

Midland Section of the American Chemical Society

Traveling Centennial Exhibit



The Midland Section of the American Chemical Society celebrates its 100th anniversary with this museum exhibit. The display narrative follows the Midland Section from its creation in the small town of Midland, Michigan, in 1919, to its largest membership amidst the economic boom of the 1950s and 1960s, and to recent efforts of the Midland Section to promote chemistry and science in the next generation. A central interpretive tower showcases four famous Midland ACS inventions through hands-on chemistry activities. Historical artifacts and displays represent the Midland Section's many achievements in the field of chemistry. Vivid graphics and photos immerse visitors in the history of the Midland Section and make chemistry come alive. The exhibit consists of seven general sections, each composed of panels and artifacts, and can be loaned together or individually. Approximately 750 ft² of horizontal space and 14 ft of vertical clearance are required for this exhibit.

Exhibit Overview

- **Introduction** (panels introducing the Midland Section of the ACS and a video addressing the question “Why Chemistry?”)
- **History** (info about National ACS, and how chemistry and ACS began in Midland)
- **Communication** (the nature and function of Section meetings and scientific communication: patents, papers and the Section newsletter)
- **Education** (the local role of ACS in formal education at all levels and informal outreach; includes a video of programs, a commemorative quilt, and two vintage chemistry sets)
- **Leadership and Awards** (info on outstanding local chemists and their recognitions, including a “Periodic Table” of members with move-able tiles)
- **Unintended Consequences** (6-minute video on breast implant controversy, info on pesticides and dioxins, and medical device artifacts)
- **Tower** (panels covering patents and scientific equipment, cubbies with artifacts and molecular model kits, and panels covering four local products with global reach: Styrofoam, Saran, Silly Putty and superabsorbent polymer)
- **Miscellaneous** (“Ask a Chemist” questions then answered on the centennial website, kiosks where the website can be accessed, and puzzles involving study of exhibit information)

NOTE: If you have not seen the exhibit in person, it is recommended that you consider taking a video tour and seeing exhibit photos before making loan decisions. Keep in mind that not all exhibit artifacts featured in the photos or video will accompany the exhibit, mainly due to their fragility or otherwise restricted use. See the Condition Report on Page 6 for a full list of exhibit components.

Video Tour: <https://www.youtube.com/watch?v=VCVxKwQDAI0>

Photos: https://drive.google.com/drive/folders/1BaxOfHsh0UMLRbC_RuDfz7CPHhi7yEIQ

A CENTURY OF SCIENCE AND SERVICE

MIDLAND SECTION, AMERICAN CHEMICAL SOCIETY

Contents

1. Application Form (pg. 5) and Facility Report (pg. 6)

Included are the application form and facilities report, to be filled out and returned to Midland ACS.

2. Exhibition Contents - Included in Condition Report (pg. 12)

All artifacts arrive with no assembly required. Rail panels will arrive in their own containers, along with audiovisual and educational materials.

3. Booking Periods and Scheduling (no additional section)

Contact Regina Malczewski, Midland ACS (989) 5631-4038, reginamalczewski@gmail.com to arrange booking period. When the exhibition request has been received and the exhibition dates have been determined, Midland ACS will help coordinate transportation.

4. Expenses and Fees (no additional section)

There is a \$500 deposit plus shipping and replacement fees. Mileage/per diem reimbursement will be coordinated with Midland ACS exhibit educator, Gina Malczewski, (989) 599-9433, reginamalczewski@gmail.com.

5. Insurance (pg. 10)

The host venue will provide a certificate of insurance that lists ACS Midland Section as additionally insured. The exhibiting institution must insure the exhibition during transit to and from each venue, a one million dollar minimum policy is required.

6. Condition Reports - Incoming and Outgoing (pg. 12)

Midland ACS will provide condition report forms and instructions with the exhibition. Borrowers will report the condition of the exhibition within **48** hours of arrival, to Gina Malczewski. Midland ACS must be notified immediately of any loss or damage which has occurred during transit, unpacking, display, or re-packing. No damages may be repaired without the consent of Midland ACS.

7. Press Kit (pg. 17)

Exhibiting institutions are required to credit Midland ACS on all public announcements, press releases, invitations, posters, and any promotional material associated with the exhibition. To aid in publicizing the exhibition, Midland ACS will provide a press release package including;

sample press release and publicity photographs in advance of the exhibition's opening date. Host venue will have access to the Exhibition website and online resources.

