



**2018 APS Prizes and Awards Committee
Review of the APS Honors Portfolio**

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Chair, APS Prizes & Awards Committee
APS Council of Representatives Meeting
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EXECUTIVE SUMMARY -

The Committee recommends that the following firm policies and procedures are enacted to ensure that all APS Honors are financially stable and that they are of the highest quality level.

Financial –

Approximately one-third of the current APS level prizes and awards (excluding dissertation awards) are not at the appropriate endowment level based on the x30 rule recommended in the 2016 Haxton Report.

We identify four prizes that could be reclassified from “prize” (\$10k) to the “award” level stipend (\$5k), rendering three of the four endowments for these honors sustainable.

We recommend that the remaining under-endowed APS level prizes and awards be topped-up to the required sustainable level using APS funds. Our intention is that after this investment, the APS will start with a “clean slate” of self-sustaining honors as the Society moves forward. This recommendation is a separate Committee motion to the Council and then the Board (the Board holds fiduciary responsibility).

Strategy –

The Committee recommends a limit to the number of honors that each unit supports going forward. Situations where a unit exceeds those limits will be grandfathered. Any proposals for new honors that exceed the standard unit limit must be exceptional and require approval up to and including the Board level (the Board holds the necessary fiduciary responsibility).

All APS units will be required to evaluate the health of each honor on a regular basis with oversight from the Prizes & Awards Committee. In the review process, any honors that are struggling in any way will be suspended pending successful financial and quality review.

Improved Process –

Canvassing for nominees

Ensuring the diversity of nominees and recipients is vital to the excellence of APS’ pool of honors. Canvassing for high quality nominees needs to be improved. We recommend continued changes to nomination and selection committee procedures to support this effort.

Integrity

The APS provides a comprehensive array of documents, tools, etc. for the nomination and selection process, however the evidence of use of these tools and the compliance records (e.g. conflict of interest, unconscious bias, etc.) is uneven. We recommend (1) certification policies that ensure that participants in the process have studied guiding materials and (2) policies insisting that detailed work of a given selection cycle be effectively passed to executive committees, subsequent selection panels, etc.

Background

The most recent periodic review of APS Prizes and Awards was the 2016 Haxton Task Force. After the 2016 report, a number of recommendations were implemented, including standardization of stipend levels and an increase in the required endowment amount from 25 to 30 times the stipend in order to cover the financial amount of the prize, the creation of certificates, administration of the honor, and any related awardee travel expenses. This increased amount was intended to allow for inflation and *full support of the actual total cost of the honor*. Because of limited APS fundraising bandwidth over the last two years, a number of the individual endowment shortfalls have yet to be addressed, and the “full cost” of operation and administration of most of the awards has not occurred.

In November 2017, the APS Council of Representatives raised concerns when four new honors were presented somewhat capriciously to the Council for approval. At that moment, there were already 70 APS level honors. The desired scale of the honors program was not well-defined and the financial health of the program was not good. The Prizes & Awards Committee was therefore asked to conduct an additional targeted review of the program. To guide our work we addressed these questions:

- Should the Society add more prizes and awards?
- Are the existing prizes and awards appropriately funded and still relevant?
- Are there opportunities to combine and phase out existing honors?

Task Force Review Work

The Committee completed an evaluation of like societies and their honors programs. We highlighted these comparisons:

- ACS (157K members) has 3x as many members as APS, with only 63 ***national level*** honors.
- American Mathematical Society (30K members) has 32 prizes & awards, 5 inactive and 3 given jointly with other organizations.
- AGU (60K members) has 2 prizes, 14 awards and 12 medals which are not monetary.
- AIChE (American Institute of Chemical Engineers - 50K members) has 16 awards for career accomplishments, 2 Board of Director’s awards for career/society impact/etc. and 70 division & forum technical awards.

In addition, we found that self-nominations for honors are not allowed for the majority of comparable societies.

