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**RGTUQPCN FCVC**< Date of Birth, April 5, 1948; Naturalized US C

Utkalmani Gopabandhu Das Memorial Award from Odisha Societeis of Americas for the year 2024

**UQEKGV [ CHHKNCVKQP ( RTQHGUUKQPCN TGIKUVTCVKQP**

Member, American Society of Mechanical Engineers from 1974

Member, Institution of Engineers India (1988-2000)

Registered Professional Engineer in Rhode Island (1978-1988) and Alaska (1987- 2015)

**RTQHGUUKQPCN GZRGTKGPEG**

2018- present Professor Emeritus of Mechanical Engineering, University of Alaska Fairbanks

1997-1998 & 2006-2007 Chair, Department of Mechanical Engineering, University of Alaska

1993-2018 Professor of Mechanical Engineering, University of Alaska

1988-1993 Associate Professor of Mechanical Engineering, University of Alaska.

1984-1988 Assistant Professor of Mechanical Engineering, University of Alaska.

1983-1984 Research Engineer, Naval Surface Weapons Center, Dahlgren, VA.

1979-1983 Mech. Eng. Staff Consult. (half-time); BIF, A Unit of General Signal, RI.

1980-1983 Instructor (half-time), University of Rhode Island, Kingston, RI.

1978-1980 Teaching Assistant, University of Rhode Island, Kingston, RI.

1974-1978 Mechanical Engineer, Tower Iron Works, Inc., Seekonk, MA.

1972-1974 Research Assistant, Brown University, Providence 1d

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2011 Jan.-May	NSF AK EPSCoR Research Fellowship (R. Vajjha)	NSF, Alaska EPSCoR	\$23,616
2010-2011	Doctoral Research Fellowship Support ( R. Vajjha)	Dean, Grad. School Univ. of Alaska	\$27,600
2010-2011	Nanofluids for Applications in NASA Missions	NASA/EPSCoR/ASGP	\$40,000 (with UAF salary match)
2009-10	Doctoral Research Fellowship Support ( R. Vajjha)	Dean, Grad. School Univ. of Alaska	\$25,880
2009-10	Research Fellowship Support ( R. Strandberg)	Alaska Space Grant Prog.	\$5,000
2009 Summer	Research Assistantship (R. Vajjha)	EPSCoR	\$2,120
2008 Fall			

2003-2004	Graduate Student Support Micro scale Heat Transfer and research on Nanofluids(for D. Kulkarni)	Center for Nanosensor Tech. (CNT)/USDOD	\$38,000
2003-2004	Graduate Student Support Heat and Fluid Flow Modeling of Gas Hydrates ( for V. Subbaihaa.)	Arctic Region Super Computing Center (ARSC)	\$36,500
2003	CFD Modeling of Gas Hydrates (summer support for D.Das)	Arctic Region Super Computing Center (ARSC)	\$ 18,500
2002-2003	Graduate Student Support Thermal Management of Micro/Nano chips (for D. Kulkarni)	Center for Nanosensor Tech. (CNT) / USDOD	\$32,500
2003	Thermal research on electronic cooling (summer support for D. Das)	CNT	\$37,000
2001-2002	Graduate Student Support Heat Transfer Effects on GTL Transmission (for S. Nerella)	Petroleum Development Lab/ USDOE	\$15,000
2000-02	ITM Syngas Reactor for Natural Gas Conversion	Air Products & Chemicals, Inc., PA	\$87,800
1997	Lecturing and Research, second year grant	Rotary International, IL	\$5,000
1996	Lecturing and Research in a Developing Country	Rotary International, IL	\$5,000
1995	Design of a Rocket Motor Test Stand	Alaska Space Grant, NASA	\$5,000
1993	Graduate Student Support Modeling of Ice Coring Devices (for S. Hazarika)	Polar Ice Coring Office	\$8,800
1993	Monitoring Heater Testing	Rheem Manufacturing Company, AR	\$3,000
1993	Paper presentation at Fourth International Workshop on Ice Drilling, Tokyo	UAF Faculty Travel Grant	\$700
1992-93	Cold Weather Testing of Outdoor Gas-Fired Heaters	Rheem Manufacturing Company, AR	\$48,900
1992-93	Graduate Student Support, Finite Element Analysis for Thermal Drilling ( for S. Hazarika & D. Choi)	Polar Ice Coring Office	\$17,600
1992-93	Curriculum Development in Propulsion Engineering	Alaska Space Grant, NASA	\$5,000

