

A publication of the Midland Section of the American Chemical Society

# October 2018, Vol. 55, No. 10

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# Volunteer Appreciation Dinner, October 8 Michelle Rivard and Gina Malczewski, Outreach and Kids & Chemistry, Midland Section ACS

Calling all Midland Section ACS past and future volunteers! All Midland ACS Board members, committee chairs, and Kids & Chemistry volunteers are cordially invited to an evening dinner celebration of Midland Section ACS Achievements and Service. All 2018 volunteers will be recognized at this event.

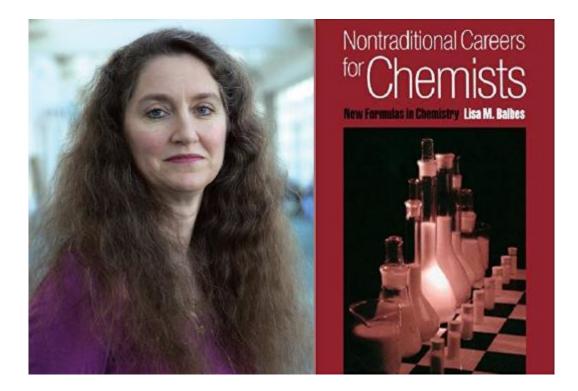
Please RSVP by no later than October 4 using the SignUpGenius tab on the Midland Section ACS home page at <u>http://www.midlandacs.org/</u>. For more information or questions, please contact Michelle Rivard at <u>michelle.rivard@dowcorning.com</u> or Gina Malczewski at <u>reginamalczewski@gmail.com</u>.



# Careers in Chemistry Presentation by Dr. Lisa Balbes Wenyi Huang, Chair, Midland Section ACS

The Kalamazoo and Huron Valley Sections of the American Chemical Society invite you to a presentation on "Careers in Chemistry" by Dr. Lisa Balbes, a career consultant, on Thursday, October 4th, 2018 at 7 pm in Kalamazoo College's Dewing Hall, Room 103. The Huron Valley section will gather in room 300 at the Bruce T. Halle Library at Eastern Michigan University where they will join via webinar. Join from PC, Mac, Linux, iOS, or Android: <u>https://zoom.us/j/751103694</u>. For parking information at Eastern Michigan University see <u>https://www.emich.edu/parking/index.php</u>.

The meeting should be of interest to anyone who may have, or may be inclined to consider getting, a degree in chemistry and is wondering what career options are available to someone with the skills acquired in following this path.



Dr. Lisa M. Balbes has been an American Chemical Society volunteer career consultant since 1993, providing career management advice and information to literally thousands of scientists. She is the author of "Nontraditional Careers for Chemists: New Formulas in Chemistry", published by Oxford University Press, an ACS certified master workshop facilitator, and an internationally invited speaker on various career topics. She earned her Ph.D. in chemistry from the University of North Carolina at Chapel Hill, and her undergraduate degrees in chemistry and psychology from Washington University in St. Louis.

2018 Dow Great Lakes Bay STEM Festival – Flyer, October 12-13 Gina Malczewski, Director, Midland Section ACS

# **Great Lakes Bay STEM Festival at Delta College!**

Midland ACS will be offering activities related to the NCW theme "Chemistry is Out of this World!"



# SAVE THE DATE

Mark your calendars for Friday, October 12 and Saturday, October 13, for the 2018 event.

- The first part of Friday from 8:30am 2pm is reserved for pre-registered 6th, 7th and 8th grades.
- New this year Friday evening session from 6 9pm is FREE and open to the public.
- Saturday's session from 11am 2pm is also FREE and open to the public.

# 2018 Dow Great Lakes Bay STEM Festival, October 12-13 Science and Mathematics Division, Delta College

## **STEM Festival**

Putting the "wow" in science, technology, engineering, and math (STEM), that's what this event is all about.

Each fall for the last five years, the Dow Great Lakes Bay STEM Festival has been hosted at Delta College. This two-day event is an engaging, hands-on, informal environment for area youth and their families to experience STEM. Through this event we're able to show students concepts on a much larger scale than teachers can pull off in the classroom.

