEI members, they do not have to be US citizens, but the recipient must be living at the time he/she is nominated.



Nominations are considered by a committee comprised of ANS and NEI members.

Please visit <http://www.ans.org/honors/va-smyth> to learn more and download the nomination form.

**Nomination Deadline: February 28**

**Presented: Annual Meeting (even years), Nuclear Energy Assembly (odd years)**

### [Walker Lee Cisler Medal](#)

This award was established in 1991 to honor the late Walker Lee Cisler and to provide international recognition to leadership and achievements associated with the design, development, or deployment of fast reactor technologies. The medal is awarded to an individual in recognition of outstanding scientific or engineering research achievements, or the management associated with the design, development, or deployment of fast reactor technologies. This award recognizes and honors excellence in engineering leadership and achievements worthy of international recognition sustained over a period of time. Nominees need not be ANS members, but must be living at the time of selection.



Please visit <http://www.ans.org/honors/va-cisler> to learn more and download the nomination form.

**Nomination Deadline: March 1. Presented: Annual Meeting**

**The above nominations must include the completed nomination form accompanied by the following supporting documents:**

- A letter of recommendation
- A narrative summary of about 1,000 words, including accomplishments, period of activity, and significance of achievements
- A list of publications
- A brief chronological resume
- Letters of support (support letters recommended but not required, no more than five)

Nomination forms and supporting documents (in Word or Adobe Acrobat) should be emailed to [honors@ans.org](mailto:honors@ans.org).

**Hard copies may be mailed to:**

Honors and Awards, American Nuclear Society  
555 N. Kensington Avenue, La Grange Park, IL 60526-5535, USA

## **Launch of the Forum on Energy**

**Scott L. Campbell**, Director, The Howard Baker Forum and the U.S.-Japan Roundtable, sent the following message on March 5:

“Dear Friend of the US-Japan Roundtable,

The Howard Baker Forum is pleased to announce the launch of the [Forum on Energy](#) - a dynamic online information center that collects, shares and analyzes the latest developments in nuclear energy. The site brings together a range of compelling voices and content to examine and discuss the vital role of nuclear energy as countries across the globe seek clean, sustainable, emission-free power sources.

Our mission is especially important in the wake of the Great East Japan Earthquake and Tsunami that caused the accident at the Fukushima Daiichi Nuclear Power Plant. March 11 marks the first anniversary of this catastrophic event. Today, almost a year later, Japan continues to cope with and repair the damage caused by the tsunami and to manage the decommissioning and clean-up of the Fukushima site and surrounding environs. The world’s nuclear energy industry has learned valuable lessons and is emerging stronger and better equipped to manage the threat of natural disasters.

We would like your help in announcing the [Forum on Energy](#). Thank you for your support and for sharing this important new resource.”

## News from ANS Divisions

To further the implementation of the Joint Protocol between the IC and the Professional Divisions Committee, we are pleased to include in the Globe some newsworthy Division items. While some items can be gleaned from the Divisions' web pages, please send us your most up-to-date and timely news to post in the *ANS Globe*!

- [Thermal Hydraulics Division \(THD\) \(http://thd.ans.org\)](http://thd.ans.org)

### **NURETH-15**

[www.nureth15.org](http://www.nureth15.org)

The 15th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH) will be held

2012 May 12-16 at the Convention Hall in Pisa, Italy. NURETH is recognized as the key series of international topical meetings in the field of thermal hydraulics. NURETH provides international nuclear societies an open forum where high-quality and up-to-date information can be actively discussed and exchanged among world-renowned experts. NURETH-15 is organized by the American Nuclear Society and Nuclear Research Group of San Piero a Grado (GRNSPG) of University of Pisa and will bring together international thermal hydraulic experts with their new information and research. Technical tours to the Virgo facility, the Brasimone Research Centre and the TRIGA Research Reactor will be offered. Additionally a series of tours of some of the beautiful sites and places around Pisa are also being planned. Selected papers from the conference will be published in special issues of refereed archival journals.



## Highlights from the 2011 October Meeting in Washington, DC

IC Member [Lumin Wang](#) made a presentation on a Technical Exchange Visit that he organized to China in 2011 May for 15 undergraduate students and six faculty members from the University of Michigan. The presentation is reproduced below.