1992	School of Engineering Machine Shop Support, Drill Fabrication.	Polar Ice Coring Office	\$4,000
1991-92	Graduate Student Support, Thermal Modeling of Ice Coring Operation ( for S. Jois)	Polar Ice Coring Office	\$17,200
1991	Performance Evaluation of New Air Intake Fixtures on Heaters	Rheem Manufacturing Company, AR	\$39,200
1990	Testing of Heaters to Eliminate Icing Problem	Rheem Manufacturing Company, AR	\$39,700
1989	Moisture Accumulation in Insulated Walls	U.S. Army Cold Region Research & Engin. Lab	\$7,200
1988-89	Graduate Student Support, Gas Hydrate Research (for D. Scott)	Petroleum Development Laboratory/U.S. Department of Energy	\$10,400
1988-89	Tandem Propeller Application for Ships	Marine Highway System, AK	\$22,800
1988	Computation of Fluid Flow and Heat Transfer in VLS	U.S. Navy/SCEEE	\$27,200
1987-88	Halon System Design for Remote Diesel Power Plants	Dept. of Transportation & Public Facilities, AK	\$20,500
1987-88	Graduate Student Support, Fire Protection Research (for V. Srivastava)	Inst. of Northern Eng. & State of Alaska	\$6,000
1986-87	Photovoltaic Systems for Alaska	Dept. of Transportation & Public Facilities	\$12,000

2016 summer	Construction of nanoscale drug powder in blood, With Co-PI Jason Slats	UAF BLaST Program	\$5,000
2008	Small Scale Test Setup for Fan Coil Testing with Co-PI Roy Strandberg	CCHRC	\$6,100
2007	Construction of a Specific Heat Apparatus With Co-PI Robert Paul Shymanski	EPSCoR, Alaska	\$3,000
2006	Comprehensive Evaluation of Bridge Anti-icing Technologies with J. Zhang	Alaska Dept. of Trans. and Publ. Fac. Anchorage	\$65,000
2006	Preparator of proposal for "Equipment for Thermal Systems Lab for Microelectronic Packaging " with D. Thorsen	Murdock Foundation Total \$425 K with match	\$100,000
2005	Crisis Intervention Training for Young Adults (Students) at NAMI	Eli Lilly Company	\$2,500
2004-05	HVAC Systems for Long Range Radar Stations	Aero-Thermo, Inc US Dept. of Defense	\$25,000
1998-99	Energy Research with Fuel Cell	U.S. Dept. of Energy	\$1 Million
1998-99	Evaluation of Syngas Generators	Air Products, PA	\$37,800
1990	Engineering Development of PICO Ice Test Well Facility	Polar Ice Coring Office	\$7,000
1989-90	Waste Heat Driven Refrigeration Unit for Alaska	Alaska Energy Authority	\$22,400
1987-88	Alaskan Commodities Irradiation Project	U.S. Dept. of Energy	\$450,000

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Date of Student      c      Masters  
or Ph.D.      Title  
of Thesis or Project      Graduation  
Date

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Vineet Srivastava	Masters	Finite Element Modeling of Hydrate	Summer 1988
David Scott	Masters	Heat Transfer Model in Hydrate	Spring 1990_