8. Education (pg. 16)

As the host venue for the traveling exhibit, you are encouraged to utilize educational materials created by Midland ACS. This includes online resources, chemistry souvenirs, printable activity sheets, and in-person chemistry programs. All printable resources will be available in both physical and digital formats via a flash drive.

9. Transportation (no additional section)

Midland ACS will be responsible for shipping arrangements, made one to two months prior to the exhibition opening. Exhibiting institutions are responsible for all shipping charges. Every effort will be made to provide the safest and least expensive means of transportation and to deliver the exhibit at a mutually convenient time. Exhibitors are responsible for the cost of outgoing shipping.

10. Security (pg. 10)

The borrower is required to have safety screws on all display cases holding artifacts. The borrower must provide a secure exhibition space with exhibit space locked after hours. The exhibition must be installed in a building that meets Midland ACS requirements. All crates/shipping material should be safely and securely housed during exhibition.

11. Installation and De-installation Procedures (pg. 21)

Enclosed are instructions for installing and de-installing the exhibit.

Contacts:

For more information on the exhibition, please contact Regina Malczewski, (989) 631-4038, reginamalczewski@gmail.com or Gretchen Kohl at gretchen.kohl@att.net, or web.midlandacs@gmail.com

Application Form

Preferred dates for presentation of exhibition

Name of borrowing institution

Address

City State Zip code

Institutional contact Title

Telephone Fax Email

Length of hosting the exhibition can be arranged by contacting Regina Malczewski, Midland ACS (989) 631-4038, reginamalczewski@gmail.com

Why does your institution want to host this exhibition?

What type of programming might your institution want to plan in conjunction with the presentation of this exhibition?

Do you have, or anticipate having, any community partners for this exhibition? If so, list below

You may email these materials to web@midlandacs.org or Regina Malczewski, Midland ACS (989) 631-4038, reginamalczewski@gmail.com, or mail them to,

Regina Malczewski
4210 Linden Dr.,
Midland, MI 48640

Facility Report

Borrowing Institution Profile

Name of Borrowing Institution/Loan Venue	
Contact Person	
Title	
Mailing Address	
Street Address	
Shipping Address	
Telephone Number	
Fax Number	
E-mail Address	
Dates at Loan Venue	

Staff and Major Contractors

Position/Title	Name	Telephone/Fax Number	Email address
		Work: Home: Fax:	
		Work: Home: Fax:	
		Work: Home: Fax:	
		Work: Home: Fax:	
		Work: Home: Fax:	
		Work: Home: Fax:	
		Work: Home: Fax:	

General Information

Check the type(s) that best describe your institution:

- Museum (not for profit)
 - Art
 - Natural History/Anthropology
 - Children's/Youth
 - Historic House/Site
 - History
 - Science
 - General
 - Other: _____

- University
 - Museum or Gallery
 - Student Center
 - Library
 - Department_____

- Cultural Organization
 - Library
 - Religious Institution
 - Civic/Exhibition Center
 - Other:_____

Storage

1. Do you have a secure storage area for temporary exhibition objects? Yes No
2. Do you have a secure storage area for the storage of exhibition crates and other packing materials? Yes No
3. Where do you store empty loan object crates? (Mark all that are appropriate.)
 - On-premises Off-premises

If stored on-premises, is the area:

- Locked
- Temperature-controlled
- Humidity-controlled
- Pest-controlled

If stored off-premises, is the area:

- Locked
- Temperature-controlled
- Humidity-controlled
- Pest-controlled

Please include location of off-site storage: _____

Complete if you utilize basement or below ground storage for loan objects:

1. Are the loan objects stored at least 12 inches off of the floor? Yes No
2. Is the storage area alarmed with a water detection system? Yes No
3. Is the storage area climate controlled? Yes No
4. How often is the area checked for overall conditions?_____

Shipping and Receiving

1. What are your normal receiving hours? _____

Can you accommodate a delivery at other times? Yes No

2. Do you have, or have access to the following?

(Mark all that apply and provide requested details that relate to the loan object(s) in question.)