### **Witness Nuclear Power Development in China**

A University of Michigan Global Intercultural Experience for Undergraduate Students (GIEU) Program, May 4-31, 2011  
Cosponsored by the Department of Nuclear Engineering and Radiological Sciences, University of Michigan, Ann Arbor  
Participated by 15 Undergraduate Students and 6 Faculty members



#### **Institutions visited**

##### **5 Universities**

- Peking University
- Tsinghua University
- Shanghai Jiaotong University
- Xiamen University
- City University of Hong Kong

##### **2 Research Institutions**

- Institute of Nuclear and New Energy Technology (INET, Tsinghua University)
- Shanghai Nuclear Engineering Research & Design Institute (SNERDI)

##### **4 Nuclear Power Plants**

- Qinshan NPP
- Sanmen NPP
- Fuqing NPP
- Daya Bay NPP



Visit the HTR control room at INNET, Tsinghua University, Beijing  
Hosted by CNS and INNET

Visit SNERDI in Shanghai





### Findings & Summary

- Despite the Fukushima accident, public support for nuclear power is still very strong in China (>70% surveyed by our students thought China should continue to develop nuclear power).
- China is continuing its large-scale campaign of NPP construction (although at a slightly lower pace) and research on Generation IV reactors.
- Exchange of faculty (engineers, scientists) and students between US and China in the nuclear-power area is mutually beneficial for both countries.

### Findings & Summary (cont'd)

- China now provides a unique opportunity for us to learn techniques on nuclear-power construction.
- The US students found the trip eye-opening and obtained a better understanding of how and why China is developing its nuclear-power industry, and through this cultural exchange developed ties with their peers in China for future co-operation in the peaceful utilization of nuclear technology.
- The ANS and the US Government should encourage more exchanges in the field of nuclear engineering.

## Societies with Collaboration Agreements with ANS

The following is a list of nuclear societies with collaboration agreements with the ANS, along with the corresponding website addresses. The Table contains also a few other entries of interest to ANS International Committee members.

<b>Society</b>	<b>Website or E-Mail Address</b>
Asociación Argentina de Tecnología Nuclear	<a href="http://www.aatn.org.ar">www.aatn.org.ar</a>
Associação Brasileira de Energia Nuclear	<a href="http://www.aben.com.br">www.aben.com.br</a>
Association des Ingénieurs en génie atomique du Maroc	-
Atomic Energy Society of Japan	<a href="http://wwwsoc.nii.ac.jp/aesj/index-e.html">wwwsoc.nii.ac.jp/aesj/index-e.html</a>
Australian Nuclear Association	<a href="http://www.nuclearaustralia.org.au">www.nuclearaustralia.org.au</a>
Bangladesh Nuclear Society	-
Bulgarian Nuclear Society	<a href="http://www.bgns.bg">www.bgns.bg</a>
Canadian Nuclear Society	<a href="http://www.cns-snc.ca">www.cns-snc.ca</a>
Chinese Nuclear Society	<a href="http://www.ns.org.cn">www.ns.org.cn</a>