Each of the individual APS level prizes and awards were distributed among the committee members to review for relevance, funding status, the number of nominations, the level of volunteer and staff involvement, etc. The APS Council of Representatives was also engaged for input at their April 2018 meeting. Nick Bigelow, Committee Chair, provided an overview and we

organized break-out groups to formulate and address key questions. Committee members followed up with the appropriate unit representatives for additional feedback as the review proceeded.

AREAS OF REVIEW AND OUTCOMES

Section I - Financial: Focusing on just APS level prizes as of July 2018, the integrated endowments of the prizes after implementing 30x rule is short by \$909K. APS level awards are underfunded by \$389K. Specific analysis of the 1.3M deficit is provided in Appendix A.

The key recommended action items are:

The **Davisson-Germer (DAMOP/DCMP)**, **Delbruck (DBIO)**, **Onsager (DCMP/GSNP)** and **Broida Prizes (DAMOP/DCP)** should be changed to “Awards” at a \$5K level. Alternatively, the Davisson-Germer, Delbruck and Onsager awards could become biennial and remain at the \$10K level. The Broida is already biennial and would still be approximately \$25K short if changed to a \$5K stipend. We recommend that the relevant units be contacted and asked to decide promptly whether to convert the prize to an award or to be given a three-year period to lead an effort to raise the endowment to sustain the honor as a prize (annual or biannual). In this case we recommend a 50:50 match from APS. If after three years the effort is unsuccessful, the prize-to-award conversion will be implemented.

Other key updates needed include:

The **Langmuir (DCP)** and **Rahman (DCOMP) Prizes** - These are sponsored honors, i.e. honors that do not have an endowment. Currently the APS Development office and the relevant units have no leads on potential sponsors. We recommend that these two honors be suspended and the relevant unit be contacted and offered the opportunity to develop a well formulated petition (to the Prizes and Awards Committee, the Council and the Board) for resumption, as discussed below. More generally, we recommend that the Development office and the CFO develop a strict policy on sponsored awards, including a clear statement to the sponsor and the relevant unit that if sponsorship is terminated, the award will be automatically suspended.

The **Primakoff Award** (DPF - Early Career) stipend should be increased from \$1,500 to \$3,000. As a result, the endowment will be short by \$15K.

The **Burton Award** (FPS) stipend should be raised from \$3K to \$5K. The endowment will be \$30K short and will need to be topped up.

The **Pipkin Award** (GPMFC) stipend has to be raised from \$2K to \$3K. It's every other year, early career, and has enough to cover the increase.

We recommend leaving the **Szilard Lectureship Award** (FPS) at \$3K as a lectureship award. Its recipient is required to present lectures and excess endowment fund income should be used for the exceptional level of awardee travel reimbursement.

The **Nicholson Medal** (FOEP) includes a physical medal and recently added a \$2K stipend. The current endowment fund of \$109K would allow for an increase to a \$3K stipend. We recommend that an exception be made to not increase the stipend to \$5K for the next five years.

Full Cost

Although the cost of oversight and administration of the honors has been recognized, the cost of administration has not been accounted for and has largely been absorbed by the APS. The cost of travel, etc., as appropriate for honor recipients is not covered in a consistent manner. We find that a small number of honors have little or no coverage, while others are covered from unit funds, resources that cannot be considered reliable going forward.

We recommend that the APS charge a flat fee of **2%** annually of each honor's financial value to administer the APS honor. We also recommend that the APS cover the annual cost for honorees to participate in any relevant ceremonies and events for all prizes and awards so there is consistency across the honors portfolio. We recommend that the APS develop a budgetary mechanism to fund these two costs from income from the x30 five-year rolling average of the honor's endowment.

Section II - Process

Limit units to a certain number of honors going forward:

We recommend a baseline of one (1) prize and or award, one (1) early career award, and a set of dissertation honors per unit for its honors portfolio.