Shipping/receiving door (dimensions: height: _____ width: _____)

Raised loading dock (height from ground: _____)

Dock leveler/lift

Forklift (weight capacity: _____)

Ramp (length: _____ width: _____)

Scaffolding (height: _____)

Other (specify: _____)

3. What is the maximum size crate your shipping/receiving door can accommodate?

(height: _____ width: _____ depth: _____)

General Site Information

1. Date building constructed _____

2. How will the exhibit area be lit? _____

3. Building materials _____

4. What is the height of the ceiling in the intended exhibit space? _____

5. How many floors? _____

6. If more than one, indicate means of access between levels: Stairs Elevator
Other _____

7. Aside from exhibitions, what activities take place in the building?

8. Do you have fire extinguishers in exhibition and storage areas? Yes No
Type _____

Handling and Packing

1. Do you have staff available for loading and unloading of crated loan objects at shipping/receiving area? Yes No

If yes, how many? _____

If no, explain: _____

2. Do you have staff specially trained to pack and unpack loan objects? Yes No

If yes, how many? _____

Supervised by whom? _____

3. Do volunteers or interns handle loan objects? Yes No

4. Are volunteers specially trained to handle objects/artifacts? Yes No

Do you make routine inspections for rodent, insect and microorganism problems?

Yes No

If yes, describe the method and frequency of inspection _____

Environment

1. What kind of heating/cooling systems do you have? _____
2. What is the light source in your exhibition space? (check all that apply)
Incandescent Fluorescent Daylight (windows, door, skylight)
UV Filtered Equipped with shades or drapes

Insurance

Host venue will need to provide a certificate of insurance that lists ACS Midland Section as additionally insured. The exhibiting institution must insure the exhibition during transit to and from each venue. Insurance must also cover the exhibition while in possession of the borrower.

1. Which company provides insurance for your institution? _____

Broker's Name	
Address	
Telephone Number	
Fax Number	

What coverage for borrowed objects does your policy provide?

All risk museum coverage, wall-to-wall (while on exhibit and in transit), subject to the standard exclusions

What are the deductible limits of coverage for borrowed objects? _____

What are the applicable, nonstandard exclusions of your policy affecting loan objects? _____

Security and Safety

Midland ACS requires all display cases have safety screws to protect artifacts. Glass parts and chemicals must be handled with special care. Chemicals must be kept dry. All shipping materials must be kept off the floor in a secure area.

Are galleries under constant visual surveillance? Yes No

Is your site protected by electronic security? Yes No

If yes, check all in use:

- Central station alarm

- External door alarms
- Window alarms
- Motion detectors

Is your exhibit space staffed during open hours? Yes No

Verification and Responsibility

The undersigned is a legally authorized agent for the subject institution and has completed this report. The information indicated provides a complete and valid representation of the facility, security systems, and care provided to objects (both owned and borrowed).

By checking this box, I agree to the above terms

Signature: _____

Typed Name/Title: _____

Date: _____

Please attach a scale floor plan of the intended exhibition area, including the location of windows, doors, electrical outlets, structural obstacles, and the relative location of the exhibition space in the building. Please mark loading dock if applicable, entrances and exits, and spaces for crate storage and educational programming.

You may email these materials Regina Malczewski, Midland ACS (989) 599-9433, reginamalczewski@gmail.com.

ACS-Midland Section
P.O. Box 2695
Midland, MI 48641-2695

Condition Report - Incoming and Outgoing

Host site:

City/State:

Contact:

E-mail:

1. Please check the condition of all materials as you unpack. If any exhibit parts or materials are missing or severely damaged, please notify Midland ACS immediately. Please take photos of damaged component(s) and email them to Regina Malczewski, Midland ACS reginamalczewski@gmail.com

2. The Condition Report must be completed within **48 hours of receiving the exhibit**. We must have a condition report form on file from the host site.

Artifacts

Chemistry Sets (2)

_____ No visible damage to chemistry sets

_____ Damage to chemistry set. Describe damage, location, whether damaged on arrival at site or after:

_____ Contents were incorrectly packed.

_____ Items are missing. Please explain:

Perkin Medal Program

_____ No visible damage to object

_____ Damage to program. Describe damage, location, whether damaged on arrival at site or after:

Kaliapparat: (Glass)

_____ No visible damage to Kaliapparat

_____ Damage to Kaliapparat. Describe damage, location, whether damaged on arrival at site or after:

_____ Content was incorrectly packed.

_____ Item is missing.

ACS Pins:

_____ No visible damage to ACS pins.

_____ Damage to ACS pins. Describe damage, location, whether damaged on arrival at site or after:

_____ Contents were incorrectly packed.

_____ Items are missing. Please describe:

Medical Equipment: Includes catheters, scleral sponges, tubing, medical adhesive,

_____ No visible damage to medical equipment.

_____ Damage to medical equipment. Describe damage, location, whether damaged on arrival at site or after:

_____ Contents were incorrectly packed.

_____ Items are missing. Please describe:

Quilt (1): comes with curtain rod and holders

_____ No visible damage to quilt.

_____ Damage to quilt. Describe damage, location, whether damaged on arrival at site or after:

_____ Incorrectly packed

Dioxin Information

_____ No visible damage to Dioxin information

_____ Damage to information. Describe damage, location, whether damaged on arrival at site or after:

_____ Contents were incorrectly packed.

_____ Items are missing. Please describe:

30" x 40" Chair poster (1)

_____ No visible damage to poster.

_____ Items are missing. Please describe:

Audiovisual

Monitors (3) including 3 remotes.