#### Save the Date

#### Mark your calendars for Friday, October 12, and Saturday, October 13, for the 2018 event

- The first part of Friday from 8:30 AM 2:00 PM is reserved for pre-registered 6th, 7th, and 8th grades.
- New this year, a Friday evening session from 6:00 9:00 PM is FREE and open to the public.
- Saturday's session from 11:00 AM 2:00 PM is also FREE and open to the public. Please note the time change from prior years. Registration for both public sessions is not required, but pre-registration does provide you with a chance to win a prize. Make sure to register early.

Plus, there's the opportunity to meet with before and after school groups that could continue the excitement after the event ends, the opportunity to meet with colleges and universities to explore higher education options, and the opportunity to meet with professionals from a variety of careers in an environment that really encourages one-on-one interaction between young people and professionals.

#### Registration

#### Friday, October 12, 8:30 AM – 2:00 PM

Middle school registration is now closed. It will be reopened if space becomes available.

#### Friday, October 12, 6:00 – 9:00 PM, and Saturday, October 13, 11:00 AM – 2:00 PM

The event is open to the public on Friday evening and on Saturday. We invite you to pre-register to attend the festival. Registration is not required, but you can pre-register for a chance to win a prize by using this <u>Friday/Saturday registration form</u>. We hope to see you there.

#### Partner sign up for both days

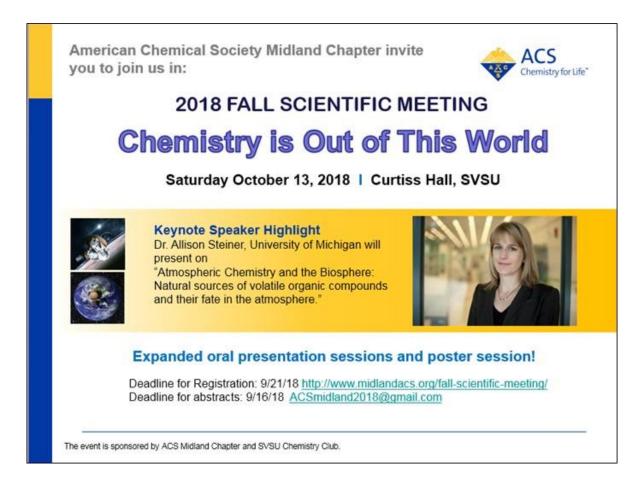
If you are interested in participating in this exciting event, please complete the <u>partner signup form</u> with your organization's information.

#### **Volunteers Needed**

Please consider volunteering by completing the <u>online volunteer registration form</u>. For volunteers under the age of 18, a <u>parent signed waiver</u> is needed. Please bring the parent signed waiver form to the volunteer check-in station when you arrive for your assignment at the event.

# 2018 Fall Scientific Meeting, October 13

Eve Suthiwangcharoen and Jennifer Larimer, 2018 FSM Committee Co-Chairs, Midland Section ACS



#### **Additional Featured Speakers:**

- Dr. Ted Bergin University of Michigan, Astronomy
- Dr. Margaret Wooldridge University of Michigan, Aerospace Engineering
- Dr. Marcos Dantus Michigan State University, Chemistry Department
- Chris Windiate Dow Chemical, TS&D Transportation

**Event Cost:** FREE for all attendees! The only cost associated with the conference is a \$10 charge to cover lunch (if you plan to have lunch at SVSU). The first 100 students who registered for the event will get a FREE lunch!

Questions: If you have additional questions, please contact us at <u>ACSmidland2018@gmail.com</u>.

# Countdown to 2019: The Inspirational Role of the Chemistry Set *Gina Malczewski, Director, Midland Section ACS*

Two chemists profiled in this column recently, Fred Buchholz and Earl Warrick, both to be featured in the 2019 Centennial History exhibit, were sent down their career paths by encounters with chemistry sets. These men are in excellent company—many Nobel Laureates, including Robert F. Curl, Jr., who was recognized for the discovery of Buckyballs in 1996, were lured into the field in this manner. "When I was nine years old," said Curl, my parents gave me a chemistry set. "Within a week I had decided to become a chemist and never wavered from that choice."

Chemistry sets originated in 19th-century England where "portable laboratories" were assembled for students and scientists. Imagine being sent to shops with a list of chemicals to buy for school, instead of the usual assortment of pens and notebooks! John J. and Harold Mitchell of the Porter Chemical Company in Hagerstown, MD, began making chemistry toy kits; their products were available at Woolworth's department stores for as little as \$1.50 until WWI, when the German chemical sources dried up. In 1920 the maker of the very successful Erector set, Alfred Carlton Gilbert, began to compete with Porter.

