A MESSAGE FROM AIP

On August 21, 2017, one of nature’s most awe-inspiring sights took place across North America. For a brief moment, a total solar eclipse brought people together. Suddenly, it seemed everyone was interested in science. It was inspiring to see that broad passion that we as professionals have for the wonders of our universe.

Like our universe, wondrous and evolving, AIP continues to forge a path to ensure a strong and vibrant federation. The following pages highlight some of 2017’s events that matter as we look toward our future. 2017 also presented changes for AIP, including the retirement in May of our CEO, Robert Brown. After his departure, AIP officers Catherine O’Riordan and Gigi Swartz were appointed interim co-CEOs, and AVS member Dave Surman started the year as interim board chair. In September, John Regazzi was officially installed as the seventeenth chair of the AIP Board of Directors.

Several outcomes throughout the year generated excitement within our community; one was the signing of an agreement to purchase an extraordinary collection of rare books and documents. To assist in this effort, we have launched the Physics Heritage & Promise Campaign to raise the necessary funds.

Another big outcome was the result of AIP working with Member Societies on the Liaison Committee for Underrepresented Minorities: the formation of the National Task Force to Elevate African American Representation in Undergraduate Physics and Astronomy.

Additionally, AIP’s Venture Partnership Fund, an initiative to encourage collaborative partnerships between Member Societies and AIP, funded five projects, totaling $100,000 of support.

And, finally, nothing matters more than our next generation of scientists. As a result, the Board of Directors agreed to waive dues for AIP Member Societies’ student members, while maintaining their full benefits.

While the next total solar eclipse won’t be visible in North America until April 8, 2024, our mission is to continue advancing, promoting, and serving the physical sciences for the benefit of humanity. On the following pages, read about how we are doing this and demonstrating that AIP matters.

AIP MEMBER SOCIETIES & THE YEAR THEY JOINED

AAPM (1973)  
American Association of Physicists in Medicine

AAPT (1932)  
American Association of Physics Teachers

AAS (1966)  
American Astronomical Society

ACA (1966)  
American Crystallographic Association

AMS (2013)  
American Meteorological Society

APS (1931)  
American Physical Society

ASA (1931)  
Acoustical Society of America

AVS (1976)  
Science & Technology of Materials, Interfaces, and Processing

OSA (1931)  
The Optical Society

SOR (1931)  
The Society of Rheology

Note: AIP also has 27 Affiliated Societies

OTHER MEMBER ORGANIZATIONS

• Sigma Pi Sigma  
  (the physics honor society)

• Society of Physics Students

• Corporate Associates
History Matters: AIP Launches Campaign to Acquire Rare Books Collection

AIP received a major gift from the Avenir Foundation to support the acquisition of the Wenner Collection, a library containing the first published accounts of some of the most important discoveries in physics. The collection includes works by Ptolemy, Galileo, Huygens, Halley, Newton, Laplace, and many others. AIP’s acquisition of this rare books collection will further establish the Center for History of Physics and Niels Bohr Library & Archives as a destination for scholars, authors, and the public who seek insights into the discoveries that shape our world.

To support this effort, please visit https://donate.aip.org/helphistory.

Diversity Matters

The number of physics and astronomy bachelor’s degrees awarded in the U.S. is at an all-time high. Yet, the proportion of these degrees earned by African Americans remains appallingly low. In fact, a smaller proportion of physics and astronomy bachelor’s degrees are awarded to African Americans today than was the case two decades ago. That is why AIP formed the National Task Force to Elevate African American Representation in Undergraduate Physics & Astronomy (TEAM-UP). TEAM-UP is investigating the reasons for the persistent underrepresentation of African American undergraduate students in physics and astronomy, and will produce a report of its findings with evidence-based recommendations for increasing the number of African American students obtaining physics and astronomy bachelor’s degrees.

Also on the diversity front, the AIP Statistical Research Center published a new report on African American, Hispanic, and Native American women among bachelor’s degree recipients in the physical sciences and engineering. This report was the first to be published using a format that is user-friendly on all electronic devices.

Promoting the Value of Physical Sciences

AIP works with Member Societies to promote the value of physical science and its many contributions to society. The AIP News & Media Services department collaborated with the APS, ASA, AVS, and OSA on news releases, webcasts and press conferences.

