Alaska Society of Professional Engineers
A state society of the National Society of Professional Engineers

Western and Pacific Region
A Region of the National Society of Professional Engineers

2011 WESTERN AND PACIFIC REGION ANNUAL MEETING AND CONFERENCE

ANCHORAGE, ALASKA

APRIL 1 TO APRIL 2, 2011

THE ALASKA SOCIETY OF PROFESSIONAL ENGINEERS CORDIALLY INVITES YOU TO ATTEND THE 2011 NSPE WESTERN AND PACIFIC REGION ANNUAL MEETING AND CONFERENCE. NOTE THIS EVENT WILL BE INTEGRATED WITH THE AMERICAN SOCIETY OF CIVIL ENGINEERS PACIFIC NORTHWEST STUDENT CONFERENCE AT THE UNIVERSITY OF ANCHORAGE, ALASKA.

States of the Western and Pacific Region of NSPE

ASCE Student Chapter Societies Attending the PNW Conference

University of Alaska Anchorage
University of Alaska Fairbanks
Boise State University
Carroll College
Gonzaga University
Idaho State University
University of Idaho
Montana State University - Bozeman
Montana Tech of the University of Montana
Oregon Institue of Technology
Oregon State University
Portland State University
University of Portland
Saint Martin's University
Seattle University
Washington State University
University of Washington

THE CONFERENCE

The Conference is a joint event shared with the University of Alaska, Anchorage (UAA) Student Chapter of the American Society of Civil Engineers (ASCE) Pacific Northwest Student Conference. The intent of this joint event is to combine Professional Engineers with Student Engineers. The professional events are sponsored by the Alaska Society of Professional Engineers (ASPE) in conjunction with an annual meeting for the Western and Pacific Region of the National Society of Professional Engineers (NSPE). By bringing together professional and student members of ASCE and NSPE from the western and pacific regions we hope to effectively unite for common causes and promote the Engineering Profession and Student Leadership. Please Join us in Anchorage, Alaska from March 31 to April 2, 2011 for this unique event.

Anchorage, Alaska

Anchorage, the "Air Crossroads of the World" is a city encompassing 2,000 square miles of Alaskan Wilderness, glaciers and wildlife, history and native culture, gourmet dining, arts and festivals, and dog mushing, skiing, fishing, and flight seeing. Located between the Chugach Mountains and Cook Inlet, Anchorage has a climate like the Rocky Mountains or Swiss Alps from fall through spring; the normal high temperature for this time of year is 40° F. With sunrise at 7:15 am and sunset at 8:45 pm there is ample daylight to explore by foot, cross country skis, or snow shoes, or even dog sleds Anchorage's 260 miles of groomed trails, or go downhill skiing at a local resort. If outdoor activities are not your style, visiting the Anchorage Museum or the Native Heritage Center may be of interest. No matter how you enjoy your time in Anchorage, you will find warm, friendly hospitality and some of the finest restaurants anywhere. Come be our guest!

To see more of what Anchorage has to offer, visit the Anchorage Convention and Visitors Bureau at
Anchorage Convention and Visitors Bureau

To take advantage of skiing and museum specials, visit the University of Alaska, Anchorage Conference Webpage at
Have a Funday on Sunday

THE PROFESSIONAL SEMINAR TRACK

Professional Engineering Practice Forum

This program session is geared towards engineers practicing in Alaska and includes panel participants from the state's licensing board members, design reviewers, and professionals. Implementation of recent changes to Architecture, Engineering, and Land Surveyor (AELS) regulations governing Professional Engineering registration, expanding the number of Engineering branches, will be presented to educate participants and generate discussion of the pending policies. In addition, the subject of comity between Alaska, United States, and Canada will be explained and discussed. Lastly, a workshop will be conducted to raise awareness of the standard of care among participants and generate a dialog between practitioners and reviewers to identify areas of divergence or commonality. The desired outcome will be to gain a better understanding of Standard of Care issues throughout the state and Western and Pacific Region.