Croatian Nuclear Society	<a href="http://www.nuklearno-drustvo.hr/en/home.html">www.nuklearno-drustvo.hr/en/home.html</a>
Czech Nuclear Society	<a href="http://www.csvts.cz/cns">www.csvts.cz/cns</a>
European Nuclear Society	<a href="http://www.euronuclear.org">www.euronuclear.org</a>
Hungarian Nuclear Society	<a href="http://www.kfki.hu/~hnucsoc/hns.htm">www.kfki.hu/~hnucsoc/hns.htm</a>
Indian Nuclear Society	<a href="http://www.indian-nuclear-society.org.in">www.indian-nuclear-society.org.in</a>
Israel Nuclear Society	<a href="mailto:meins@tx.technion.ac.il">meins@tx.technion.ac.il</a>
Korean Nuclear Society	<a href="http://www.nuclear.or.kr/e_introduce.php">www.nuclear.or.kr/e_introduce.php</a>
Lithuanian Energy Institute	<a href="http://www.lei.lt">www.lei.lt</a>
Malaysian Nuclear Society	<a href="http://www.nuklearmalaysia.org/index.php?id=18mnu=1">www.nuklearmalaysia.org/index.php?id=18mnu=1</a>
Nuclear Energy Society of Kazakhstan	<a href="http://www.nuclear.kz">www.nuclear.kz</a>
Nuclear Energy Society of Russia	<a href="mailto:ns@kiae.ru">ns@kiae.ru</a>
Nuclear Energy Society of Slovenia	<a href="http://www.drustvo-js.si">www.drustvo-js.si</a>
Nuclear Energy Society of Thailand	<a href="http://www.nst.or.th">www.nst.or.th</a>
OECD/Nuclear Energy Agency	<a href="http://www.nea.fr">www.nea.fr</a>
Polish Nuclear Society	<a href="http://www.ptn.nuclear.pl">www.ptn.nuclear.pl</a>
Romanian Nuclear Energy Association	<a href="http://www.aren.ro">www.aren.ro</a>
Romanian Society for Radiological Protection	<a href="http://www.srrp.ro">www.srrp.ro</a>
Slovak Nuclear Society	<a href="http://www.snus.sk">www.snus.sk</a>
Sociedad Nuclear Española (SNE)	<a href="http://www.sne.es">www.sne.es</a>
Sociedad Nuclear Mexicana	<a href="http://www.sociedadnuclear.org.mx">www.sociedadnuclear.org.mx</a>
Ukrainian Nuclear Society	<a href="http://www.ukrns.odessa.net">www.ukrns.odessa.net</a>
United Kingdom Nuclear Institute	<a href="http://www.nuclearinst.com/ibis/Nuclear%20Institute/Home">www.nuclearinst.com/ibis/Nuclear%20Institute/Home</a>
Women in Nuclear – Global	<a href="http://www.win-global.org">www.win-global.org</a>
<b>Affiliated National Societies</b>	<b>Website or E-Mail Address</b>
Belgian Nuclear Society	<a href="http://www.bns-org.be">www.bns-org.be</a>
<b>Associated Nuclear Organizations</b>	<b>Website or E-Mail Address</b>
International Nuclear Societies Council	<a href="http://insc.ans.org">http://insc.ans.org</a>
Pacific Nuclear Council	<a href="http://www.pacificnuclear.net/pnc/">http://www.pacificnuclear.net/pnc/</a>
<b>Non-U.S. Local Sections</b>	<b>Website or E-Mail Address</b>
Austrian Section	
French Section	<a href="http://local.ans.org/france/">http://local.ans.org/france/</a>
India Section	<a href="http://local.ans.org/india/">http://local.ans.org/india/</a>
Italian Section	
Japanese Section	
Latin American Section	<a href="http://www.las-ans.org.br">www.las-ans.org.br</a>
Korean Section	
Swiss Section	
Taiwan Section	<a href="mailto:u805301@taipower.com.tw">u805301@taipower.com.tw</a>

# Calendar of Events

Some Upcoming International Conferences on Nuclear and Related Topics  
(Please send us information about your upcoming conferences, for inclusion in this space.)

## **Legend:**

☀ **ANS Event**

□ **Non-ANS event co-sponsored by ANS**

o **For all other conferences, ANS is NOT a sponsor, nor are these conferences endorsed by ANS.**

## **2012**

- 24-28 June: ANS Annual Meeting, Chicago, IL, USA – <http://www.ans.org/meetings> ☀
- 2-5 July: 2012 LAS-ANS SYMPOSIUM: FUKUSHIMA OUTCOMES – The Impact on Latin American Nuclear Power Programs, Rio de Janeiro, Brazil – <http://www.las-ans.org.br>
- 16-21 July: 2012 Joint McMaster University-IAEA Course on Science and Technology of Supercritical-Water-Cooled Reactors, Hamilton, Ontario, Canada – <http://www.eng.mcmaster.ca/scwr>
- 22-26 July: 8th International Topical Meeting on Nuclear Plant Instrumentation, Control, and Human Machine Interface Technologies (NPIC&HMIT 2012), San Diego, CA, USA ☀
- 27-31 August: 20<sup>th</sup> Topical Meeting on the Technology of Fusion Energy (TOFE), Nashville, TN, USA ☀
- 2-6 September: International Meeting on Water Reactor Fuel Performance (TopFuel 2012), Manchester, UK – <http://www.topfuel2012.org>
- 2-7 September: International Conference on Radiation Shielding (ICRS-12) & 17th Topical Meeting of the Radiation Protection and Shielding Division of the ANS (RPSD-2012), Nara, Japan – <http://www.icrs12.org/> □
- 9-13 September: 9<sup>th</sup> International Conference on Nuclear Reactor Thermal-Hydraulics, Operation and Safety (NUTHOS-9), Kaohsiung, Taiwan – <http://www.-nuthos-9.org/>