After the Depression, parents saw chemistry as a secure job prospect, and encouraged their children—mostly boys—to consider the field by buying them chemistry sets. The increase in scientific research during WWII and interest in the US-Russian "space race" after Sputnik also fueled the growth of the kit market. Girls finally became a target audience for Gilbert sets in the late 1950s.

Early kits included balances, alcohol lamps, instructions, glassware, and many harmless chemicals, but sodium cyanide was also included in some sets, as was radioactive uranium ore in others. With the passage of the Toy Safety Act in 1969, the Toxic Substances Control Act in 1976, and the establishment of the Consumer Products Safety Commission in 1972, chemistry sets were scaled back significantly. Today Thames and Kosmos sells sets that include ingredients for 27 to 125 experiments (depending on the kit), and these are available through Amazon. ACS publishes many resources with instructions for doing chemistry with safe household materials.

At the 2019 Centennial exhibit, we plan to pay homage to the chemistry set and all those it inspired, by showing parts from sets sold in the 1930s and the 1970s. Were you or anyone you know intrigued by one of these? Come reminisce with us or let us know about your experiences!

References:

https://www.smithsonianmag.com/science-nature/the-rise-and-fall-and-rise-of-the-chemistry-set-70359831/ https://www.nytimes.com/2012/12/25/science/a-brief-history-of-chemistry-sets.html

# Request for Nominations for 2019 Esselen Award for Chemistry in the Public Interest David Walt, 2019 Chair of the Esselen Award Committee, Northeastern Section ACS

The **Gustavus John Esselen** Award for Chemistry in the Public Interest is a very prestigious honor provided by the Northeastern Section of the American Chemical Society. The award annually recognizes a chemist whose scientific and technical work has contributed to the public well-being, and has thereby communicated positive values of the chemical profession. The awardee should be a living resident of the US or Canada at the time of nomination, and the significance of the nominee's work should have become apparent within the five years preceding nomination.

The Esselen Award has no limitations with respect to the chemical field in which the nominees are active. It differs from many other awards in that it is



for chemical activities whose importance to the public has been demonstrated. A complete list of the Esselen Award recipients is available at <u>http://www.nesacs.org/awards/esselen/awards\_esselen\_recipients.html</u>.

The award consists of a medal and a check for \$5,000. Travel expenses incidental to the conferring of this award will be reimbursed. The award is usually presented at the April meeting of the Northeastern Section of the ACS at Harvard University in Cambridge, MA. The tentative date for the upcoming award is April 11, 2019. The awardee will deliver an address on the subject of the work for which the honor is being conferred, or for work in progress which is also directed to chemistry in the public interest. The award address should be at a level where it would be of interest to an audience that does not have knowledge of a specific field.

The award was established in 1987 to honor the memory of Gustavus John Esselen, a distinguished member of the Northeastern Section. The first awardees were F. Sherwood Rowland and Mario J. Molina, who subsequently received the Nobel Prize. Several other Esselen Award recipients have also been Nobel awardees.

Nominations shall include: (1) a letter signed by the primary sponsor with a description of the nominee's work recognized as making a major contribution to the public welfare and as communicating positive values of the chemical profession, plus the names of two co-sponsors; (2) short supporting co-sponsor statements; (3) the nominee's professional biography including a list of no more than 10 of the nominee's publications selected for their pertinence to the work nominated for recognition; and (4) copies of popular and technical press news or feature articles indicative of the public benefit and interest.

Inquiries should be directed to Dr. David Walt, c/o Jeananne Piper Grady, 11 Thaxter Street, Hingham, MA 02043. All nomination materials must be consolidated into a single electronic PDF file and e-mailed to dwalt@bwh.harvard.edu with a copy to JPiperGrady@gmail.com. The deadline for nominations is October 19, 2018, and joint nominations are acceptable. The Esselen Award Committee will review the nominations and the award recipient will be notified by the first of February 2019. Further information is available at http://www.nesacs.org/awards\_esselen.html.