Construction Administration Workshop

This session will provide a comparison-contrast between construction delivery methods as they pertain to construction administration, general conditions and specifications, engineering liability, and conflict resolution. While comparing-contrasting conventional, design-build, and construction manager at risk construction delivery systems the relationships between the Owner, Engineer, and Contractor will be discussed in significant detail. The intent of this session is to provide the participants the administration tools to perform optimally while minimizing liability. The following four experts will provide training in their areas of expertise:

Jeffery Callahan, Dir. – Division of Construction & Design Technology, UAA: Construction Delivery Methods

Clifford Marvin, President - CSI Cook Inlet Section: General Conditions and Specifications

Raymond H. Royce III, Esquire – Law Offices of Royce and Brain: Construction Liability

Christian Muntean, MA, Executive Director – Beyond Borders: Construction Conflict Resolution

THE TECHNICAL SEMINAR TRACK

Professionals, experts in their fields, will present a variety of topics related to Arctic Engineering Design and Arctic Energy Systems. These technical sessions will provide both overviews of projects and/or technological advances affecting Alaska Infrastructure and Energy Management. For a complete list of presentation topics and presenters, see the schedule and biographical summaries on the following pages.

SPECIAL GUEST PRESENTATIONS

Lunch with the NSPE President

Registration at the conference includes lunch with the current President of NSPE, Mr. Michael Hardy, PE, F. NSPE. During Lunch, Mr. Hardy will provide a keynote address on the future of NSPE. This event will be held at the South Cafeteria of the Student Union Building on UAA Campus.

Leading Multi-Generational Teams

Ms. Amanda Holland from the Alaska Department of Transportation and Public Facilities will provide a lecture on leading multi-generational teams in the workplace. "Today's workforce is unique in that, for the first time, four generations are in the workforce at the same time. A quick refresher on the four generations in the workforce today may help us address this situation." Ms. Holland will explore the unique differences between generations in order to assist project managers and graduating Engineers to understand how to become more effective working together in teams. This lecture will be provided at the end of the day and unite professionals and students. A professional-student social event will follow at the conclusion of the presentation.

STUDENT-PROFESSIONAL EVENTS

Engineering Career Fair

On Friday afternoon during the seminars, the UAA School of Engineering will be hosting a Career Fair in Conjunction with the ASCE Pacific Northwest Student Conference. Over 200 Civil Engineering Students representing the Pacific Northwest and Canada will gather at this event. While there is no charge for this event, companies contributing toward the Student Conference will be rewarded with a discount for two people to attend the ASPE Seminars, $50 each. While this event is geared toward the graduating Engineer, Professional Engineers are encouraged to participate. Visit the UAA Student Conference Website for more information on how to participate in the Career Fair.

To Donate to the ASCE Student Chapter and/or Signup for the Career Fair go to: UAA ASCE Student Chapter

Student Technical Presentations

As part of the student competitions, college engineers will present on the topic "Original Research/Design or Personal Technical Experience in Civil Engineering" concurrently with the Friday afternoon seminar sessions. Professionals are encouraged to attend as students present on projects, research, innovative designs, or other engineering skills learned from practical experience. A schedule for student presentations will be made available at a later time. Meanwhile, visit the PNW website below for more information.

2011 ASCE PNW Conference Paper Presentations

Student-Professional Social

At the end of the Ms. Holland's presentation on Friday afternoon, the Alaska Society of Professional Engineers will be hosting a Student-Professional Social at the SUB South Cafeteria. After a busy day of student competitions, professional seminars, and career fair we all deserve an opportunity to relax with beverages and hors devours. Please come mingle with your peers, enjoy yourself, and stick around to win door prizes. Students and visiting academic advisors are free.

Saturday ASCE Awards Banquet

On Saturday, April 2 the ASCE Conference will conclude with an awards banquet at the Lucy Cuddy Center on UAA Campus. Come join the students and congratulate them on their conference achievements and enjoy a keynote speech from a VIP from British Petroleum.

TRAVEL ARRANGEMENTS AND TRANSPORTATION

Arrival by air can be scheduled with regular flights into Ted Stevens International Airport. Guests staying at Springhill Suites at University Lake should notify the hotel shuttle service for pickup and drop off at the airport. In addition, Springhill Suites will run shuttles to/from the UAA campus at various times of the day on Friday and Saturday. Ask for the schedule at the hotel desk upon check-in.