Sirisha Nerella	Masters	Heat Transfer Effect on GTL Transmission	Summer	2002
Devdatta Kulkarni	Masters	Thermal Management of Micro/Nano Chips	Summer	2003
Vijay. Subbaihaa.	Masters	Heat & Fluid Flow Modeling of Gas Hydrate	Fall	2004
Devdatta Kulkarni	Ph.D.	Fluid Flow and Heat Trans.inMicro/Nano Scales,	Summ	2007
Praveen Namburu	MS	Numerical Modeling of Nanofluids	Summer	2007
Brij Mahagaonkar	MS	Thermophysical Properties of nanofluids	Summer	2007
Ravikanth Vajjha	MS	Measurements of Properties & Heat Transfer	Fall	2008
Roy Strandberg	MS	Nanofluids for Building Heating & Cooling	Summer	2009
Bhaskar Sahoo (Co-Chair)	MS	Fluid Dyn. and Thermal Prop. of Nanofluids	Summer	2008
Sravan K. Allam	MS	Application of Nanofluids in Auto. Radiators	Incomplete	
Hanumanth Konakanchi	MS	Electrical Conductivity of Nanofluids	Summer	2010
Dustin Ray	MS	Nanofluids in Plate and compact heat exchangers	Summer	2013
Ravikanth Vajjha	Ph.D.	Rheology and Heat Transfer of Nanofluids	Summer	2014
Jabez Chinnam	MS	Surface Tension and Contact Angle of Nanofluids	Spring	2014
Dagganadha Satti	Ph.D.	Thermophysical Properties and CFD of nanofluids	Summer	2015
Roy Strandberg	Ph.D.	Building heating with nanofluids exper. & numer.	Summer	2018
Dustin Ray	Ph.D.	Nanofluids in microchannel heat exchangers	Summer	2018
Jason Slats	MS	CFD studies of nanoscale drug powder in blood	Summer	2018
Robbin Garber-Slats	MS	Nanofluids		

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**Eqwtugu Vcwijv** At University of Rhode Island

Undergraduate: Statics  
Dynamics  
Engineering Graphics  
Fluid Mechanics  
Advanced Engineering Mathematics  
(Engineering Analysis paper II)  
Mechanical Engineering Laboratory  
Engineering Science Review Course for  
Practicing Engineers Preparing for EIT







Nanofluids and Comparison with Theory," ASME Journal of Thermal M

Exchangers Using Nanofluids and Base Fluids for NASA Applications," Proceedings: Thermal and Fluids Analysis Workshop, NASA Langley Research Center, Newport News, VA pp. 25.  
<http://tfaws.nasa.gov/TFAWS11/>

Konakanchi, H., Vajjha, R.S., Misra, D. and Das, D.K., 2011, "Electrical Conductivity Measurements of Nanofluids and Development of New Correlations," Journal of Nanoscience and Nanotechnology, Vol. 11, 6788-6795.

Vajjha, R.S., Das, D. K. and Kulkarni, D.P., 2010, "Development of New Correlations for Convective Heat Transfer and Friction Factor in Turbulent Regime for Nanofluids," International J. Heat and Mass Transfer, Vol. 53, pp. 4607-4618.

Vajjha, R.S., Das, D. K. and Namburu, P.K., 2010, "Numerical Study of Fluid Dynamic and Heat Transfer Performance of Al<sub>2</sub>O<sub>3</sub> and CuO Nanofluids in the Flat Tube of a Radiator," International J. Heat and Fluid Flow, Vol. 31, pp. 613-621.

Strandberg, R.T. and Das, D. K., 2010, "Influence of Temperature and Properties Variation on Nanofluids in Building Heating," Energy Conversion and Management, Vol. 51 pp. 1381-1390.

Das, D.K., 2010, Use of Different Types of Energy and Minimization of their Impact on Environment," Proceedings: Energy and Environmental Impacts Related to Sustainability, Institute of Technical Education and Research, Bhubaneswar, India, pp. 10-15

Strandberg, R.T. and Das, D. K., 2010, "Finned Tube Performance Evaluation with Nanofluids and Conventional Heat Transfer Fluids," International Journal of Thermal Sciences, Vol. 49, pp. 580-588.

Sahoo, B.C. Vajjha, R.S., Ganguli, R.,

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Dasari, J, Hazari

Bargar, H.E. and Das, D.K., 2002, "Building Pressurization in Extreme Cold Climates," Proceedings:  
11<sup>th</sup> International Conference,