Unit petitions for the creation of, change of or sunseting/ merger of honor(s):

The unit shall, with full endorsement of its Executive Committee, submit a proposal for a new honor to the Prize and Award Committee for consideration. This proposal will be reviewed and if supported be presented to the Council. If supported by the Council, the plan will be sent to the Board for final review and approval as it involves a fiducial responsibility for the APS. We recommend that if any of the preexisting honors for that unit are struggling (# and diversity of nominations, financially, etc.), the proposal for a new honor be declined.

The process for temporary/permanent suspension of honor

We recommend that the APS staff develop a process, preferably a standardized online report, that will have to be completed by the appropriate group (APS, unit executive committee, honor selection committee) every 5 years to certify that each and every honor is still relevant and healthy. This reporting will include discussion of the number of nominations, the diversity of nominations and recipients, finances, etc. These reports will be reviewed by the Prizes and Awards Committee, and if significant deficiencies are identified, a suspension of the honor should be recommended.

In addition, we recommend that for each honor, no prize or award will be given if in the prior year (1) there were new financial issues, 2) there were no new nominations, or 3) if there was a conflict of interest issue that was not listed/addressed.

Also, if any selection committee chair report from the prior year is not completed appropriately (e.g. the COI, diversity, etc. is not fully reported), then the next round of nominations will not be opened up for consideration until the Unit Executive Committee submits an addendum.

Petition for exceptions to these suspension policies will be reviewed by the Prizes and Awards Committee and reported to Council.

Units sharing honors: We recommend that the APS mandate that units that share a joint prize or award develop a clear, cooperative and balanced procedure for nomination and selection of the recipient. Such a process can include the possibility of alternating years of selection leadership between the units and or a policy of no carryover nominations. The Onsager, Broida, Davisson-Germer and Ramsey honors are specific examples of honors in need of a clear plan.

APS Level recommendation - The APS Medal and Prize Committee (the full Council) is currently responsible for selecting the recipient of the APS Medal, the Lillienfeld Prize and the Valley Prize. The Valley prize is now awarded annually creating an additional burden to the APS Council Medal Committee. The Committee recommends that a new Valley prize subcommittee be created that includes the general, forum and section councilors.

Section III - Canvassing

Nomination Canvassing and the Creation of an APS Canvassing Committee –

The Executive Committee of each unit is responsible for building the nominee pool for its honors. That Committee will be held accountable for soliciting nominations and for canvassing efforts that assure an excellent, broad and diverse nomination pool. We recommend that every year the Prizes and Awards Committee reviews the nomination record, chair's report, etc. for each honor and that it refers honors deemed in need of support to a *new APS Canvassing Committee*. On recommendation by the Prizes and Awards Committee and appointment by and approval of the Council, the Canvassing Committee will be made up of 6-8 members, including one each from CSWP (women) and COM (minorities). This process could be coordinated through the Education & Diversity Department.

While we do not recommend self-nominations, we observe that it would be good to empower members, especially our early career members, with a mechanism to advocate for themselves and colleagues to be considered for nomination. We believe that an anonymous electronic portal for such pre-nominations would be valuable. Output from the portal would be sent to the unit Executive Committee(s) of the relevant unit.