HOTEL ACCOMODATIONS

We have block rooms established at Spring Hill Suites located at University Lake from March 31 to April 3 for $99/night (approximately $110 with tax). We are sharing block rooms with ASCE Students under the name "ASCE/ASPE". If you don't have a strong preference to the contrary, please book a single king rather than a double queen. This will help save the double rooms for the students.

To make your reservations call: (907)751-6300 Direct, or
(888)284-1887 Toll Free.

Use Block Name "ASCE/ASPE" to book your reservation. Credit Card Required at the time of reservation.

REGISTRATION INFORMATION

The full registration fee includes morning and afternoon refreshments breaks, lunch on Friday, select refreshments and hors devours at the Student-Professional Social, and the special lecture provided by Amanda Holland just before the social event. If you wish to have a spouse, friend, or co-worker join you for the lunch or the lecture and social event please note on the registration form and include the additional fee(s). Note that because this is a combined event with the ASCE Student Chapter, fees for members include both NSPE and ASCE.

Fee Schedule:	Amount	x	Count	=	Total
Full Non-member	$250	x	_____	=	_____
Full Member (NSPE or ASCE)	$125	x	_____	=	_____
Full Career Fair Discount (Up to 2 People)	$75	x	_____	=	_____
Full Visiting ASCE Academic Advisors	$75	x	_____	=	_____

Note: Full Registration includes Friday Lunch and Holland Lecture Below

Additional Friday Lunch	$35	x	_____	=	_____
Additional Holland Lecture/Social	$15	x	_____	=	_____
Saturday ASCE Student Awards Banquet	$35	x	_____	=	_____

Note: Full Registration Does Not include ASCE Student Banquet.

TOTAL AMOUNT DUE _____

Participant Name: Last: _____ First, MI (Optional): _____

Organization: _____ Your Position: _____

Street Address: _____

City: _____ State: _____ Zip: _____

E-Mail: _____

Work Phone: _____ Cell: _____

Please Send Check or Money Order along with Registration Information above to:

Alaska Society of Professional Engineers
c/o Greg Latreille, PE - BBFM Engineers
510 L Street, Suite 200
Anchorage, AK 99501

To Register Online with Credit Card, Visit: Alaska Society of Professional Engineers

If you have questions or problems with registration, Contact Greg Latreille at (907)274-2236

REGISTRATION DEADLINE 5 PM MARCH 25, 2011

Professional Track Rasmussen Hall Room # 220		
Time	**Seminar Topic**	**Presenter/Descriptions**
8:00 to 8:30 AM	***Registration at SUB N. Cafeteria***	
8:30 to 9:45 AM	Implementation Strategy for PE Licensure in Alaska Forum	Representatives from the Alaska AELS Board will discuss implementation of changes in licensure and solicit input from practicing Engineers. The Alaskan perspective of Canadian Comity will be reviewed and discussed.
9:45 to 10:30 AM	Alaskan and Canadian Commity Forum	
10:30 to 10:45 AM	***BREAK***	
10:45 to 11:45 AM	Standard of Care Workshop	Facilitated Session between permit reviewers and Engineers to raise awareness and discuss Standard of Care concerns in Alaska.
12:00 to 1:00 PM	Lunch w/Keynote at the Sub S. Cafeteria	Michael Hardy, PE, F.NPSE - 2010/11 NSPE President
1:15 to 2:00 PM	CA Workshop - Construction Delivery Methods Introduction	Jeffery Callahan, Director - Division of Construction & Design Technology, UAA
2:00 to 2:45 PM	CA Workshop - Construction Delivery and General Conditions & Spec's	Clifford Marvin, Pres. - Construction Specification Institute Cook Inlet Chapter
2:45 to 3:00 PM	***BREAK***	
3:00 to 3:45 PM	CA Workshop - Construction Delivery and Engineering Liability	Raymond H. Royce III, Esquire, Partner - Law Offices of Royce & Brain
3:45 to 4:30 PM	CA Workshop - Construction Conflict Resolution	Christian Muntean, MA, Executive Director - Beyond Borders