- Vajjha, R.S. and Das, D.K., 2012, "Performance of Nanofluids in Microchannel Heat Exchangers", Proceedings: Thermal and Fluids Analysis Workshop, NASA Jet Propulsion Laboratory, Pasadena, CA, pp. 39-40, <http://tfaws.nasa.gov/TFAWS12/>
- Das, D.K., 2012, "Computational Study of Nanofluids in a Heat Exchanger Proving Their Thermal Energy Efficiency", Proceedings: 99<sup>th</sup> Indian Science Congress, Bhubaneswar, India, pp. 24-25.
- Strandberg, R. and Das, D.K., 2011, "Experimental Examination of A Hydronic Coil Test Bed Using Water and Nanofluids" ASME Graduate Students Technical Conference, University of Nevada, Los Vegas. Appears at the 2011 ASME Dist D GSTC website.
- Vajjha, R. and Das, D.K., 2011, "Study on the Viscosity of Aluminum Oxide Nanofluids" ASME Graduate Students Technical Conference, University of Nevada, Los Vegas. Appears at the 2011 ASME Dist D GSTC website.
- Das, D. K, Vajjha, R. S., Strandberg, R. T., and Kulkarni, D. P., 2010, "Enhancement of the Performance of Thermal Control Systems Using Nanofluids," Proceedings: Thermal and Fluids Analysis Workshop, NASA Johnson Space Center, Houston, TX, <http://tfaws.nasa.gov/TFAWS10/>
- Strandberg, R. and Das, D.K., 2010, "Nanofluids Improve the Thermal Performance of Building Heating Systems" ASME District D Graduate Students Technical Conference, Washington State University, Pullman, appears at the 2009 ASME GSTC website.
- Avadhanula, V., Das, D.K., and Lin, Chuen-Sen, 2009, "Comparison of the Thermal Performance of Nanofluids and Conventional Fluids in Recovering Exhaust Waste Heat from a Stationary Diesel Engine" ASME District D Graduate Students Technical Conference, Washington State University, Pullman, appears at the 2009 ASME GSTC website.
- Sahoo, B. and Das, D., 2008, "Measurement of the Thermal Conductivity of Silicon Dioxide Nanofluid to Compare its Performance with Conventional Fluids," Proceedings: American Association for the Advancement of Science, 2008 Arctic Science Conference, Fairbanks, Alaska, p. 46.
- Strandberg, R. and Das, D., 2008, "Comparison of Nanofluids Performance in Building Heating Systems," Proceedings: American Association for the Advancement of Science, 2008 Arctic Science Conference, Fairbanks, Alaska, p. 50.
- Vajjha, R. and Das, D., 2008, "Evaluation of the Performance of Nanofluids as Automobile Engine Coolants," Proceedings: American Association for the Advancement of Science, 2008 Arctic Science Conference, Fairbanks, Alaska, p. 54.
- Mahagaonkar, B. and Das, D., 2007, "Viscosity Measurements of Nanofluids for Their Applications in the Arctic and the Sub Arctic Regions," Proceedings: American Association for the Advancement of Science, 2007 Arctic Science Conference, Anchorage, Alaska, p. 44.
- Namburu, P. and Das, D., 2007, "Numerical Investigation of Convective Heat Transfer and Fluid Dynamic Behavior of Nanofluids for Applications in Cold Regions," Proceedings: American Association for the Advancement of Science, 2007 Arctic Science Conference, Anchorage, Alaska, p. 49.
- Vajjha, R. and Das, D., 2007, "Density and Specific Heat Measurements of Nanofluids for Their Applications in Cold Regions," Proceedings: American Association for the Advancement of Science, 2007 Arctic Science Conference, Anchorage, Alaska, p. 65.
- Namburu, P., Kulkarni, D., Das, D., 2006, "Reduction of Pollution and Energy Saving in Ships in the Arctic Region Using Nanofluids," Proceedings: American Association for the Advancement of Science, Arctic Science Conference, Fairbanks, Alaska, p. 50.

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Kulkarni, D., Namburu, P., Das, D., 2006, "Mitigation of Air Pollution in the Arctic and Subarctic Regions Using Nanofluids to Heat Buildings," Proceedings: American Association for the Advancement of Science, Arctic Science Conference, Fairbanks, Alaska, p. 38.