Employment Fields for New Physics PhD Recipients

NEW! Who’s Hiring Physics PhDs?, a companion to our popular Who’s Hiring Physics Bachelors?, is a resource that shows the importance of physics graduates in our nation’s economy. Published by the AIP Statistical Research Center, this report has become one of the most visited resources on the AIP website.

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Global Matters

Inside Science established several international syndication agreements. In June, AIP signed a contract with Voice of America. VOA will translate our videos in up to 47 different languages and broadcast them through its network of 1,072 affiliate television stations in 107 countries. In December, AIP began a one-year, revenue-bearing agreement with the internet giant Tencent Company, which will translate and run our print stories over its platforms in China. A previous one-month trial with Tencent resulted in more than 190,000 page views of the translated stories. The AIP Statistical Research Center (SRC) spread the word about AIP to all parts of the globe by facilitating three regional workshops on the Global Survey of Scientists, an International Council for Science funded project with 11 international partner organizations, including the International Union of Pure and Applied Physics and the International Astronomical Union. SRC collaborated with nearly 100 scientists to conduct these workshops, which were designed to make the questionnaire culturally relevant for all scientists.

Science Policy Matters

A 2017 FYI Readership Survey found 91% of FYI readers rate the quality of FYI as exceptional or very good.

NEW in 2017

- FYI This Week A science policy newsletter issued each Monday morning highlights major science policy events of the upcoming week and summarizes science policy news from the previous week.
- FYI Tracker A set of three web-based resources with information on federal science budgets, bills, and policymakers.
- FYI Opportunities A digest of the latest opportunities in science policy from around the web, ranging from open positions on advisory committees to internships and more.

Physics Today, 2017 readership survey

- Nearly 80% rate the magazine as exceptional or very good.
- More than 60% rate it as one of the top three membership benefits.
- More than half say it impacts their decision to renew their membership.

Physics Today, the Institute’s flagship magazine, is sent to all 120,000 members of AIP’s Member Societies and continues to be ranked as one of the top membership benefits.

2ND QUARTER

- Particle physicist Don Lincoln wins Andrew Gemant Award.
- AIP Publishing launches Scilight to showcase research appearing in AIP journals.
- Inside Science wins bronze at the 38th annual Telly Awards for its documentary: “Fish, Feathers, Fluid, Phlegm and Freaks.”
Research Matters

AIP Publishing is one of the world’s leading publishers in the physical sciences, publishing almost 29,000 research articles and conference proceedings in 2017. AIP Publishing aims to help researchers maximize the potential impact and reach of their work. AIP Author Services offers language editing and other pre-submission services to global authors. In collaboration with AIP News & Media Services, AIP Publishing launched SciLight – short summaries of recent research – that provide authors an avenue to promote their research more widely, and a way for the scientific community to quickly and easily scan the latest breakthroughs.

AIP Publishing is committed to removing barriers to publication and making content more discoverable and accessible to researchers. In 2017 AIP Publishing made all reference data freely accessible, discontinued page and color charges in all titles, and launched its fifth open access title, AIP Advances. More than a million global researchers access the Scitation website each month, and around 25 million articles were downloaded in 2017.

Research output is not limited to journal articles, and AIP Publishing continues to innovate around scientific data. eSpectra, our new online platform and visualization tool, builds on the peer-reviewed datasets from the AVS reference journal Surface Science Spectra.

AIP PUBLISHING BOARD OF MANAGERS

John Regazzi, Chair (after 9/17)  
Greg Tananbaum, Chair (until 9/17)  
Alan Singleton, Secretary  
John Haynes, Chief Executive Officer  
David Campbell  
Wolfgang Christian  
Judith Flippen-Anderson  
Susan Fox  
Gerald Fuller  
A. Jeffrey Giacomin  
Marsha Lester  
Ivan Petrov  
Kristen Ratan

THE FOLLOWING MEMBER SOCIETY JOURNALS ARE PUBLISHED BY AIP PUBLISHING:

AAPT – American Journal of Physics  
AAPT – The Physics Teacher  
ASA – The Journal of the Acoustical Society of America  
AVS – Biointerphases  
AVS – JVST A: Vacuum, Surfaces, and Films  
AVS – JVST B: Nanotechnology and Microelectronics  
AVS – Surface Science Spectra  
SOR – Journal of Rheology