Appendix A - Financial Summary/Stipend Action Items

Name	Status	Funding Available	Unit
Goeppert-Mayer Award (early career)	\$3K stipend	Has \$69K, needs \$90K to fully endow.	APS/CSWP
Astrophysics <i>Thesis</i>	\$1K stipend, needs to increase to a min of \$1,500.	DAP operating funds	DAP
Delbruck	Make an Award at \$5K or alternate years.	\$174K funds available.	DBIO
Onsager	Become an award (\$5K) or alternate years.	\$185K funds available.	DCMP/GSNP
Davisson-Germer	Close to fully endowed for \$5K but would be called an award.	\$144K funds available. Needs \$6K.	DAMOP/DCMP
Broida	Could be an award but not fully funded.	\$50K - need \$75K	DAMOP/DCP - concerns raised over alternating years and unfair balance on selection committee in 2018.
Ramsey Prize	\$10K - Raise stipend?	Has \$489K.	DAMOP/GPMFC
Allis Prize	\$10K stipend	Has \$121K, needs \$150K.	DAMOP
Rahman Prize	No sponsor after 2019. \$300K to fully endow.	Engaged with Development, but no leads on a new sponsor.	DCOMP
Jankunas <i>Dissertation</i>	Updated to \$1,500 stipend.	\$33K. Working with Development on \$50K goal.	DCP
Langmuir Prize	No sponsor after 2019. \$300K to fully endow.	Engaged with Development, but no leads on a new sponsor.	DCP
Acrivos <i>Dissertation</i>	\$1K stipend, update to	\$100K - Endowment	DFD

	at least \$1500.	can accommodate up to \$3K.	
Schawlow Prize	\$10K stipend	Has \$227K, needs \$300K.	DLS
McGroddy Prize	\$10K stipend	Has \$240K, needs \$300K	DMP
Adler Award	\$5K stipend	Has \$101K, needs \$150K.	DMP
Bonner Prize	\$10K stipend	Has \$281K, needs \$300K.	DNP
Feshbach Prize	\$10K stipend	Has \$222K, needs \$300K.	DNP
Wilson Prize	Currently \$7,500, should be \$10K.	Has \$255K, needs \$300K.	DPF/DPB
Panofsky Prize	\$10K stipend	Has \$218K, needs \$300K.	DPF
Primakoff (Early Career)	Currently \$1,500. Should be at least \$3K.	Has \$75K, needs \$90K to sustain.	DPF
Polymer Prize	\$10K stipend	Has \$239K, needs \$300K.	DPOLY
Maxwell Prize	\$10K stipend, but no travel reimb. Reg waiver and banquet tix.	Has \$227K, needs \$300K to fully endow.	DPP
Stix Award	Currently \$2K, should be increased to \$3K.	Has \$71K, needs \$90K to sustain.	DPP
Bennett/Landauer Award	\$5K stipend	Has \$100K, needs \$150K. DQI discussed having some funds available to contribute. Donor (IBM) originally approached with 20x formula.	DQI
Pake Prize	Now \$10K, biennially.	\$99K, needs \$150K to sustain.	FIAP

Distinguished Lectureship Award on the Applications of Physics	\$5K stipend, travel to March and multiple lectures to smaller mtgs/universities.	Has \$75K, needs \$75K (FIAP gave \$100 to start but wasn't set up as traditional endowment.	FIAP
Industrial Applications	No Sponsor - Now Inactive	No progress	FIAP
Wheatley Award	Currently \$2K - biennially. Should be \$5K.	Has \$40K, needs \$75K.	FIP
Burton Award	Currently \$3K, should be \$5K.	\$120K can support \$4K. Needs \$150K.	FPS
Szilard Award	Currently \$3K. Should be \$5K.	\$158K, sufficient funds to update.	FPS
Nicholson Medal	Currently gives a medal, \$2K stipend and \$1,500 travel reimbursement.	Fund is \$109K and would allow for a \$3K stipend.	FOEP
GHP <i>Dissertation</i>	\$1K stipend, needs to increase to a min of \$1,500.	Has \$15K. Needs \$45K or use operating.	GHP
Keithley Award	\$5K stipend	Has \$97K, needs \$150K.	GIMS
Pipkin Award (Early Career)	Currently \$2K, should be \$3K.	\$53K - has enough to increase stipend.	GPMFC
Sakharov Prize	\$10K biennially.	CIFS has requested an AWARD annually at \$5K - has \$107K. Needs \$150K.	<i>CIFS - Council to approve the changes to Award/\$5K annually at Nov 2018 meeting.</i>