

**COMBINED MINUTES OF THE
99TH ANNUAL MEETING OF THE
SOUTH DAKOTA ACADEMY OF SCIENCE
FRIDAY AND SATURDAY 28 AND 29 MARCH 2014
HOSTED BY SOUTH DAKOTA SCHOOL
OF MINES AND TECHNOLOGY
BEST WESTERN RAMKOTA HOTEL,
RAPID CITY, SD**

EXECUTIVE COMMITTEE MEETING

President Gary Larson opened the meeting 12:30 am, Friday 28 April 2014, and welcomed members of the Executive Council to the 99th South Dakota Academy of Science Annual Meeting at the Best Western Ramkota Hotel hosted by the South Dakota School of Mines and Technology and noted that a quorum was present. Gary noted that because the 98th meeting was cancelled in response to a severe ice storm in Sioux Falls, the 99th meeting was the first meeting after the 97th in 2012.

Reports

The Secretary's Report, Treasurer's Report and Proceedings Editors Report were given by Donna Hazelwood, Jeff Palmer, and Bob Tatina, respectively. Members moved and seconded acceptance of the respective reports.

Old Business

Fellows 2012

Fellows Elected to the South Dakota Academy of Science for 2012 and honored at the Banquet are Nels Granholm, SDSU, the late Audrey Gabel, BHSU, Mark Gabel, BHSU, and Robert (Bob) Tatina, DWU. No fellows were elected 2013.

SDAS web page

The SDAS website <http://www.sdaos.org> is hosted by Miner Solutions owned by Shane Miner. Although Shane has moved to a position with WGBH in Boston, the Executive Council voted to continue utilizing Miner solutions to host the webpage. Payment is made from the Proceedings Account.

New Business

Fellows 2015

A call for nomination of Fellows for 2015 will be sent. Brian Patrick has agreed to head the nomination process.

Invitation to all Fellows to attend the SDAS Centennial meeting 2015

The Executive Council passed a motion by Brian Patrick and seconded by Vicki Geiser to formally invite the Fellows to attend the centennial meeting as guests of the Executive Council.

The Centennial meeting of the South Dakota Academy of Science

The meeting will be 10-11 April 2015 at Cedar Shores Resort, Oacoma, SD.

Bob Tatina has been in contact with Dr. Michael J. Mullin, Professor of History at Augustana College who is in the process of writing a history of the first 100 years of the Academy. Dr. Mullin has also been invited to serve as Keynote speaker. Bob has read a draft of the first portion of the manuscript and is looking forward with enthusiasm to the final draft. A portion of the manuscript has been presented by Mullin to a history conference and was well received.

Committee Report

Proceedings by Robert Tatina

The Proceedings Account is solvent. Abstracts are included in the Proceedings. Complimentary copies are provided to libraries. Proceedings for the 2012 meeting have been uploaded to the website. All volumes dating back to 1915 have been digitized and are available in a searchable format on website.

Bob plans to have a special centennial edition of the Proceedings with Michael Mullin's history of the Academy available at the Centennial meeting. Toward that end, articles submitted to the 2014 Proceedings will need to be forwarded to Bob in final format by 15 July 2014.

Committees

Neil Reese has kindly agreed to serve as the Resolutions Committee. Auditing Committee are Mark Gabel and Donna Hazelwood. AAAS Undergraduate Poster Judges are Dave Bergman, Jim Sorenson, and George Mwangi. Judges for the first SDAS paper presentations are Vicki Geiser and Brian Patrick.

BUSINESS MEETING SATURDAY 29 MARCH 2014

Passing of the Gavel

The gavel was passed from outgoing President Gary Larson, SDSU, to Chun Wu, Mount Marty College.

Presidential Address

The Presidential address on the timely topic “Always Room for You in Science” was presented by incoming President Chun Wu.

Committee Reports

Audit Committee

Mark Gabel and Donna Hazelwood audited the 2012-13-14 account for Treasurer Jeff Palmer. Mark gave the report and commended Jeff on the most organized and put together report that he has seen in his many years of serving on the auditing committee.