THE FOLLOWING PUBLICATIONS ARE PUBLISHED BY AIP PUBLISHING:

AIP Advances  
AIP Conference Proceedings  
APL Bioengineering – NEW in 2017  
APL Materials  
APL Photonics  
Applied Physics Letters  
Applied Physics Reviews  
Biomicrofluidics  
Chaos: An Interdisciplinary Journal of Nonlinear Science  
The Journal of Chemical Physics  
The Journal of Mathematical Physics  
The Journal of Physical and Chemical Reference Data  
The Journal of Renewable and Sustainable Energy  
Low Temperature Physics  
Physics of Fluids  
Physics of Plasmas  
Review of Scientific Instruments

Chinese Journal of Chemical Physics  
– Co-published with the Chinese Physical Society

Journal of Laser Applications  
– Co-published with the Laser Institute of America

Structural Dynamics  
– Co-published with the American Crystallographic Association

3rd QUARTER

Physics Today launches a comprehensive reader survey, finding strong reader engagement across AIP Member Societies.

The Society of Physics Students distributes 12,478 solar eclipse glasses for viewing the Great American Eclipse and 37 SPS chapters awarded grants to conduct viewing events.

Inside Science publishes “Rare Human Syndrome May Explain Why Dogs Are So Friendly,” which goes viral with more than 200,000 views.
Science Policy Fellowships Matter

Since 1988, AIP and Member Societies have sponsored Science Policy Fellows, where member scientists spend a year in Washington, D.C., providing science and technology expertise to the federal government. In 2017, AIP sponsored one congressional fellow, co-sponsored a second congressional fellow with ASA, and sponsored a State Department Fellowship. All three fellows are members of the AMS.

Mallory Hinks is a Congressional Science Fellow in the office of Sen. Chris Coons (D-DE) working on energy and environmental issues. Hinks received her PhD in Chemistry from the University of California, Irvine, in 2017.

Shuchi Talati is a Congressional Science Fellow in the office of Sen. Tammy Duckworth (D-IL). Talati received a PhD in 2016 from Carnegie Mellon University in Engineering and Public Policy.

Alice Alpert is a State Department Fellow with the Bureau of Oceans and International Environmental and Scientific Affairs, Office of Global Change. Alpert received a PhD in 2016 from the MIT-Woods Hole Oceanographic Institution Joint Program in Oceanography.

Advocacy Matters

AIP worked with AAPT through the Physical Science Education Policy Coalition to advocate for the restoration of $1.2M to continue funding the Albert Einstein Distinguished Educator Fellowship Program. The program, which was proposed to be eliminated in the president’s FY 2018 budget, has long been recognized for bringing a much-needed science educator voice to federal agencies and Capitol Hill.

AIP collaborates with Member Societies to help ensure the community has a stronger, more effective voice on Capitol Hill.

In 2017, AIP assisted AAS, APS, OSA, and SPS with each of their Congressional Visits Day events by training participants on the political landscape and how to conduct a congressional visit. We also guided teams of scientists and facilitated discussion during visits with their delegation.

AIP has put an increased focus this year on advocacy. We launched our new Advocacy Services program where we work with like-minded science organizations to advance their policy objectives in Washington, D.C. We worked with a new Affiliated Society on multiple science policy training sessions and scheduled a D.C. fly-in event that included 43 congressional visits for over 20 participants.
Nurturing the Current Generation

AIP Career Network is an online job board network for physical scientists, engineers and computing professionals. The Network comprises four Member Society job sites — AAPM, AAPT, APS, and AVS — along with the IEEE Computer Society and two AIP sites, Physics Today and the Society of Physics Students/Sigma Pi Sigma. In 2017, the network had over 3,700 jobs posted over 8,600 active job seekers

an average of 41,000 unique visitors a month

AIP worked with Member Societies on various career-focused events. AIP teamed up with The Society of Rheology and Dow Chemical to hold their 8th “Careers in Rheology” forum. The event showcased the diversity of career options for those who have studied the flow and deformation of matter.

Shaping the Future Generation

AIP provides activities and resources for undergraduate students to give them the experience and knowledge they need to be successful.

In April, 10 students from the Society of Physics Students (SPS) from throughout the U.S. participated in the Science-Engineering-Technology Congressional Visit Day. Congressman Ami Bera (D-CA) recognized the SPS interns attending a House committee hearing on in-space propulsion.

