Our INVESTMENT in the FUTURE of AAAR

AMERICAN ASSOCIATION FOR AEROSOL RESEARCH
ENDOWMENT FUND
ANNUAL REPORT 2017
Dear Colleague,

The mission of the American Association for Aerosol Research Endowment Fund is to assist in advancing aerosol science and technology by providing stable, long-term financial support for the Association’s programs. The goal is to establish and increase in net worth a set of funds that will provide significant financial support to aid in achieving AAAR’s strategic objectives. The Endowment Fund is intended to complement AAAR’s revenue from dues and other sources. This mission is enabled by the generous contributions of fellow colleagues, their families and friends, and currently realized by funding awards and plenary lectures. I am pleased to present this report on Endowment Fund activities in 2017.

AAAR endowment funds are invested in a blend of high quality stocks and bonds following the AAAR investment policy. During 2017, net assets grew from approximately $422,000 to approximately $485,000, including contributions and investment gains as detailed in the table on the last page of this report. A total of $20,009 was disbursed from the endowment funds to support AAAR activities, including five awards presented at the 2017 AAAR Annual Conference, and support for the Friedlander Memorial Plenary Lecturer via an honorarium and travel grant.

Recent changes to encourage the establishment of new endowment funds are bearing fruit with the development of the Presidents Fund currently underway. Further details about the current funds and how they were used in 2017 can be found in the following pages. On behalf of the Endowment Committee, thank you for your contributions.

Sincerely yours,

Phil Hopke
Endowment Committee Chair
THE AAAR ENDOWMENT FUND is comprised of sub-funds that are either True Endowment Funds or Quasi Endowment Funds. True Endowment Funds are established by a donor-restricted gift. The original value of gifts contributed to True Endowment Funds cannot be spent. The income and appreciation earned by True Endowment Funds provide a permanent source of expendable revenue in perpetuity for the purposes specified by the donor and agreed to by AAAR. Quasi Endowment Funds are created by donor gifts or by AAAR Board designation, and are treated the same as True Endowment Funds except that the original contributions can be spent in accord with the purpose of the fund and may have a finite lifetime. The AAAR Endowment Fund currently has two True Endowment Funds and six Quasi Endowment Funds.

TRUE ENDOWMENT FUNDS

▶ Sheldon K. Friedlander Memorial Fund for Promoting Aerosols as an Enabling Discipline:
This fund was established in 2009 by the family of Sheldon Friedlander with a $50,000 donation. Friends and colleagues contributed additional funds. The goal of the fund is to provide for activities related to promoting aerosols as an enabling discipline, such as supporting plenary lectures and special symposia at the annual conference.

The 2017 Friedlander Lecture, “Toward a Greater Understanding of the Chemistry and Impacts of Mineral Dust and Sea Spray Aerosols,” was presented by Vicki Grassian of the University of California, San Diego. The Friedlander Memorial Fund was used to support her honorarium and travel expenses. The Friedlander Memorial Fund also supported two other plenary speakers.

▶ Fissan-Pui-TSI Award Fund:
This fund was established in 2005 with a $75,000 donation from TSI Incorporated, which provided the award amount in 2006 and $65,000 to support future awards. The Award is granted by the International Aerosol Research Assembly (IARA) to recognize international collaboration in the field of aerosol science and technology between researchers/engineers residing on at least two different continents. The award is presented every four years at the International Aerosol Conference. The next award will be presented in 2018.

QUASI ENDOWMENT FUNDS

▶ Sheldon K. Friedlander Dissertation Award Fund:
Revenue from this fund supports the monetary prize for the Sheldon K. Friedlander Award which recognizes an outstanding dissertation by an individual who has recently earned a doctoral degree. The dissertation can be in any discipline in the physical, biomedical, or engineering sciences but has to be in the field of aerosol science and technology. The award memorializes Sheldon Friedlander for his leadership as a researcher, teacher, and pioneer in aerosol science. One of AAAR’s founders, Friedlander is a past recipient of the distinguished Fuchs Memorial Award. He directed graduate students at Columbia University, The Johns Hopkins University, the California Institute of Technology, and the University of California for more than 50 years.