# In Memoriam – Dr. Robert William Belfit, Jr. *Steve Keinath, Co-Editor, The Midland Chemist*

Editor's note: The obituary notice for Dr. Robert Belfit as it appears here is reprinted, in part, from the Thursday, September 13, 2018 issue of the *Midland Daily News*. Dr. Belfit's obituary mentions the fact that he was a longstanding member of the American Chemical Society. He joined the ACS in 1952, and at the time of his passing he was a 66-year member of the ACS.



Dr. Robert William Belfit, Jr., PhD, 91, of Midland, MI, died Wednesday evening, August 29, 2018, at Stonecrest Assisted Living in Freeland, MI. He was born on June 10, 1927 in Watertown, CT, son of the late Robert and Hazel (Prentiss) Belfit. Bob attended schools in Watertown, CT, and graduated from Taft High School there where he is still listed on their ledgers as hitting the longest home run on their baseball team.

Bob served with the U.S. Marine Corps during World War II. He received his Bachelor's degree from Dartmouth College, and his Masters and PhD degrees from

Penn State University. Bob worked at the Dow Chemical Company for 29 years, retiring from there in 1986. He was one of six men who started Omni Tech International, Ltd. in that same year and retired from there.

Bob married the former Margaret Smith on September 11, 1948. She preceded him in death on January 21, 2006. He then married Sandra Boylan Hansen on December 11, 2010 at Blessed Sacrament Catholic Church in Midland, MI.

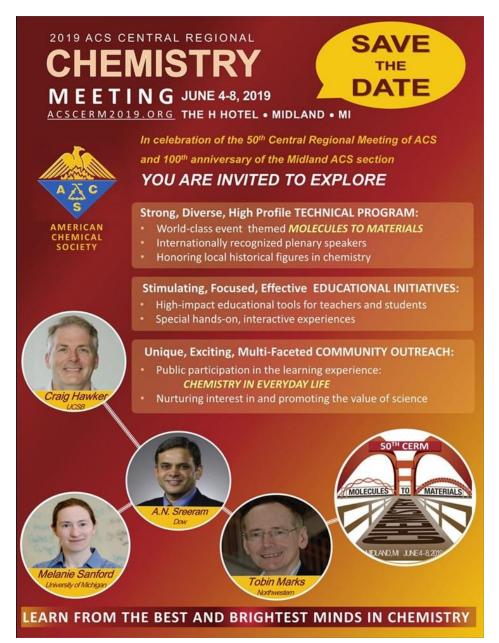
Bob was an avid golfer and a member of the Midland Country Club where he served as a past President. A golf tournament is played each year in his name (the Bob Belfit Tournament) for families. He was a member of the Midland Noon Rotary and received the Phillip Harris Award. He was a 66-year member of the American Chemical Society, and Bob volunteered at middle schools in Midland to help in their science and chemistry departments.

Surviving is his daughter by his first wife Margaret, Barcie (Robert) Freinberg of Westlake Village, CA; grandson Jonathan (Natasha) Freinberg of Alexandria, VA; granddaughter Ashley Freinberg of Charleston, SC; and great grandchildren, Daniel and Celia Freinberg, also of Alexandria, VA. Bob is also survived by children from his second wife Sandy, Kelly Hansen of Phenix City, AL, and Kurt (Darlene) Hansen and family of Sanford, MI. In addition to his parents and first wife, he was preceded in death by one brother, Theodore Belfit, and by one sister, Carmen Belfit Davis.

Sandy would like to thank all of the people who helped Bob along the way, and those who loved him and taught him things so he could have a wonderful and happy life. He was blessed beyond measure by knowing all of you, and that is what made his life worthwhile.

The memorial service for Bob took place on Sunday, September 16, 2018 at 3:00 PM from the Ware-Smith-Woolever Funeral Home, 1200 West Wheeler Street, in Midland, MI. Rev. Dr. Wallace H. Mayton, III officiated. Bob's cremains will be inurned next to his first wife Margaret in the Midland Cemetery. His family received friends at the funeral home on Sunday, September 16, 2018 from 1:00 PM until the time of service. Those planning an expression of sympathy are asked to consider Sandy Hansen Belfit to help purchase medical equipment for Stonecrest Assisted Living in Freeland, MI.