Proceedings Editor Report

Proceedings Editor Robert Tatina reported that the proceedings account is solvent. A total of 40 print copies have been made and distributed to SD libraries, Abstracting Services and Thompson Scientific. The remaining copies join the complete set that Bob has stored at his residence in Michigan.

For the Centennial Proceedings, Mike Mullin, historian at Augustana College, has been contracted to write a history of the Academy. The paper weaves the history of the Academy with that of South Dakota and of the USA. Bob issued a call for help with articles, artifacts, and photographs for the centennial edition. He suggested that a glossy photograph would be appropriate for the cover.

Resolutions Committee

Neil Reese presented the following resolutions:

The Members of the Academy thank the following: 1) The Local Planning Committee: Andrew Detwiler and Thomas Montoya; 2) the local registration committee headed by Amy L. Montoya and the members of Eta Kappa Nu for working the registration desk: Lindsey Evans, Shaun Gruenig, Dustin Moser, Zachary Norstedt, Benjamin Dykstra, Joshua Leland, Lance Baum, Mason Cover, Preston Cook, and Dana Jensen; 3) the Rapid City Convention & Visitors Bureau for providing area maps, visitor guides/pamphlets, and name badges; 4) Dr. Richard Gowen and his wife Nancy for supporting the SDAS; 5) Dr. Dick Gowen for his stimulating address, “Trusting Autonomous Systems”; 7) special thanks to Bob Tatina for his continued excellence and dedication as editor of the Proceedings of the SDAS; 8) special recognition to Gary Larson for serving two terms as SDAS President (2012-2013 and 2013-2014); 9) thanks to the ever-faithful Donna Hazelwood, Secretary, and the well-organized Jeff Palmer, Treasurer; 10) thanks to Uriel Buitrago-Suarez for his past service as Webmaster and to Tim Mullican for assuming these duties; 11) we thank Brian Patrick, Vicki Geiser, and Gary Larson for judging the first student Oral Presentations Contest, and Dave Bergmann, Jim Sorenson and George Mwangi for judging the Undergraduate Student Poster Contest; 12) we thank the organizers of the Symposium Committees: Bioinformatics by Vicki Geiser, Paleontology by Clint Boyd, and Science Education by Matt Miller; and lastly 13) we thank the Best Western Ramkota Inn for providing an excellent venue for the 2014 meeting.

Oral Presentation Awards

Prizes awarded are 1st place, \$100.00, 2nd place, \$75.00, and 3rd place, \$50.00. The winning presentations are listed in sequential order and the names of the winners are in boldface type.

First Place: “Variability in micro-computed tomography images for non-destructive evaluation of friction-stir weld quality.” **Alex Wulff**, William Cross, Michael West, Antonette Logar, and Edward Corwin. Department of Mathematics and Computer Science, South Dakota School of Mines and Technology.

Second Place: “DNA methylation used to identify candidate loci associated with drought induced trans-generational plasticity that may inhibit range expansion in *Boechera stricta*.” **J. Alsdurf**, C. Anderson, and D. Siemens. Integrative Genetics Program, Black Hills State University.

Third Place: “Interpreting native upland tallgrass prairie communities of South Dakota’s prairie coteau using multivariate methods.” **Diane M. Narem**¹, Lan Xu¹, Gary E. Larson¹, and Dave J. Ode². ¹Natural Resource Management, South Dakota State University. ²South Dakota Game Fish and Parks Department.

Poster Competition Awards

The winners receive a one-year subscription to Science compliments of the American Association for the Advancement of Science.

“Movement Patterns and Hibernation of Ornate Box Turtles in South Dakota.” **C. Griffith** and A. Higa. Department of Math, Science, & Technology, Oglala Lakota College

“Genetic Structure of Endangered Populations of Native Red Mulberry in the Upper Midwest USA.” **S. J. Schreier**. S. Piya and M.P. Nepal. Department of Biology & Microbiology, South Dakota State University.