The 2017 Sheldon K. Friedlander Dissertation Award was presented to Bryan Bzdek for his dissertation work at the University of Delaware, on characterizing and understanding particle formation and growth in the atmosphere using advanced mass spectrometric techniques to measure nanoparticle chemical composition.
▶ Thomas T. Mercer Joint Prize Fund:  
Sponsored by AAAR and the International Society for Aerosols in Medicine (ISAM), the Thomas T. Mercer Joint Prize recognizes excellence in the areas of pharmaceutical aerosols and inhalable materials. The award honors the legacy of Thomas T. Mercer, an outstanding researcher and author whose work encompassed aerosol physics and chemistry as well as inhalation toxicology, industrial hygiene, and health physics. The award is funded by contributions from the Mercer Family Foundation, as well as contributions from ISAM and revenue from this fund.

The 2017 Thomas T. Mercer Joint Prize was presented to Anthony Hickey of the Research Triangle Institute (RTI) International for his contributions to understanding pulmonary drug and vaccine delivery for the treatment and prevention of a variety of diseases.

▶ David Sinclair Award Fund:  
Revenue from this fund supports the David Sinclair Award which recognizes sustained excellence in aerosol research and technology by an established scientist still active in his/her career. The individual's research must have a lasting impact in aerosol science. The award memorializes David Sinclair, one of aerosol science’s great innovators, known for his knowledge, ingenuity and energy.

The 2017 David Sinclair Award was presented to Lidia Morawska of the Queensland University of Technology for her contributions to the understanding of atmospheric particulate matter, its sources, and its impact on human health and the environment.

▶ Kenneth T. Whitby Award Fund:  
This fund supports the Kenneth T. Whitby Award which recognizes outstanding technical contributions to aerosol science and technology by a young scientist. The purpose of the award is to encourage continued work in the field and ongoing support of such endeavors. The award memorializes Kenneth T. Whitby, known for his contributions to aerosol measurement, the study of aerosol properties and behavior, and the nature of atmospheric aerosols.

The 2017 Kenneth T. Whitby Award was presented to Cari Dutcher of the University of Minnesota for her contributions to developing new models of and experimental approaches to measuring surface tension and solute/solvent interactions in highly concentrated solutions.

▶ Benjamin Y. H. Liu Award Fund:  
This fund supports the Benjamin Y. H. Liu Award which recognizes outstanding contributions to aerosol instrumentation and experimental techniques that have significantly advanced the science and technology of aerosols. The award honors Benjamin Liu for his leadership in the aerosol community and his own seminal contributions to aerosol science through instrumentation and experimental research.

The 2017 Benjamin Y. H. Liu Award was presented to James Smith of the University of California, Irvine for his development of the thermal desorption chemical ionization mass spectrometer (TDCIMS) instrument that has advanced understanding of new particle formation and growth.

▶ Fuchs Memorial Award Fund:  
The Fuchs Memorial Award is the premier international prize in aerosol science and is sponsored by AAAR, the Gesellschaft für Aerosolforschung (GfAeF) and the Japan Association of Aerosol Science and Technology (JAAST). This fund supports AAAR’s contribution to the award. Presented every four years at the International Aerosol Conference, the award memorializes Nikolai Albertovich Fuchs, the great Russian scientist who is regarded by many as the “father of aerosol science.” The award recognizes outstanding worldwide contributions to the field of aerosol research. The next award will be presented in 2018.
The Endowment Committee seeks to engage AAAR members, and their families and friends, in establishing and directing the future of the endowment. The AAAR Board has already identified a number of useful activities that could be supported through return from an endowment fund (listed in the table below). We welcome members’ thoughts regarding these activities and any others that could make AAAR more effective in fostering and supporting aerosol science. Named funds to memorialize the legacy of prominent members of the aerosol community are a possibility as well.