#### 50th ACS Central Regional Meeting – Save the Date, June 4-8, 2019



# In Past Issues of *The Midland Chemist Wendell L. Dilling, Director and Historian, Midland Section ACS*

## 50 Years Ago, The Midland Chemist 1968, 5, No. 4 (October), 12.

In *Professional News, Thermal Research Lab., Dow:* "Dr. D. R. Stull, J. Chao, A. T. Hu, G. C. Karris, H. Prophet, A. N. Syverud, and D. U. Webb of the Thermal Research Lab., The Dow Chemical Company, have completed a compilation of data for the book "*JANAF Thermochemical Tables – 3rd, Addendum*" published by Clearinghouse of U.S. Dept. of Commerce."

# 40 Years Ago, The Midland Chemist 1978, 15, No. 7, 77.

In *Bad Science and Social Penalties* by Prof. Cyril Comar Professor Emeritus, Cornell University: "Bad science, especially in the environment and health area, may well impose socioeconomic penalties hardly envisioned. Health effects data, for example, are used as a basis and as a rationale (often emotional) for far-reaching decisions on the control of technology. All too often, published partial findings are taken uncritically at face value, misinterpreted, and misused; their qualifications are disregarded and their uncertainties forgotten. This can lead to technological fixes that do more harm than good."

### **30 Years Ago**, *The Midland Chemist* **1988**, *25*, No. 7, 2.

In *Chairman's Column* by Billy M. Williams: "Jim Hutchison and the Authors' Night Committee deserve our thanks for a job well done. The September 19 Authors' Night program at Alma College provided a stimulating evening for all who braved the heavy rains to attend. In addition to the dinner and poster session, an added treat was a view of new trends in college organic laboratory practices, being pioneered at Alma. The Authors' Night Committee is somewhat unique in our section. Nearly all of the committee members have served for the five years since the program's initiation here. Our hats are off to them for having established Authors' Night as a cornerstone of our Midland Section programs. A special thanks to Wendell Dilling for having spearheaded this."

#### 20 Years Ago, The Midland Chemist 1998, 35, No. 7, 5.

In Second Annual Joint Get-together, Midland and Detroit ACS Sections: "As expected, the Second Annual Joint Get-together of the Detroit-Midland Sections of the ACS was a success! Although only three people from Midland attended, the overall turnout involved about twenty people who met Sat., Sept. 19, 1998, in Flint at Oil Chem, Inc., a company that processes metal working fluids and distributes them world wide. After a brief and informative tour of the rather impressive laboratory facilities and plant operations, the group retired to the Redwood Lodge Micro Brewery for lunch and conversation. These kinds of events serve not only to inform but also to provide an opportunity to renew old acquaintances and to share ideas about our common goals as a professional society. Those of us who took part are looking forward to next fall (1999) when our Section will plan the program and we need your input as to what we might do to continue this fine tradition. If you have some ideas contact Deb Bergstrom (496-6951) or Art Smith (631-4619)."

#### **10 Years Ago**, *The Midland Chemist* **2008**, *45*, No. 5, 2.

In 2008 SciFest Promises "You'll Have a Ball" by Dave Stickles and Joan Sabourin: "Join us for a celebration of National Chemistry Week at SciFest 2008: "Having a Ball with Chemistry." The event will be held at the Delta College Pioneer Gym from 10:30 am to 2:30 p.m., Saturday, October 18, 2008. Admission is free with Lots of activities for families and individuals!

#### This year's goals:

1. Enhance the understanding of materials, design, and safety improvements of sports/sporting equipment made possible through chemistry.

2. Stress the importance of hydration and good nutrition for athletes.

3. Help develop an understanding of the importance of an active lifestyle for physical well-being.

4. Encourage participants with booths to have a "Chemistry Olympics" with hands-on activities with stations for questions or other challenges.

