

Dear Members of Kansas-Western Missouri Chapter of ASA,

Please join us for our spring Chapter meeting on **Thursday, March 31th, 2016** at Kansas State University. The meeting will be held in the Holiday Inn of Manhattan. A map is provided below for your convenience.

Professor James V. Zidek from the Department of Statistics, University of British Columbia, Canada will be presenting the Keynote Address **“Getting to the US 2008 0.075ppm standard for ozone and beyond: The statistician’s story”**.

Professor James V. Zidek will also present a seminar talk at the Department of Statistics at Kansas State University on **“Preferential selection of environmental monitoring sites: origins, impacts and mitigation”** at 4:00pm, Dickens Hall 207. Additional information about his talks is given below.

Please contact our Chapter president, Dr. Juan Du (dujuan@ksu.edu) or Chapter secretary Dr. Wei-Wen Hsu (wwhsu@ksu.edu) if you have any questions.

We look forward to seeing you in Manhattan!

Registration

The cost to attend the chapter meeting is **\$30.00 (\$20.00 for students)**, which includes dinner. The on-line registration time frame is

Registration Starts:	February 1, 2016
Registration Ends:	March 28, 2016

Registration for this event can be done online at
<https://www.123signup.com/register?id=ppbck>

More information about this event:
<https://www.123signup.com/event?id=ppbck>



Agenda

- 6:00 – 6:15 p.m. Social time
- 6:15 – 6:30 p.m. The induction ceremony for Mu Sigma Rho Honor Society
- 6:30 – 7:15 p.m. Dinner
- 7:15 – 7:30 p.m. Chapter business
- 7:30 – 8:30 p.m. Keynote Address

Chapter Meeting Keynote Address

Title: Getting to the US 2008 0.075ppm standard for ozone and beyond: The statistician's story

Abstract: The presentation will take us along the road to new US ozone standard announced in Mar 2008 by the Environmental Protection Agency, the Agency responsible for monitoring the Nation's air quality standards under the Clean Air Act of 1970. The talk will describe my experiences as a member of the EPA's Clean Air Scientific Advisory Committee (CASAC) for Ozone and his perspectives on the process as well as the results it produced. Along the way, we will meet a large cast of players who helped shape that standard. And we will encounter a couple of tricky statistical problems along with approaches, developed by the speaker and his co-researchers, that could be used to address them. The first has to do with the use of deterministic physical - computational models for inferring certain unmeasurable but hugely important ozone level, the so-called "policy related background level". The second is about inferring another unmeasurable quantity, the actual human exposure to ozone after accounting for human time activity patterns that make personal exposures less than the ambient levels measured by fixed site monitors. Above all, the talk will be a narrative about the interaction between science and public policy - making in an environment that harbors a lot of stakeholders with varying but legitimate perspectives, a lot of uncertainty in spite of the great body of knowledge on ozone and above all, a lot of potential risk to human health and welfare.

Additional Seminar Talk at Kansas State University

Additional seminar talk will be given by **Professor James V. Zidek** at the Department of Statistics, Kansas State University on March 31th from 4:00 – 5:00 p.m, Dickens Hall 207.

Title: Preferential selection of environmental monitoring sites: origins, impacts and mitigation

Abstract: In the 1960s, over 2000 sites in the UK monitored black smoke (BS) air pollution due to concerns about its effect on public health that were clearly demonstrated by the famous London fog of 1952. Abatement measures led to a decline in the levels of BS and hence a reduction in the number of monitoring sites to less than 200 by 1996. Treating the BS example as a case study, the speaker will argue that the sites to be removed were preferentially selected, causing estimates of metrics used by regulatory agencies to be too high. He will describe an approach to mitigating the effects of preferential sampling in calculated aggregate estimates of the BS concentration levels. And finally he will describe what happens when environmental epidemiologists calculate health risks using the BS data. The large number of monitoring sites and their associated high dimensional data vectors rules out naïve use of classical geostatistical methods in this work and novel approaches for handling such data will be described.

The work has important general implications for the setting of regulatory standards and the design of monitoring networks. Most importantly it points anew to the importance of good design in statistical measurement and testing.

Biographical sketch of Professor James V. Zidek:



James V. Zidek, PhD
Professor Emeritus
Department of Statistics
University of British Columbia
Canada

Dr. James Zidek is Professor Emeritus at the University of British Columbia. He received his MSc and PhD in Statistics from the University of Alberta and Stanford University respectively. His research interests include the foundations of environmetrics, notably on the design of environmental monitoring networks and spatio-temporal modeling of environmental processes. His contributions to statistics have been recognised by a number of awards including Fellowships of the ASA and IMS, the Gold Medal of the Statistical Society of Canada and Fellowship of the Royal Society of Canada, one of that country's highest honours for a scientist.

<http://www.stat.ubc.ca/~jim/>

Chapter Meeting Address:

Landon Room
Holiday Inn Manhattan at Campus
(The intersection of N17th Street and Anderson Avenue)