Elections

The Executive Council provided for election the following slate of nominees:

Second Vice-President:	Vicki Geiser, MMC
Web Master:	Tim Mullican, DWU
Member-at-Large 2014-2016	Arvid Boe, SDSU
	Xu Lan, SDSU
	Matt Miller, SDSU
	Thomas Montoya, SDSM&T

The floor was opened for nominations, but none were forthcoming. Brian Patrick moved and Dave Berman seconded that the slate of officers provided by the Executive Council be accepted. The motion passed by acclamation.

Upcoming meetings

100th Annual Meeting hosted by SDAS Executive Council, at Cedar Shore, 10 and 11 April 2015

101th Annual Meeting hosted by University of Sioux Falls 2016.

102th Annual Meeting hosted by Dakota Wesleyan University 2017.
 103rd Annual Meeting hosted by South Dakota State University 2018.
 104th Annual Meeting hosted by Mount Marty College 2019.
 105th Annual Meeting hosted by Northern State University 2020.
 Executive Council Fall Meeting 2014: Al's Oasis, Oacoma, SD, Saturday, 6 September 2014

Recap of the 99th Annual meeting of the South Dakota Academy of Science

Forty papers were presented at the contributed paper sessions Friday afternoon and Saturday morning, and 25 posters were presented Friday afternoon and Saturday morning. There were 82 registrations for the spring meeting.

Adjournment

Brian Patrick moved and Mark Gabel seconded the adjournment of the 99th Annual SDAS Meeting.

*Respectfully submitted,
 Donna Hazelwood
 Secretary, SDAS*

TREASURER’S REPORT—2014

01 April 2013	Checking Account Balance	12,519.72	
	Certificate of Deposit	8,577.50	
	Petty Cash	0.00	
	Total Assets	21,097.22	
		<i>Income</i>	<i>Expenses</i>
	Spring 2013 Meeting Refunds		2895.00
	Spring 2013 Meeting Expenses		1081.43
	Stamps for Mailing Refunds		46.00
	Spring 2013 Meeting Deposits	2865.00	
	2013 Membership Payments	275.00	
	Fall 2013 Meeting Expenses & Lunch		262.15
	2014 Science Fair Awards		640.00
	Cash for Cashbox 2014 Meeting		200.00
TOTALS		6050.00	5134.58
31 March 2014	Checking Account Balance	13,435.14	
	Certificate of Deposit	8,628.96	
	Petty Cash	0.00	
	Total Assets	22,064.10	

*Respectfully Submitted,
 Jeffrey S. Palmer*

PROCEEDINGS EDITOR'S REPORT—2014

Report for the year from April 1, 2013 to March 31, 2014.

1. The following libraries were mailed a complimentary paper copy: AC, BHSU, DSU, DWU, MMC, NSU, OLC, SDSMT, SDSU, UND, UND, Am. Mus. Nat. Hist., U of WA and the Booth Fish Hatchery
2. The following indexing/ abstracting services and institutions were mailed complimentary paper copies: Chemical Abstract Services, AcadSci., Inc. , Cambridge Scientific Abstracts, GeoRef Library, Baywood Publishing (Anthropology), Thompson Scientific (Biosis)
3. The following non-member institution purchased paper copies: Linda Hall Library (Kansas City, MO) 1 copy; Curran and Associates (Red Hook, MA) 2 copies
4. Electronic files of the 2013 Proceedings have been sent to Miner Solutions for publishing to the SDAOS website.
5. For the 2013 Proceedings:
 - No. of paper copies printed = 40
 - No. of pages = 268
 - No. of full papers published = 14
 - No. of abstracts published = 61
 - No. of titles only published = 45
 - No. paper copies distributed to libraries, abstracting services, individuals, etc.= 29
 - Electronic files of were provided to Shane Miner of Miner Solutions for uploading to the SDAS website.
6. First call for papers sent out early February; second call sent out 1 March.
7. 2014 Schedule of Events was produced and distributed
8. Proceedings Ledger

Beginning Balance (4/1/2013) \$9707.94

INCOME

Page Charges	3850.00	(Invoiced \$4280.00, 100% paid on 4/7/2013)
Reprints	300.00	(Invoiced \$400.00)
Subscriptions	30.00	(Invoiced \$20.00)
2012 page charges	600.00	
Total Income	\$5740.00	

Expenses

Postage	296.06
Supplies	160.14
Formatting	1410.00
Printing	1529.66
Total Expenses	\$6851.94

Ending Balance (3/31/2014) \$8596.00

Note: As of 4/29/2014, 100% of charges for the 2014 Proceedings were paid.