Das, D.K. and Kulkarni, D.P., 2005, "A Theoretical Investigation on Heat Transfer Characteristic of Nanofluids," Proceedings: American Association for the Advancement of Science, 56<sup>th</sup> Arctic Science Conference, Kodiak, Alaska, p. 44. Alaska, 49

Das, D.K. and Annadurai, V.S., 2004, "Recovery of Natural Gas from Hydrates Via a Thermal Stimulation Technique," Proceedings: Bridges of Science Between North America and the Russian Far East: Past, Present and Future, An International Conference on the Arctic and North Pacific, Edited by Sergienko, V.I., Vladivostok, Russia, p. 49.

Kulkarni, D.P. and Das, D.K., 2003, "Heat Transfer Model for Designing Cooling Systems for Micro-Electronic Chips," Proceedings: American Association for the Advancement of Science, 54<sup>th</sup> Arctic Science Conference, Fairbanks, Alaska, p. 44. Alaska, 49

American Association for the Advancement of Science, 47<sup>th</sup> Arb

Zhang, J., Das, D., Peterson, R. and Goering, D., 2007, "Comprehensive Evaluation of Bridge Anti-icing Technologies—Final Report,

Das, D.K. and Briggs, R.W., 1991, "A Photovoltaic Energy System at an Alaskan Site," Alaska Department of Transportation and Public Facilities Report No. AK-RD-91-05, 47 pp.

Jois, S.S., Das, D.K. and Koci, B., 1990, "Temperature Rise in Ice Cores During a Water Jet Cutting Process," Polar Ice Goring Office Tech. Rept. No. 90-3, University of Alaska Fairbanks, 9 pp.

Johnson, R.A., Das, D.K. and Hok-Barker, C., 1990, "A Feasibility Study for Waste-Heat Driven Absorption Refrigerat

Amaral, A.M., and Das, D.K., 1982, "Seismic Analysis of Butterfly Valve with Matryx Pneumatic Operator," Rept. No. DES-TR-82-6 for BIF-General Signal and ,

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**PRESENTATIONS AT CONFERENCES:**

A Computational Study of Nanofluids Performance in Automobile Radiators, Keynote Address at 3<sup>rd</sup> KIIT International Symposium on Advances in Automotive Technology, KIIT University, December 26, 2014, Bhubaneswar, India.

Enhancement of Heat Transfer Performance Using Nanofluids, Keynote Address at All India Seminar on Recent Advances in Thermal Engineering ,The Institution of Engineers (India), Odisha State Center, January 11, 2014, Bhubaneswar, India.

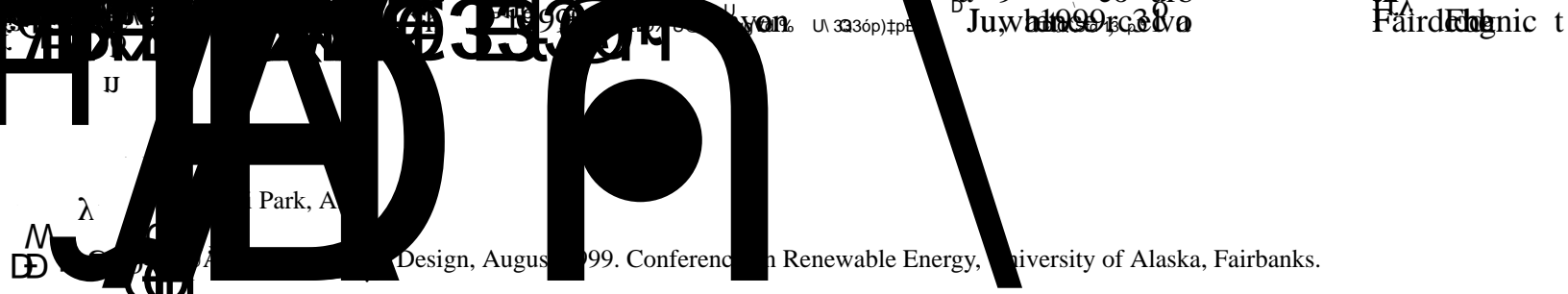
Research for Efficient Energy Utilization, Keynote Address at International Seminar on Recent Trends in Renewable Energy, Siksha 'O' Anusandhan University, January 13, 2014, Bhubaneswar, India.

Application of Nanotechnology to Enhance the Thermal Performance of Automotive Radiators, 100<sup>th</sup> Indian Science Congress, Jan. 2-6, 2013, Kolkata, India.