5. Provide activities for participants conducted by members of various local teams and health centers."

# Upcoming Dates, Events, and Other Updates

- October 2 (7:00 8:00 PM) ACS Board meeting, MCFTA Board Room (in person), or via a WebEx conference call connection at <u>Midland Section WebEx Board Meeting October 2018</u>, meeting number/access code: 710 134 652, phone number: 989-633-1166. Rescheduled to Tuesday, October 2, from the usual Monday evening meeting.
- October 4 Deadline to RSVP for the Midland Section ACS Volunteer Appreciation Dinner, to be held the evening of October 8, at Creative 360, 1517 Bayliss Street, Midland. RSVP by using the SignUpGenius tab on the Midland Section ACS home page at <a href="http://www.midlandacs.org/">http://www.midlandacs.org/</a>. For more information or questions, please contact Michelle Rivard at <a href="michelle.rivard@dowcorning.com">michelle.rivard@dowcorning.com</a> or Gina Malczewski at reginamalczewski@gmail.com.
- October 4 (7:00 PM) The Kalamazoo and Huron Valley Sections of the American Chemical Society invite you to a presentation on "Careers in Chemistry" by Dr. Lisa Balbes, an American Chemical Society volunteer career consultant, in Kalamazoo College's Dewing Hall, Room 103. Join from <u>https://zoom.us/j/751103694</u>. For additional information, see the article in this newsletter.
- October 8 (6:30 8:00 PM) Midland Section ACS Volunteer Appreciation Dinner, Creative 360, 1517 Bayliss Street, Midland. Please RSVP by no later than October 4 using the SignUpGenius tab on the Midland Section ACS home page at <u>http://www.midlandacs.org/</u>. For more information or questions, please contact Michelle Rivard at <u>michelle.rivard@dowcorning.com</u> or Gina Malczewski at <u>reginamalczewski@gmail.com</u>.
- October 12 (8:30 AM 2:00 PM) 2018 Dow Great Lakes Bay STEM Festival, Delta College, open to preregistered middle school grades only (6th, 7th, and 8th grades). However, please note that middle school registration is now closed. It will be reopened if space becomes available. For more information, see <u>http://www.delta.edu/community/youth-programs/stem/stem-festival.html</u>.
- October 12 (6:00 9:00 PM) 2018 Dow Great Lakes Bay STEM Festival, Delta College, FREE and open to the public. Registration is not required, but you can pre-register for a chance to win a prize by using this <u>Friday/Saturday registration form</u>. For more information, see <u>http://www.delta.edu/community/youth-programs/stem/stem-festival.html</u>.
- October 13 (8:00 AM 5:00 PM) Midland Section ACS 2018 Fall Scientific Meeting, Curtiss Hall, Saginaw Valley State University. Meeting theme: *Chemistry Is Out of this World*. The deadline for submission of abstracts is September 16; please submit a title and 300-word abstract to <u>ACSmidland2018@gmail.com</u>. The deadline for 2018 Fall Scientific Meeting attendance preregistration is September 21; please follow the SignUpGenius link at <u>http://www.midlandacs.org</u>. For any questions, please contact Luqing Xi at <u>lqi3@dow.com</u>.
- October 13 (11:00 AM 2:00 PM) 2018 Dow Great Lakes Bay STEM Festival, Delta College, FREE and open to the public. Please note the time change from prior years. Registration is not required, but you can pre-register for a chance to win a prize by using this <u>Friday/Saturday registration form</u>. For more information, see <a href="http://www.delta.edu/community/youth-programs/stem/stem-festival.html">http://www.delta.edu/community/youth-programs/stem/stem-festival.html</a>.

- October 19 Deadline for nominations for 2019 Gustavus John Esselen Award for Chemistry in the Public Interest, sponsored by the Northeastern Section of the American Chemical Society. For more information, see <u>http://www.nesacs.org/awards\_esselen.html</u>.
- November 5 (7:00 8:00 PM) ACS Board meeting, MCFTA Board Room (in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- December 3 (7:00 8:00 PM) ACS Board meeting, MCFTA Board Room (in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- June 4-8, 2019 (Save the Date) 50th ACS Central Regional Meeting (2019 CERM), The H Hotel, Midland. Celebrating the 50th Central Regional Meeting of the ACS and the 100th anniversary of the Midland Section of the ACS. Abstract submission will open in December 2018. Please watch for more information at <u>https://acscerm2019.org/</u>.

*The Midland Chemist* is published twelve times a year by the Midland Section of the American Chemical Society, P.O. Box 2695, Midland, MI 48641-2695, <u>http://www.midlandacs.org</u>.

#### **Volunteer Staff**

Vickie Langer	Editor ( <u>vllanger@dow.com</u> )
Steve Keinath	Editor ( <u>skeinath54@charter.net</u> )
Greg Cushing	Webmaster, electronic distribution
(Open Position)	Membership roster, hardcopy mailings

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