Technical Track Allied Health Science Bldg Room # 106		
Time	**Seminar Topic**	**Presenter**
8:00 to 8:30 AM	***Registration at SUB N. Cafeteria***	
8:30 to 9:15 AM	Port of Anchorage Expansion Project	Brett Flint, PE, Chief Engineer - Integrated Concepts and Research Corporation
9:15 to 10:00 AM	Update on the Knik Arm Crossing	Michael Foster, PE, Owner - Michael L. Foster & Associates
10:00 to 10:15 AM	***BREAK***	
10:15 to 11:00 AM	Building on Snow: Design considerations and lessons learned from the South Pole Station and Summit Camp, Greenland	Dennis Berry, PE, President - BBFM Engineers, Inc.
11:00 to 11:45 AM	Pile Foundations in Alaskan Permafrost	Duane Miller, PE, Senior Geotechnical Consultant - Golder Associates
12:00 to 1:00 PM	Lunch w/Keynote at the Sub S. Cafeteria	Michael Hardy, PE, F.NPSE - 2010/11 NSPE President
1:15 to 2:15 PM	Ocean Renewable Engergy	Doug Johnson, Alaska Projects Director - Ocean Renwable Power Company
2:15 to 3:15 PM	Next Generation Wind-Diesel Systems in Alaska	Katherine Keith, PE, Coordinator Wind-Diesel Appliation Center Coordinator (WiDAC)
3:15 to 3:30 PM	***BREAK***	
3:30 to 4:30 PM	Hydro-power Problems, Solutions, and Power Plant Optimization for a Sub Arctic Environment	George Hornberger, GM - Iliamna-Newhalen-Nandalton Electric Cooperative Brian C. Gray, PE, VP - Alaska Energy & Engineering, Inc.

Student - Professional Presentation - SUB S. Cafeteria		
Time	**Seminar Topic**	**Presenter**
4:45 to 6:00 PM	Leading Multi-Generational Teams	Amanda Holland, Operations Manager - Administration Services Division, ADOT&PF
6:00 to 7:00 PM	Student - Professional Social	

Note: Presentations and Room Locations Subject to Change. Final Schedules will be Provided at Registration.

PRESENTER BIOGRAPHICAL INFORMATION

Michael Hardy, P.E., F.NSPE, NSPE President, Black Oak Engineering Principal

Michael Hardy, P.E., F.NSPE, is the 2010-11 president of the National Society of Professional Engineers. He joined NSPE in 1994 after receiving his professional engineering license. In 2008, he was named a Fellow of NSPE. Mr. Hardy has served in most of the Society's chapter and state offices as well as on several national committees and task forces, including chairman of the NSPE Membership Committee. He was NSPE Western and Pacific Regional Director from 2006-08, and from 2006-09 he served as the Oregon state MATHCOUNTS coordinator. Currently, he is a member of the National Engineers Week Foundation Board of Directors and a former member of the Engineers Week Steering Committee. He is a graduate of Oregon State University in Mechanical Engineering and is the principal of Black Oak Engineering where he provides HVAC and process piping designs for industrial, institutional, and governmental clients.

Amanda Holland, Operations Manager for the Administrative Services Divisions - ADOT&PF

Amanda Holland works for the State of Alaska in the DOT & Public Facilities. She serves as the Division Operations Manager for the Administrative Services Division and functions as the department's Workforce Planning Project Manager. Her work for the State of Alaska includes leading 28 human resource professionals that provide labor relations, classifications, planning and research, employee relations, recruitment, payroll, and training to over 3,500 employees at 120 duty stations across Alaska. Amanda also worked for Personnel Decisions International, a private industrial and organizational psychology consulting firm focusing on employee assessment and leadership development. She received her Bachelor of Arts degree from Macalester College in St. Paul, Minnesota.

Jeffery Callahan, Associate Prof. of Construction Management - Division of Construction & Design Technology

Mr. Callahan has an undergraduate degree in Architectural and Engineering Technology and a Master of Arts in Conflict Resolution and has over 25 years of experience in construction management. His work includes a number of international construction-sector economic development projects in Israel's West Bank, Gaza, Ukraine and most recently in Kosovo. Jeff is a Certified Construction Contract Administrator (CCCA) and member of the Construction Specifications Institute (CSI) since 1989, serving on the CSI Board of Directors from 2002 to 2004. Mr. Callahan also works as a mediator in the Alaska Court System and is the Alaska Representative to the Dispute Review Board Foundation.