Computational Study of Nanofluids in a Heat Exchanger Proving Their Thermal Energy Efficiency, 99<sup>th</sup> Indian Science Congress, Jan 3-7, 2012, Bhubaneswar, India

Computational Study of Nanofluids in a Heat Exchanger Proving Their Thermal Energy Efficiency, 99<sup>th</sup> Indian Science Congress, Jan 3-7, 2012, Bhubaneswar, India





Park, A

Design, August 1999. Conference on Renewable Energy, University of Alaska, Fairbanks.

An Entrainment Approach for Turbulent Boundary Layer Calculation, June 1999. 36<sup>th</sup> Heat Transfer and Fluid Mechanics Institute, Sacramento, CA.

Author

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manager, India  
Jan. 16-17, ... presentation on ... engineering project  
... and Information

Jan. 16-18, ... h ... anava  
... of Engineering, India

I presented ... at universities, research lab ... industries over a period of ... during my  
sabbatical leave ... in the Fall semester of 2009 ... of acknowledgement ... organizations were  
presented to ... purpose of documentation ... reimbursement. The ... seminars covered  
different asp ... and heat transf ... ics of nanofluids.

1. Technical Seminar: Nov. 19, 2009, Institute of Technology, Bhubaneswar
2. Technical Seminar: Nov. 20, 2009, National Aluminum Company of India, Angul
3. Technical Seminar: Nov. 23, 2009, Institution of Technical Education and Research
4. IEEE Seminar: Nov. 25, 2009, Silicon Institute of Technology, Bhubaneswar
5. Engineering Management Seminar: Jan. 5, 2010, The Institution of Engineers (India)
6. Technical Seminar: Jan. 9, 2010, Synergy Inst. of Eng. and Technology, Dhenkanal
7. Technical Seminar: Jan. 12, 2010, Steel Authority of India Plant, Rourkela
8. Technical Seminar: Jan. 13, 2010, Padmanava College of Engineering, Rourkela
9. Technical Seminar: Jan. 14, 2010, VSS University of Technology, Burla
10. National Seminar: Jan. 15, 2010, Energy and Environmental Impacts Related to Sustainability at Institute of Technical Education and Research, Bhubaneswar

Collaboration for Energy and Environmental Technologies Between the Canadian and American Arctic Regions.  
Presented at the Sixth Annual Canada Days Conference, Feb. 27, 2009 at the University of Alaska Fairbanks.

I presented eleven seminars during my visit to India between Dec. 16, 2006 and Jan. 12, 2007 on two topics.

- (1) Technical seminar entitled "Experimental and Numerical Study on Convective Heat Transfer and Fluid Dynamic Characteristics of Nanofluids."
- (2) Education seminar entitled "Graduate Education System in the USA with Examples from the University of Alaska"

The seminars and the institutes where they were presented have been listed below.

1. Technical Seminar: Dec. 20, 2006, Indian Institute of Technology Delhi
2. Technical Seminar: Dec. 26, 2006, National Research Laboratory, Bhubaneswar
3. Education Seminar: Jan. 27, 2007, St. Francis College, USA

## Cold Region Heat Transfer Studies for Gas-to-Liquids

Performance of Fix Kits to Eliminate Icing Problems on Large-scale Gas-fired Heaters, June 21, 1993, Rheem Manufacturing Co., Fort Smith, Arkansas.

Cold Weather Testing of Rheem Gas-Fired Outdoor Heaters, June 5, 1992, Rheem Manufacturing Company, Ft. Smith, Arkansas.

A Finite Element Method for Modeling Heat Transfer During Ice Goring Operations, April 10, 1992, Polar s

Reviewed a paper for International Journal of Heat and Mass Transfer, July 2013

Reviewed two proposals each worth slightly more than \$1M for Qatar National Research Fund under their National Priorities

!

Reviewed a paper for ASME Heat Transfer Division, April 2003.

Reviewed sixteen abstracts for the 53rd Arctic Science Conference, 2002

Reviewed a proposal for Specific Research Grant of Idaho Board of Education, 1998.

Reviewed a paper for AIAA journal, 1997.

