



## American Institute of Chemical Engineers Knoxville-Oak Ridge Section

For additional information see our Web site at: <http://www.ornl.gov/sci/aiche/>  
Or contact: Linda Puckett, [puckettlf@ornl.gov](mailto:puckettlf@ornl.gov), (865)574-6147 or  
Lori Daniels, [lori.daniels@utk.edu](mailto:lori.daniels@utk.edu), (865)974-2421



### October 2010 Meeting

Date: Thursday, October 21, 2010  
Cost: \$20.00  
Location: Calhoun's, Turkey Creek Shopping Center, Knoxville TN

5:30 pm AIChE Executive Committee Meeting (All members welcome)  
6:00 pm Dinner – From menu  
7:00 pm Program – Dr. Arvid Pasto, Director, C3/Oak Ridge, TN – ***The Truth about Anthropogenic Global Warming***

**Abstract** – Anthropogenic global warming (AGW) has been an international issue for many years, as represented most publicly by the United Nations' Intergovernmental Panel on Climate Change (UN-IPCC). Reports issued by this Panel have indicated that the world is heating up, and much of this heating is due to carbon dioxide accumulating in the atmosphere, increasing the "greenhouse" effect. Further, the Panels' reports go on to blame much of this increase on humankind's activities, including burning of fossil fuels to generate electricity, and to power vehicles, industry and residences. Atmospheric carbon dioxide increase is also noted to be caused by various other human activities, such as deforestation.

This presentation will describe the situation as depicted by the UN-IPCC and other AGW supporters. Then the theories, models, and assumptions utilized by AGW adherents will be examined in the light of scientific evidence, including laboratory experiments and numerous field observations of both earth temperatures and atmospheric carbon dioxide levels. The speaker will show that predictions of global warming developed by the theories and models do not agree with actual observations, and that these models do not describe historical data accurately. Neither have they been good at predicting the future. Reasons for the lack of agreement will be discussed.

Dire warnings of increased sea levels, flooding, ice sheet and glacier melting, hurricanes, cyclones, tornadoes, droughts, and the loss of polar bears have all been published in the recent past, based on the presumption that AGW is factual. The speaker will briefly discuss these issues and show why he believes that they are not, in fact, happening now and they are not likely to happen in the future due to global warming.

**Bio** – Arvid Pasto is currently Director, C3/Oak Ridge. He retired in February 2007 as Director, High Temperature Materials Laboratory, and Manager of EERE and Technology Programs, Metals and Ceramics Division, Oak Ridge National Laboratory. Prior to this, Arvid was Leader, Ceramic Processing Group from 1992 to 1993 and from 1991 to 1992, a Technical Staff Member of the Ceramic Processing Group. Additional biographical information is available at: <http://www.ornl.gov/sci/aiche/calendar.html>

**Please make your reservations by noon, October 19, by contacting**  
Linda Puckett, [puckettlf@ornl.gov](mailto:puckettlf@ornl.gov), (865)574-6147 or  
Lori Daniels, [lori.daniels@utk.edu](mailto:lori.daniels@utk.edu), (865)974-2421

***The Section will subsidize up to 15 students,  
including graduate students***

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2010 AIChE Annual Meeting:  
Salt Lake City

## ChemE on Demand – A Major Benefit of AIChE Membership

AIChE's latest on-line content initiative, *ChemE on Demand*, is a multi-media digital library containing hundreds of live and archived webinars, recorded conference sessions and papers, as well as useful how-to articles. This convenient resource is designed to meet your needs as a chemical engineer. Much of the content qualifies for Professional Development Hours, which many engineers use toward their Professional Engineer (PE) requirements.

**AIChE professional members are entitled to 6 FREE 'credits', worth over \$700; good for live or archived content in *ChemE on Demand* each year.**

Some popular items you can access online include:



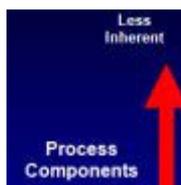
[Engineers Without Borders - USA: ChEs Can Make an Impact](#)



[Safety Issues in Particle Handling: Dust Explosions](#)



[The Water-Energy Nexus: Emerging Issues and Challenges](#)



[Inherently Safer - The Designs of the Future?](#)



[Six Sigma for Chemical Engineers](#)

Launched in mid-2009 as part of past AIChE President Scott Fogler's slate of initiatives, [ChemE on Demand](#) is AIChE's latest on-line content Library. It contains hundreds (soon to be thousands) of video presentations from the last several years of AIChE Annual and Spring Meetings, the Global Congress for Process Safety (GCPS), and the Leadership Development Conference (LDC). Additionally, all AIChE webinars have been archived since the inception of that initiative in 2007. Center for Chemical Process Safety (CCPS) and Society for Biological Engineering (SBE) content is being added along with several Divisions and Local Sections event content as it is being produced.