_____ No visible damage to screens.

_____ Damage to monitors. Describe which monitor, damage, location, whether damaged on arrival at site or after:

Kiosks (2, each containing screen and base) come with software installed

_____ No visible damage to kiosks or touch screens.

_____ Damage to kiosks or touch screens. Describe damage, location, whether damaged on arrival at site or after

Red Cabinet (1):

_____ No visible damage to cabinet.

_____ Damage to cabinet. Describe damage, location, whether damaged on arrival at site or after

Stools (6)

_____ No visible damage to stools.

_____ Damage to stools. Describe damage, location, whether damaged on arrival at site or after:

Main Rail Panels

Contains: **(5)**- panels measuring 36" x 144"; **(4)**- panels measuring 38" x 73.5"; **(10)**- panels measuring 38" x 91.5"; **(1)** panel measuring 38" x 90"

Please list below the title/number of panel and explain damage

Periodic Table

Periodic Table Key: 42" x 20"

90 Tiles all 4" x 6"

_____ No visible damage to Periodic Table, key, or metal rails

_____ Damage to Periodic Table. Describe damage, location, whether damaged on arrival at site or after:

_____ Damage to Periodic Table key. Describe damage, location, whether damaged on arrival at site or after

_____ Damage to metal rails. Describe damage, location, whether damaged on arrival at site or after:

_____ Contents were incorrectly packed.

_____ Items are missing. Please describe:

Tower

12 Feet Tall

(6)- panels measuring 48" x 18.5"; (1)- panel measuring 21" x 86"; (5)- panels measuring 21" x 76"

_____ No visible damage to panels or table surface.

_____ Damage to panels. Describe damage, location, whether damaged on arrival at site or after:

_____ Damage to table surface. Describe damage, location, whether damaged on arrival at site or after:

_____ Contents were incorrectly packed.

_____ Items are missing. Please describe:

Molecule kits

_____ No visible damage to kits.

_____ Contents were incorrectly packed.

_____ Items are missing. Please describe:

In Tower artifacts

- Silly Putty
- A lump of raw silicon, a rod of hyper-pure silicon and a broken section of a 3-inch diameter single crystal from the Czochralski process
- Piece of Styrofoam
- Saran Wrap boxes

_____ Contents were incorrectly packed.

_____ Items are missing. Please describe:

Miscellaneous

- Bin of free Silly Putty: 100 count
- 2 scavenger hunt booklets: copies by host venue
- 'Create your own invention' blank paper (on tower table) and a box of colored pencils/sharpeners
- Flash drive: All printable resources
- Ask A Chemist Sign and Post It Notes/pens
- Guest Book
- QR Codes

Education Materials

As the host venue for the traveling exhibit, you are encouraged to utilize educational materials created by Midland ACS. This includes online resources, chemistry souvenirs, printable activity

sheets, and in-person chemistry programs. All printable resources will be available in both physical and digital formats via a flash drive.

Online Resources: (midlandacs100.org)

- Kid-friendly chemistry experiments
- Chemistry-themed coloring pages
- Chemistry songs
- Periodic Table poem contest

Printable Activity Sheets:

- A Century of Science and Service crossword
- Kids scavenger hunt
- Create-your-own invention

Chemistry Souvenirs:

- Pre-portioned Silly Putty samples in plastic eggs will be provided for free (100-count) - additional supplies can be obtained for \$10 for each additional 50-count

In-person Chemistry Programs:

- Educational chemistry programs may be requested from Gina Malczewski, a long-time ACS member, research chemist, educator, and head of the exhibit planning committee. Availability will depend on timing, location, and target audience. Where possible, programs will be conducted free of charge.
 - Regina Malczewski, (989) 599-9433, reginamalczewski@gmail.com

Press Kit

Approved marketing message:

“The Midland Section of the American Chemical Society celebrates its 100th anniversary with this museum exhibit. The narrative follows the Midland ACS Section from its creation in the small town of Midland, Michigan in 1919, to its largest membership amidst the economic boom of the 1950s and 1960s, and to recent efforts of the section to promote chemistry and science in the next generation. A central interpretive tower showcases four famous Midland ACS inventions through hands-on chemistry activities. Historical artifacts and displays represent the Midland Sections many achievements in the field of chemistry. Beautiful graphics and photos immerse visitors in the history of the Midland ACS Section and make chemistry come alive.”