Clifford Marvin, President – CSI Cook Inlet Chapter

Clifford Marvin is an experienced construction specifier and educator, accredited as a Certified Construction Specifier for over ten years. His experience of working with architects, owners, manufacturer's representatives and contractors dates back to 1984. He has been involved in the construction of a myriad of building types in both the public and private sectors. He has worked as a specification writer for kpb architects and was responsible for preparing the contract specs for the design-build Goose Creek Correctional Facility. Cliff is currently serving his second term as President of the CSI Cook Inlet Chapter.

Raymond H. Royce III, Esquire, Partner - Law Offices of Royce

Raymond H. Royce III is a partner in the law firm of Royce & Brain of Anchorage. His primary practice areas include representation of owners, contractors, subcontractors and suppliers in matters concerning construction contract claims and litigation, bid procurement issues and commercial law. Mr. Royce has represented national, international and Alaskan clients on state, federal and local projects throughout Alaska. He graduated from Vermont Law School and has practiced in Alaska since 1982. Mr. Royce is also admitted to the state bar of Massachusetts, the U.S. District Court for the District of Alaska, the 9th Circuit Court of Appeals and the U.S. Claims Court. He is a member of the Anchorage Bar Association, the Alaska Bar Association and the American Bar Association's Forum on the Construction Industry and Commercial Law Sections.

Christian Multean, MA, Director - Beyond Borders

Christian Muntean, MA is the Executive Director of Beyond Borders, an Alaskan non-profit that provides resources for leadership and conflict resolution. He is a mediator, consultant and trainer. His diverse experience in non-profit & non-governmental organizations has brought him to work in dozens of countries and four conflict/war zones.

Brett Flint, P.E., Chief Engineer – Integrated Concepts and Research Corporation

Mr. Flint possesses 25+ years of experience in engineering and construction projects. His project management experience has included multi-disciplinary projects encompassing environmental, geologic, hydrogeologic, hydrologic, geotechnical, civil, transportation, and structural elements. He has managed infrastructure projects including highway and roadway design in Colorado, Utah and Nevada; port, railroad, and bulk fuel facilities in Alaska; industrial, mining, commercial and residential developments, and military installations throughout the Western United States and in several foreign countries. His program management experience includes projects receiving funds from various federal agencies including DOD, FRA, FTA, FHWA, and the Maritime Administration. His most recent work for the Port of Anchorage Intermodal Expansion Project has allowed him to utilize his engineering, construction, and project management skills and knowledge base to oversee multiple design, construction, and construction support services contracts.

Michael L. Foster, PE, Chairman of the Board - Knik Arm Bridge and Toll Authority

Michael Foster has over 20 years of engineering, design, and construction related experience in Alaska as the owner and principal engineer of Michael L. Foster & Associates. His extensive engineering experience also includes serving as Vice President in charge of Dames & Moore's Alaska Operation and Western Division General Contracting Operation prior to 1998. He provides consulting services for cold regions, sanitary, environmental and geotechnical engineering for investigation, design and construction projects including dams, mine facilities, pipelines, sanitation facilities, buildings, and other civil structures. Additionally, he has a thorough knowledge of Alaska regulations and has worked on a number of Environmental Assessments (EAs) and Environmental Impact Statements (EISs). Mr. Foster was appointed to the KABATA Board of Directors by the Governor in January 2009. & Associates. His extensive engineering experience also includes serving as Vice President in charge of Dames & Moore's Alaska Operation and Western Division General Contracting Operation prior to 1998. He provides consulting services for cold regions, sanitary, environmental and geotechnical engineering for investigation, design and construction projects including dams, mine facilities, pipelines, sanitation facilities, buildings, and other civil structures. Additionally, he has a thorough knowledge of Alaska regulations and has worked on a number of Environmental Assessments (EAs) and Environmental Impact Statements (EISs).

Dennis Berry, PE, President - BBFM Engineers, Inc.

Born and raised in Anchorage, Mr. Berry has been a principal in Alaskan structural engineering firms since 1984. He has worked in structural offices in San Francisco, Seattle, and Anchorage. With 34 years of experience, he is well known for his structural engineering ability and his arctic engineering expertise, resulting in his selection as the structural designer for the Amundsen-Scott South Pole Station Replacement Project. Mr. Berry also has considerable experience in seismic analysis and has a record of success for a variety of projects throughout the state of Alaska.