Highlights of this new member benefit include:

- AIChE professional members are entitled to **6 free *ChemE on Demand* credits each year**, good for live or archived content, with permanent access to the content selected.
- Credits can be used in **fractions**, extending the amount of content one can access.
- Members who are teaching professionals receive unlimited credits, allowing them to incorporate *ChemE on Demand* into their curricula.
- Undergraduate student members do not receive credits. They don't need them. They are entitled to **free, unlimited access to all archived content** in *ChemE on Demand*.
- There is plenty of content that is free to all members and not subject to credit use.

*AIChE ChemE on Demand content is available with the kind permission of the author(s) solely for the purpose of furthering AIChE's mission to educate, inform and improve the practice of professional chemical engineering. All other uses are forbidden without the express consent of the author(s). For permission to re-use, please contact [chemepermissions@aiche.org](mailto:chemepermissions@aiche.org).*

(From material at: <http://apps.aiche.org/chemeondemand/home.aspx> and <http://apps.aiche.org/chemeondemand/About.aspx>)

## Starting Salaries

The University of Tennessee Career Services organization posts salary information for a number of disciplines at <http://career.utk.edu/pdf/Salary%20Survey%202009-2010.pdf>. Information on job offers accepted immediately following graduation is compiled from employing organizations and graduates. The salary information for Bachelor's degrees is given in Table 1. Limited additional information on Masters Degrees is also available from UT's web site.

(Source: UT Career Services web site, <http://career.utk.edu/pdf/Salary%20Survey%202009-2010.pdf>)

**Table 1. Salaries accepted by 2009-2010 graduates.**

<i>BACHELORS College/Major</i>	#	High	Low	Mean 2009-2010	Mean 2008-2009	Mean 2007-2008	Mean 2006-2007	Mean 2005-2006
<b>AGRICULTURE</b>	3	44000	23000	35333	33341	31830	30961	31263
Plant Sciences	2	44000	23000	33500	NA	NA	NA	NA
<b>ARCHITECTURE</b>	2	30000	24960	27480	35833	39543	39118	39650
Architecture	2	30000	24960	27480	35833	40842	39118	41222
<b>ARTS &amp; SCIENCES</b>	34	60000	15000	30357	33087	36398	34055	32365
Economics	4	50000	20000	37750	36666	42142	35400	39250
Geography	2	37440	32000	34720	21400	NA	NA	NA
Interdisciplinary Programs	2	36000	20000	28000	NA	NA	NA	NA
Microbiology	2	27000	20000	23500	NA	NA	NA	NA
Political Science	3	60000	16000	33666	26585	36500	30298	28200
Psychology	10	42000	21840	27884	26850	29648	25297	29256
<b>BUSINESS</b>	165	75000	20000	43184	43861	43069	38783	37959
Accounting	23	75000	24000	42400	49159	44162	41404	41857
Enterprise Management	2	63000	45000	54000	42444	42833	NA	NA
Finance	30	70000	23000	40117	43732	41706	42296	39395
Human Resource Dev. & Mgmt	6	46000	20000	34900	32186	27000	35250	30750
Logistics & Transportation	54	75000	24960	48755	49788	47564	45006	41026
Management	12	60000	24960	39696	46214	36500	38000	37463
Marketing	35	60000	24000	38987	34180	37775	36925	35407
<b>COMMUNICATIONS</b>	26	57000	20000	29686	33942	32060	31598	29499
Advertising	5	57000	20000	32200	34287	30700	34355	30250
Communication Studies	7	35000	24000	30142	33666	32473	35000	32833
Journalism	6	34000	20000	25476	24000	32366	31640	27500
Public Relations	8	48000	20000	30875	38000	31750	25400	29162
<b>ENGINEERING</b>	<b>75</b>	<b>104000</b>	<b>30000</b>	<b>56715</b>	<b>55608</b>	<b>53855</b>	<b>54067</b>	<b>52385</b>
Aerospace	3	65000	50000	57393	44833	57250	50300	NA
Chemical	7	93000	55000	67504	58346	65894	63416	58427
Civil	7	48500	41000	45658	55423	47445	44325	43714
Electrical	17	60000	30000	56106	60500	55027	51760	51700
Industrial	7	70000	48000	55642	54273	52100	55000	48250
Mechanical	27	104000	32448	57787	55069	59017	56836	49605
Nuclear	4	61500	54900	59100	59021	57171	NA	NA
<b>ED, HEALTH &amp; HUMAN SCI</b>	21	50000	17680	31662	28753	35142	38642	31950
Hotel, Restaurant, & Tourism	6	36000	22880	31280	19760	31160	NA	NA
Retail & Consumer Sciences	5	50000	20000	40000	35542	38936	38642	34357
Sport Management	7	38000	17680	29604	35000	26804	NA	NA