Reviewed three papers for ASCE Eighth International. Conf. on Cold Regions Engineering, 1996.

Reviewed thirteen abstracts for the 46th Arctic Science Conference, 1995

Reviewed a paper for the International Journal of Heat & Mass Transfer, 1994.

Reviewed a paper for the ASME Heat Transfer Division, 1994.

Reviewed three papers for ASME Journal of Fluids Engineering; 1989, 1993, 1994.

Reviewed a paper for ASME Fluids Engineering Division Conf. on Turbulent Boundary Layers, 1993.

Reviewed a paper for Fourth International. Symp. on Thermal Eng. and Science for Cold Regions, 1993.

Reviewed a paper for the Permafrost Conference, 1993.

Reviewed many proposals for Graduate Resource Fellowship, 1991-1993.

Reviewed three papers for Third International Symposium on Cold Regions Heat Transfer, 1991.

Reviewed a proposal for Faculty Small Grant, 1990.

Reviewed two papers for The Northern Engineer, 1989 - 90.

## CONFERENCES

Chair, ASME Graduate Student Technical Conference for Dist. D at California Maritime Academy in March 23-24 and Central Washington University in April 20-21, 2011.

Chair, ASME Graduate Student Technical Conference for Dist. D at University of Nevada, Las Vegas in April 2010.

Chair, ASME Graduate Student Technical Conference for Dist. D at San Jose State University and Washington State University in April 4 and 18, 2009.

Chair, Session on Northern Engineering, 2008 Arctic Science Conference of the AAAS, September 2008.

Chair & Coordinator: ASME Graduate Student Technical Conference, Old Region VIII and District D, 2001- 2008

Chair, Session on Cold Regions Engineering, 54th Arctic Science Conference of the AAAS, September 2003.

Co-chair, Session on Cold Regions Engineering, 53rd Arctic Science Conference of the AAAS, September 2002.

Chair, Session on Cold Regions Engineering, 46th Arctic Science Conference of the

AAAS, September 1995.

Co-chair, Session on Properties and Behavior of Freezing Soils, Third International Symposium on Cold Regions Heat Transfer, June 1991.

Co-chair, Technical Session on Northern Engineering, 40th Arctic Science Conference of the AAAS, September 1989.

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AT NATIONAL LEVEL

American Society of Mechanical Engineers, Dist. D, Operating Board Member, 2006-2012.

American Society of Mechanical Engineers, Region VIII (Dist. D), SSC Senior



SOE Representative to Chancellor's Graduate Fellowship Committee; November 1991 to November 1993.

- II SOE Peer Committee for Tenure and Promotion review. Wrote the summary of reviews at times for candidates on behalf of the committee; 1991 to 1995.

SOE Sabbatical Leave Review Committee, September 1995 to 1999

ASME Faculty Advisor to the UAF Student Chapter, May 1988 through May 1990 and May 1995 to 2009.

Meritorious Incentive Awards Committee, October and November, 1988.

Member of the Engineering Representative to the University Assembly, April 1985 through April 1987.

Member of the Assembly Budget Committee, April 1985 through April 1987.

Member, ME Department Graduate Admissions Committee, September 1985 – 2001 & May 2004 - 2006.

### IN COMMUNITY

Board Member, Fairbanks Community and Behavioral Health Center, Feb 2009- 2013

Board Member-at-Large and Treasurer, National Alliance on Mental Illness, Fairbanks Chapter: Treasurer (2007-08), Member at Large 2008-12.

President, National Alliance on Mental Illness, Fairbanks Chapter, CO



Mechanical design experience included stress analysis of vessels and structures due to seismic and wind loads, flow induced vibration, and preparation of technical reports to meet the American Society of Mechanical Engineering (ASME) code requirements. Developed and modified several computer programs and used general-purpose programs offered by AAA Technology, and University Computing Company. Complete familiarity with ASME codes Sec. 1, III, VIII; AISC, TEMA, and API. As project engineer, supervised the progress of projects outlined above for production scheduling, manufacturing, quality assurance, and reviewed the financial status periodically for on-time and profitable completion of the projects.

A representative list of some units designed by me and constructed under my supervision at Tower Iron Works follows.