Duane Miller, PE, Senior Geotechnical Consultant – Golder Associates

Mr. Miller has 40 years of experience as a geotechnical engineer on a variety of projects in Alaska, California, and Guam. He has training and experience in arctic engineering, engineering geology, and coastal and earthquake engineering. Mr. Miller has provided geotechnical engineering services on architectural, civil, mining, petroleum, coastal, and military projects across Alaska with special experience on projects with warming permafrost. He has published numerous papers and reports including peer reviewed work on regional soil and permafrost conditions, case histories of permafrost designs and foundation failures, containment of waste materials in frozen soils, the design and construction of insulated ice-pads, the measurement of ground temperatures, and the origin and occurrence of hypersaline permafrost. In 2000 he presented the climate analysis showing that the published weather data being used for designs in Alaska was not accounting for the warming conditions occurring after 1977.

D. Doug Johnson, Alaska Projects Director - Ocean Renewable Power Company

Having worked in the Alaskan industry for over 30 years, Mr. Johnson became the Alaska Projects Director for Ocean Renewable Power Company in 2006 and coordinates and supervises ORPC projects in Alaska and the Pacific Northwest. Using his experience as a successful entrepreneur, he cultivates key relationships with government and regulatory agencies and development partners and staff at ORPC to promote and implement the innovative renewable power technology offered by ORPC. In addition to his position with ORPC, Mr. Johnson is also an officer and partner of Alaska Growth Systems in Anchorage, Alaska where he directs financial management and product development as well as provides facilitation and planning services for a diverse client base. He has a Bachelor of Science in Geological Engineering from the University of Alaska and completed the Entrepreneurship Program at the Burklyn Business School. Combining his engineering and entrepreneur skills, Mr. Johnson is an accomplished project manager and businessman focusing on development of innovative solutions in engineering and project planning.

Katherine Keith, PE, WiDAC Coordinator - Alaska Center for Energy and Power

Katherine Keith coordinates wind-diesel activities in the state of Alaska through the Wind Diesel Application Center (WiDAC). WiDAC is a center of excellence in wind-diesel technology which was established with partnerships between the Alaska Center for Energy and Power, the National Renewable Energy Lab, and the Alaska Energy Authority. Katherine provides technical assistance to wind-diesel stakeholders, promotes education and training opportunities, and works to identify both near and long term research priorities. Katherine has worked to promote renewable energy projects that are sustainable for rural Alaska, including Chena Hot Springs and Kotzebue Electric Association. Katherine graduated from the University of Alaska, Fairbanks with an interdisciplinary degree in Renewable Energy Engineering. Katherine is an adjunct faculty at UAA teaching courses for the one year occupational endorsement certification program in Renewable Energy at the Mat-Su Campus.

George Hornberger, General Manager - Iliamna-Newhalen-Nondalton Electric Cooperative

Mr. Hornberger is the General Manager of the Iliamna-Newhalen-Nondalton (INN) Electric Cooperative. George was raised in the Iliamna area and has worked in construction, boat welding, an extensive career in aviation flying commercially for Iliamna Air Taxi for 20 years, and recently for the Pebble Partnership for two years. His practical working experience, common sense approach, and ability to adapt to his experience to meet environmental obstacles have been instrumental in his ability to manage, upgrade, and optimize a small hydro-electric power plant in remote Alaska.

Brian Gray, PE, Vice President & Chief Mechanical Engineer - Alaska Energy & Engineering, Inc.

Mr. Gray is a lifelong resident of Alaska with over 25 years of engineering experience. For the past 20 years he has served as project engineer and project manager for the design and construction of over $100 million worth of rural power generation, fuel storage, heat recovery, and other energy related projects. Responsibilities have included feasibility analysis, program development, budgeting, design, permitting, construction management, and system commissioning. His projects have taken him to more than 100 rural Alaskan communities where he has had to solve the unique engineering and logistical challenges that are synonymous with remote site construction. He has also had an extensive role in implementing standards for operations and maintenance of rural energy infrastructure including development of the AEA/AVTEC Power Plant Operator and Bulk Fuel Operator training videos.