**PLEASE SEND Your Ideas to Committee Chair**
Phil Hopke at phopke@clarkson.edu

If you would like to help initiate any of these potential sub-funds or others of your choice, please let us know and, of course, we would welcome any contributions you wish to make. They should be directed to AAAR headquarters and clearly marked that they should be credited to the endowment.

**TABLE 1.**
IDEAS FOR POTENTIAL NEW ENDOWMENT FUNDS TO SUPPORT AAAR’S MISSION

<table>
<thead>
<tr>
<th>Concept</th>
<th>Annual Spending</th>
<th>Endowed Amount*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol Science and Technology Best Paper Award</td>
<td>$2,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Student Poster Prizes</td>
<td>$2,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Early Career Travel Grant</td>
<td>$2,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Young Investigators Event</td>
<td>$2,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Plenary lectures (2)</td>
<td>$4,000</td>
<td>$100,000</td>
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<tr>
<td>Student Travel Grants</td>
<td>$10,000</td>
<td>$250,000</td>
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</table>

*Endowed amount is based on assuming a 4% average rate of return on investments to support annual spending.

“Being a Whitby award winner has been a tremendous honor and opportunity. The award has provided broad visibility to our work and ideas and helped promote exciting new collaborations for my group.”

Cari Dutcher
2017 Whitby Award

**FUND UNDER DEVELOPMENT**

- Presidents Fund:
This fund was started in 2016 with a generous donation from David Ensor and has received a total of $17,100 in donations. The Board of Directors voted to contribute matching funds to bring the Presidents Fund up to the amount of a True Endowment ($50,000).

A gift agreement is being put together to determine what activities should be supported by the income from this fund.
## AAAR ENDOWMENT FUND FINANCIAL SUMMARY FOR 2017

<table>
<thead>
<tr>
<th>NAME OF ENDOWMENT FUND</th>
<th>Net Assets Beginning of Year 1/1/2017 (audited)</th>
<th>Contributions + Matching Funds</th>
<th>Total Disbursed</th>
<th>Net Return Gain/Loss + Interest</th>
<th>Net Assets End of Year 12/31/2017 (audited)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUE ENDOWMENT FUNDS (Permanently Restricted Corpus, Remainder Temporarily Restricted)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Friedlander Memorial Fund ($50,000 Corpus)</td>
<td>$96,021</td>
<td>$4,009</td>
<td>$11,697</td>
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<tr>
<td>Fissan-Pui-TSI Award Fund ($65,000 Corpus)</td>
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<td>$12,574</td>
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<td>QUASI ENDOWMENT FUNDS (Board Designated)</td>
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<tr>
<td>Friedlander Dissertation Award Fund</td>
<td>$36,781</td>
<td>$1,500</td>
<td>$4,491</td>
<td>$39,772</td>
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<tr>
<td>Thomas T. Mercer Joint Prize Fund</td>
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<td>$15,911</td>
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<td>David Sinclair Award Fund</td>
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<td>Kenneth T. Whitby Award Fund</td>
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<td>Benjamin Y. H. Liu Award Fund</td>
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<td>Fuchs Award Fund</td>
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<tr>
<td>FUNDS UNDER DEVELOPMENT</td>
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<tr>
<td>Presidents Fund</td>
<td>$1,000</td>
<td>$16,000</td>
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<td>$17,100</td>
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<td>TOTAL</td>
<td>$421,579</td>
<td>$32,011</td>
<td>$20,009</td>
<td>$51,589</td>
<td>$485,170</td>
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</tbody>
</table>

“The Friedlander award catalyzed new collaborative efforts and emboldened me to explore new challenges in aerosol science.”

Bryan Bzdek
2017 Friedlander Dissertation Award