Enclosed are various logos, fliers, and header images available for marketing purposes. Midland ACS authorizes the host institution to alter the shape and scale of all images but forbids the alteration of any content. The only exception is the main marketing flier, for which the location, name of venue, and runtime can be tailored to the specific host institution. The venue may develop additional marketing materials per approval by Midland ACS and the exhibit planning committee. In addition, all ACS-provided materials will be available in both physical and digital formats via flash drive.

A CENTURY OF SCIENCE AND SERVICE
MIDLAND SECTION, AMERICAN CHEMICAL SOCIETY



A Century of Science and Service
100 1919-2019
MIDLAND
SECTION
AMERICAN CHEMICAL SOCIETY



A Century of Science and Service
100 1919-2019
MIDLAND
SECTION
AMERICAN CHEMICAL SOCIETY





Exhibit Installation/De-installation Procedure

Using masking tape or gaffers tape, mark out where each panel, monitor, kiosk, and the tower will be positioned. Allow sufficient space for visitors to move freely through the exhibit, comply with ADA requirements (36" clearance), and avoid overlap of exhibit sections, fields of view and lighting, and individual panels and displays.

Tower - Steps 4 through 6 will require a lift or ladder that can reach 14 feet.

1. Lay out all tower components, making sure that none are damaged or missing.
2. Place base on pre-marked floor, respecting the location of the power cord and outlet.
3. Place table sections on the base and secure them.
4. Attach steel girders and display cases to the top of the table.
5. Affix each of the six panels to the steel girders.
6. Place and secure circular, red title topper.
7. Insert artifacts for each tower display and secure using padlocks.
8. Lay out molecule-building sets and display each model key vertically and facing outward.
9. Place one stool at each molecule-building station.
10. Plug in cord for display lights. (If possible, restrict access to the cord and outlet.)
11. Install light fixtures that illuminate each tower panel and the table below.

Rail Panels - All steps will require a lift or ladder than can reach 14 feet.

1. Unwrap the still-rolled panel from the plastic sheath.
2. Make sure exposed rail (top rail) is properly closed with two metal loops.
3. Unroll panel and check for damages. Ensure bottom rail is closed and vinyl is not protruding or warped. (If vinyl is not positioned correctly, carefully use provided tools to pry apart the rail and reposition the vinyl.)
4. Determine how many 1 foot cable segments will be required for each type of panel (either longer graphic panels or shorter text panels).
5. Using a ladder or lift, hang each panel from the ceiling or wall in predesignated locations. (If hanging panels from a drop ceiling, the position of hooks on each top rail may change from panel to panel.)

Electronics - The location of monitors and kiosks may change depending on the layout of the exhibit space and the frequency of outlets. Make sure to account for the length of cords and the height of each monitor and kiosk.

1. "A World Without Chemistry" monitor -
 - a. Place monitor, remote control, opening instructions, and guest book on a thigh-high table towards the front of the exhibit.

- b. Make sure the remote control, instructions, and cord are concealed behind the table or monitor.
 - c. Place stool in front of monitor.
- 2. Educational Outreach Monitor -
 - a. Position monitor and stand in front of designated graphic panel, ideally in the corner of the room.
 - b. Lock monitor stand by toggling the lock on each leg of the stand.
 - c. Place remote control and opening instructions on stand behind the monitor.
 - d. Conceal the cord as much as possible.
- 3. Unintended Consequences Monitor and Red Cabinet -
 - a. Place red cabinet in designated position with power outlet access, leaving a few inches clearance to access cord and plug in monitor.
 - b. Using the mount, place monitor approximately 1 ½ feet above the cabinet. (Two pull-strings unlock mounting 'claws.' Mount must be installed before monitor.)
 - c. Plug monitor into cabinet hardware and push cabinet back against the wall.
 - d. Place tub of Silly Putty to the left of the illuminated start button.
 - e. Place stool in front of cabinet.
- 4. Kiosks -
 - a. Place each kiosk in designated position and plug into wall outlets.
 - b. Plug in touch screen using cord embedded in kiosk base.
 - c. Conceal each cord as much as possible.

To uninstall exhibit, proceed with installation steps in reverse order. Make sure to re-package all exhibit components in protective material. Please reuse materials that arrive with the exhibit. Please contact Regina Malczewski, Midland ACS (989) 599-9433, reginamalczewski@gmail.com if you encounter any issues.