- 16-21 September: 8th International Conference of Nuclear and Radiochemistry (NRC-8), Como (Lake of Como), North-East Italy, Chairman Mauro Bonardi ([Mauro.Bonardi@mi.infn.it](mailto:Mauro.Bonardi@mi.infn.it)) – <http://nrc8.mi.infn.it>
- 23-28 September: 9th International Conference on Facility Operations-Safeguards Interface (ICFO-SI), Savannah, GA, USA ☀
- 24-28 September: Nuclear Power Chemistry Conference 2012 (NPC-2012), Paris, France (organized by the French Nuclear Society) – <http://www.sfen.fr/NPC-2012>
- 10-13 October: Bulgaria Nuclear Society's International Conference "Nuclear Power for the People", in co-operation with the European Nuclear Society – <http://www.bgs.bg>
- 11-14 November, 7th CNS International Conference on Steam Generators, Heat Exchangers, Pumps, Valves & Controls and Other Nuclear Plant Components (SHPVC 2012), Toronto, Ontario, Canada – <http://cns-snc.ca> .
- 11-15 November: ANS Winter Meeting and Nuclear Technology Expo, San Diego, CA, USA – <http://www.ans.org/meetings> ☀
- 5-7 December: "Nuclear Safety Post Fukushima", Washington, DC – <http://www.informationforecastnet.com/nuke11>
- 9-12 December: European Nuclear Conference 2012 (ENC 2012), Manchester, UK – <http://www.enc-2012.org>



## 2013

- 25-28 February: Nuclear and Emerging Technologies for Space 2013 (NETS 2013), Albuquerque, NM, USA ☀
- 28 April-2 May: International High-Level Radioactive Waste Management, Albuquerque, NM, USA ☀
- 5-9 May: Mathematics and Computation 2013, Sun Valley, ID, USA ☀
- 12-16 May: NURETH-15 (15<sup>th</sup> International Topical Meeting on Nuclear Reactor Thermalhydraulics), Pisa, Italy □
- 27-29 May: 3<sup>rd</sup> Climate Change Technology Conference, Montréal, Québec, Canada

- 9-12 June: 34<sup>th</sup> Annual Conference of the Canadian Nuclear Society and 37<sup>th</sup> CNS/CNA Student Conference, Toronto, Ontario, Canada – <http://www.cns-snc.ca>
- 16-20 June: ANS Annual Meeting, Atlanta, GA – <http://www.ans.org/meetings> ☀
- 11-15 August: 16th Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, Asheville, NC, USA
- 22-26 September: International Topical Meeting on Probabilistic Safety Assessment and Analysis (PSA 2013), Columbia, SC, USA - <http://www.ans.org/meetings> ☀
- 22-26 September: Decommissioning Challenges Conference 2013, Avignon, France (organized by the French Nuclear Society)
- 29 September – 3 October: Global 2013, Salt Lake City, UT, USA □
- 10-14 November: ANS Winter Meeting, Washington, DC, USA – <http://www.ans.org/meetings> ☀

## 2014

- 15-19 June: ANS Annual Meeting, Reno, NV, USA – <http://www.ans.org/meetings> ☀
- 9-13 November: ANS Winter Meeting, Anaheim, CA, USA – <http://www.ans.org/meetings> ☀

### ➔ Contact ANS International Committee Members by E-mail:

**Retirement - IC Member [Mario Carelli](#) sent the following retirement notice:**

Dear friends and colleagues,

After 43 years at Westinghouse (and 3 more in Italy) on June 1st I will be entering retirement. I have had the fortune of being able to work on a wide variety of first-of-a-kind projects with some of the best people in the world (you...), provide some contribution to the advancement of nuclear power, which has been my technical passion since I was 16, have fun in the process and make great friendships. I cannot ask for more. Now, I will move on to another phase which, considering that I am from Tuscany (one of the high-longevity areas in Europe) and that in my family (fortunately also in my wife's) there have been centenarians in good health, might become another long, glorious adventure.



<b>Officers</b>	<b>Office</b>	<b>e-mail</b>
Corey K. McDaniel	Chair	<a href="mailto:cmcdaniel@nuscalepower.com">cmcdaniel@nuscalepower.com</a>
<b>Ex-Officio</b>	<b>Organization</b>	<b>e-mail</b>
Linda H. Hansen	Argonne National Laboratory	<a href="mailto:hansen@anl.gov">hansen@anl.gov</a>
<b>Staff Liaison</b>	<b>Organization</b>	<b>e-mail</b>
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