The SPS summer internship program offers 10-week positions for undergraduate physics students in science research, education, and policy with various organizations in the Washington, D.C., area. In 2017, SPS placed 14 interns.

SPS and AAPT partnered to host the 2017 Students Exploring Engineering and Science (S.E.E.S.) event at the AAPT Winter Meeting. SPS members from Morehouse College shown above helped to facilitate the hands-on activities for more than 100 minority, low-income students. By providing local support to the next generation of physicists at each AAPT Winter Meeting, AIP helps to shape the future of the community.

Careers Matter

GradSchoolShopper.com
A comprehensive, impartial resource that profiles hundreds of physics programs with comparative information on degrees, admissions, research specialties and more. It helps prospective graduate students choose the best program for a rewarding career.

Careers Toolbox
A self-guided tool for undergraduate students and their advisors for navigating career pathways in the physical sciences, highlighting the private sector, teaching, research and academia.

The SPS Observer
A quarterly magazine of the Society of Physics Students published by SPS and AIP. It contains feature articles, advice from experienced voices, physics problems, society news, announcements, and meeting notes from SPS reporters.

Radiations
The official publication of Sigma Pi Sigma, the physics honor society, published twice per year by AIP. It contains news for and about Sigma Pi Sigma members and alumni, including feature articles, news and announcements, and developments in physics.
The American Institute of Physics is a federation of scientific societies in the physical sciences, representing scientists, engineers, and educators. AIP offers authoritative information, services, and expertise in physics education and student programs, science communication, government relations, career services for science and engineering professionals, statistical research in physics employment and education, industrial outreach, and history of the physical sciences. AIP publishes *Physics Today*, the most influential and closely followed magazine of the physics community, and is also home to the Society of Physics Students and the Niels Bohr Library & Archives. AIP owns AIP Publishing LLC, a scholarly publisher in the physical and related sciences.

### 2017 AIP BOARD OF DIRECTORS

**OFFICERS**

John Regazzi, Chair (after 9/17)
David Surman, Chair (until 9/17), and Director At-Large (until 12/17)
Catherine O’Riordan, Interim Co-CEO and COO
Catherine “Gigi” Swartz, Interim Co-CEO and CFO
Judith Flippen-Anderson, Corporate Secretary
Michael Duncan, Treasurer, OSA

**OTHER DIRECTORS**

J. Daniel Bourland, AAPM
Beth Cunningham, AAPT
Judy Dubno, ASA
David Helfand, AAS
John Kent, At-Large
Kate Kirby, APS
Rudolf Ludeke, AVS
Michael Morgan, AMS
Faith Morrison, SOR
Cheryl Stevens, ACA

**DIRECTORS WHO ALSO SERVED IN 2017**

Robert G.W. Brown, former CEO
Charles Carter, ACA
Franco Einaudi, AMS
Dian Seidel, AMS

### CONSOLIDATED FINANCIAL OVERVIEW

(IN THE THOUSANDS)

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<tr>
<th></th>
<th>2017</th>
<th>2016</th>
<th>2015</th>
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<tbody>
<tr>
<td>Investments</td>
<td>$174,040</td>
<td>$144,376</td>
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<tr>
<td>Total Assets</td>
<td>$230,702</td>
<td>$204,996</td>
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<td>Unrestricted Net Assets</td>
<td>$167,976</td>
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<td>Annual Investment Return</td>
<td>16.4%</td>
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<tr>
<td>Total Operating Revenue</td>
<td>$64,971</td>
<td>$67,643</td>
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<tr>
<td>AIP Publishing, Net</td>
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<td>AIP Programs, Net</td>
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<tr>
<td>Net Operating Revenue</td>
<td>$1,596</td>
<td>$5,918</td>
<td>$4,115</td>
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### LOCATIONS

**American Institute of Physics**
1 Physics Ellipse
College Park, MD 20740
+1 301.209.3100
www.aip.org

**AIP Publishing**
1305 Walt Whitman Road
Suite 300
Melville, NY 11747
+1 516.576.2200

**AIP Publishing Beijing Office**
556, South Wing
Raycom Infotech Tower C
Kexueyuan South Road
Beijing 100190, China

www.aip.org