## Activities Calendar

Date	Time	Topic	Speaker	Location
Oct 21	6:00 PM	The Truth About Anthropogenic Global Warming	Arvid Pasto, Director, C3/Oak Ridge	Calhoun's, Turkey Creek
Nov 7-12		2010 AIChE Annual Meeting		Salt Lake City, UT
Nov 18	6:00 PM	Reconciling Large-Scale Bioenergy Production with Social and Environmental Concerns	Keith Kline, ORNL	Calhoun's, Turkey Creek
Dec 9	6:00 PM	Financial Planning	David Moon	Calhoun's, Turkey Creek
Jan 20	6:00 PM	TBD	TBD	Calhoun's, Turkey Creek
Feb 17	6:00 PM	EmeraChem Catalysts for Off-Gas Emissions	Steve DeCicco	Calhoun's, Turkey Creek
Mar 17	6:00 PM	TBD	TBD	Calhoun's, Turkey Creek
Mar 28-31		SASEF 2011 – 60 <sup>th</sup> Anniversary		Thompson-Boling Arena, Knoxville, TN
Apr 21	6:00 PM	Student Awards	TBD	Calhoun's, Turkey Creek
May 5	6:00 PM	TBD	TBD	Calhoun's, Turkey Creek

## Sponsoring Opportunities

We continue to accept advertising in the newsletter in order to provide funds to support student participation in the meetings.

Rates per newsletter are:

**\$80** full-page advertisement

**\$45** half-page advertisement

**\$25** quarter-page advertisement

The section will also continue to accept individual or corporate sponsors to provide student meals at section meetings. The sponsor will be recognized at the meeting and in the Newsletter.

The cost to sponsor one meeting is **\$200**. It's a great way to encourage students to attend the local meetings and become future members in the Institute!



(Image courtesy of DOE Digital Photo Archive, <http://www.doe.digitalarchive.doe.gov/enter.cfm>)

*"Great discoveries and improvements invariably involve the cooperation of many minds."*

Alexander Graham Bell  
Inventor, scientist, engineer  
1847-1922

## Officers

<b>Chair:</b>	Jacob Hutton	560-1706	<a href="mailto:jacob.hutton@power.alstom.com">jacob.hutton@power.alstom.com</a>
<b>Chair-Elect:</b>	Michael Aident	694-7333	<a href="mailto:Michael.Aident@shawgrp.com">Michael.Aident@shawgrp.com</a>
<b>Secretary:</b>	David DePaoli	574-6817	<a href="mailto:depaolidw@ornl.gov">depaolidw@ornl.gov</a>
<b>Treasurer:</b>	Paul Taylor	574-1965	<a href="mailto:taylorpa@ornl.gov">taylorpa@ornl.gov</a>
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<b>Term ends 2012</b>	Stuart Daw	946-1341	<a href="mailto:dawcs@ornl.gov">dawcs@ornl.gov</a>
<b>Term ends 2012</b>	Richard Denney	458-8875	<a href="mailto:rgdenney@charter.net">rgdenney@charter.net</a>
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## Knoxville - Oak Ridge Section

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We're on the Web!

See us at:

<http://www.ornl.gov/sci/aiche/>

Editor: B. Lewis

### About Our Organization... 2010 AIChE Annual Meeting: Salt Lake City

The 2010 AIChE Annual Meeting will be held on November 7-12, 2010 at the Salt Palace Convention Center in Salt Lake City, UT. This meeting is the premier educational forum for chemical engineers interested in innovation and professional growth. A wide range of subjects relevant to the latest research and newest technologies in emerging growth areas will be covered.

#### Highlights of the 2010 meeting will include:

-[62nd Institute Lecture](#) - delivered by [Julio M. Ottino](#), Northwestern University

-[Professional Progress Award Lecture](#) - delivered by [Kristi S. Anseth](#), University of Colorado at Boulder

-[3rd Corporate Innovation Award](#) - delivered by Ann

L. Lee, Roche, Genentech, is a member of the Roche Group

-[2010 Danckwerts Lecture](#) - delivered by [Roland Clift](#), Centre for Environmental Strategy (D3) University of Surrey – Guildford

-[SBE'S James E. Bailey Award Lecture](#) - delivered by Harvey W. Blanch, University of California Berkeley

-[Annual Meeting Plenary: Energy and Water Sustainability for a Smart Planet](#) - Featuring Spike Narayan, IBM Research - Almaden; Jared Ciferno, Office of Coal and Power R&D, NETL, U.S. DOE; and David Klanecky, Dow Water & Process Solutions

The annual meeting will also include topical conferences on Environmental Sustainability; Hydrogen, Oil, and Gas Production; Nanotechnology in

Medicine; Green Process Engineering; and Quality by Design (QbD).

(Source: <http://www.aiche.org/Conferences/AnnualMeeting/index.aspx>)

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