*Submitted by
Robert Tatina, Editor*

**FELLOWS OF THE SOUTH DAKOTA
ACADEMY OF SCIENCE**

Kenneth F. Higgins 1998
Chuck Estee 1999
No nominations 2000
Carroll Hanten 2001
Emil F. Knapp 2001
No nominations 2002
Clyde Brashier 2003
Milton Hanson 2003
S. Laetitia Kiltzer 2003
Robert Looyenga 2003
Arlen Viste 2003
Everett White 2003
Perry H. Rahn 2004
Robert Stoner 2004
No nominations 2005
No nominations 2006
No Nominations 2007
No Nominations 2008
No Nominations 2009
Maureen Diggins 2011
Gary Earl 2011
H.L. Hutcheson 2011
Waldemar "Wally" Klawiter Jr. 2011
Nels Grandholm 2012
the late Audrey Gabel 2012
Mark Gabel 2012
Robert (Bob) Tatina 2012
No Nominations 2013
No Nominations 2014

2014 MEMBERSHIP LIST

SENIOR MEMBERS

Baird, Nancy		Nichols, Samantha	SDGFP
Barnes, Michael E.	SDGFP	Pagnac, Darrin	SDSMT
Bergmann, David J.	BHSU	Palmer, Jeffrey	DSU
Butler, Jack L.	USFS	Parris, David C.	New Jersey State Museum
Clay, Sharon A.	SDSU	Patrick, L. Brian	DWU
Corwin, Ed	SDSMT	Rahn, Perry H.	SDSMT
Dash, Ilchgerel	SDSMT	Reese, Neil	SDSU
Detwiler, Andy	SDSMT	Roggenthen, William	SDSMT
Erazo-Barradas, Mauricio		Rumble, Mark A.	U.S. Forest Service
Ezrailson, Cathy M.	USD	Sani, Rajesh K.	SDSMT
Gabel, Mark	BHSU	Sarah, Anwar J.	SDSU
Geiser, Vicki	MMC	Shelton, Sully	SDSMT
Hansen, Stephanie	SDSU	Sorenson, James C.	MMC
Hazelwood, Donna	DSU	Swanson, David	USD
Higgins, Kenneth	SDSU	Szczerbinska, Barbara	DSU
Hoyer, Ross	SDSMT	Tatina, Robert	DWU
Jewell, Melody	SDSU	Uresk, Daniel W.	USDA
Johnson, Gary D.	SMU	Viste, Arlen E.	AC
Juntti, Tom	Sierra Club	Welsh, Ed	Badlands NP
Krack, Kaitlynn	SDSU	Wilkins, Wu Justin	Mammoth Site
Kunza, Lisa	SDSMT	Wulff, Alex	SDSMT
Laganiere, Dean	SDSMT	Xu, Lan	SDSU
LaGarry, Hannan	OLC		
Larson, Gary	SDSU	STUDENT MEMBERS	
Logar, Antonette	SDSMT	Alsdurf, Jake	BHSU
Mergen, Daryl E.	Mergen Ecological Delineations, Inc	Andersen, Ethan	SDSU
Meyer, Justin	SDSMT	Becket, Kristen	SDGFP
Miller, Matthew L.	SDSU	Benson, Benjamin	SDSU
Montoya, Thomas P.	SDSMT	Bredeson, Mike	SDSU
Mullican, Tim	DWU	Deutscher, Tyrel	SDSU
Mwangi, George K.	USF	Dolan, Lucas	DSU
Myer, Heidi	SDSU	Meiers, Lindsey	SDSU
Nam, Soonkie	SDSMT	Mergen, Zach	BHSU
		Mosco, Taylor	DSU
		Zimmerman, Sarah	SDGFP