

## **New rule for scholarship committee**

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The task force team was tasked by Dr. Song to provide a proposal for a new rule 9.6 (the current rule 9.6 would become rule 9.7) covering the establishment of a standing Scholarship Committee. In attachment an amended proposal is also provided (Attachment A) for the Hochreiter Scholarship, which makes the scholarship committee responsible for the selection of the recipients.

The structure of the committee was subject to various deliberations in the task force. We resolved to:

- include a minimum of 5 members and a maximum of 9, all serving 3-year terms (except the division chair who has a one-year term);
- add at least 2 new members every year;
- include at least 3 members from non-academic institutions;
- include at least 1 international member.

The proposed new rule is as follows:

9.6 Scholarship committee shall be composed of a minimum of five (5) members and a maximum of nine (9) members, including the division Chair.

a. Responsibilities: The Scholarship Committee shall be responsible for supporting the society in the selection of the recipients of all THD-funded scholarships.

b. Membership

1. The Chair of the Scholarship Committee shall be appointed by the Executive Committee at the recommendation of the Nominating Committee. The Chair of the Scholarship Committee shall serve a 3-year term.
2. Appointed members shall serve 3-year terms. The division Chair shall serve a one-year term. At least 2 appointed members shall be newly added each year to the Committee. Appointed members are to be nominated by the Nominating Committee and appointed by the Executive Committee.
3. The Scholarship Committee shall include a minimum of 3 members with non-academic affiliations such as industry, government, or national laboratory.
4. The Scholarship Committee shall include a minimum of 1 international member.
5. Members of the Scholarship Committee must be members of the ANS Thermal Hydraulics Division.

c. Conflict of Interest

1. In the event that a candidate package is submitted from the institution of a Scholarship Committee member, the member shall recuse herself/himself from any deliberation regarding the candidates for that evaluation cycle. Members may recuse themselves for other conflicts of interest.
2. In the event that the Scholarship Committee Chair is recused, an Acting Chair shall be selected from among the Scholarship Committee members on the nomination of the Nominating Committee and appointment by the Executive Committee. The term of the Acting Chair shall end following deliberations regarding the current evaluation cycle, after which herself/himself will remain a Scholarship Committee member.

## Attachment A

### 1. Name of Scholarship

Lawrence E. Hochreiter Graduate Scholarship

### 2. Background information on the individual that the Scholarship is honoring.

Lawrence E. Hochreiter was employed at Westinghouse during the formative years of nuclear safety and later as a professor and mentor at Penn State University. At Westinghouse, he led the evaluation of safety issues for both Pressurized and Boiling Water Reactors and consulted with the Westinghouse Savannah River Company and the Westinghouse Naval Division. His collaboration partners included the U.S. Nuclear Regulatory Commission, Electric Power Research Institute, Bettis Atomic Power Laboratory and many companies in the industry. He served in a direct role in nuclear industry's more significant events, including the nuclear industry's response to the 1972-1973 Emergency Core Cooling System Hearing, the 1979 Three Mile Island accident and the 1986 Chernobyl accident. In 1986, as an adjunct professor, Hochreiter began teaching graduate courses in the Penn State/Westinghouse mechanical engineering program. He joined Penn State's nuclear engineering department in 1997 as professor of nuclear and mechanical engineering, teaching undergraduate and graduate students.

His research at the university focused on thermal-hydraulic modeling of nuclear power plants, reactor safety analysis and experimental studies of two-phase flow and heat transfer. He created a state-of-the-art reflood heat transfer facility where Penn State graduate students carry out a variety of experiments in heat transfer, convective steam cooling and steam cooling with droplet injection. Hochreiter received posthumously the Technical achievement award, the highest honor of THD, in 2008. Always a passionate teacher and mentor, he inspired a generation of THD leaders. As THD chair he spear-headed efforts that ultimately led to the establishment of this scholarship.

We note that THD is the only major division without a scholarship program despite significant growth in recent years. One scholarship will be awarded to a graduate nuclear science/engineering major, with the desired emphasis on areas supporting thermal-hydraulics as applied to nuclear energy. These areas include, but are not limited to computational thermal-hydraulics, experimental thermal-hydraulics, two-phase flow and heat transfer, thermal-hydraulics of severe accidents, thermal-hydraulics of operating light water reactors and thermal-hydraulics of advanced reactors,

### 3. Sponsoring organization or Individual

THD

### 4. Academic level

Master's and doctoral level (graduate).

### 5. Academic/research discipline (if any)

Awardee should be enrolled in a US institution pursuing a master or a PhD with a main focus on thermal-hydraulics as applied to nuclear energy.

### 6. Proposed initial level for fully-funded scholarship

\$63,000.

**7. Expected sources of initial/supplementary funding (must be fully-funded within 5 years)**  
\$48000 from unrestricted funds (to be moved to restricted funds) and \$15000 from restricted funds.

**8. Plans for award of scholarship until sufficient funds are achieved**  
Scholarship will be fully funded from the start.

**9. Special selection criteria, restrictions, and other special requirements (if any)**

Awardee should be enrolled in a US institution pursuing a master or a PhD with a main focus on thermal-hydraulics as applied to nuclear energy. This include but is not limited to computational thermal-hydraulics, experimental thermal-hydraulics, two-phase flow and heat transfer, thermal-hydraulics of severe accidents, thermal-hydraulics of operating light water reactors and thermal-hydraulics of advanced reactors.

No residency or nationality requirement will be imposed reflecting the international nature of the field.

Applicants shall submit a personal statement of 500 words or less where they describe long-term and short-term professional objectives with respect to their interest in nuclear reactor thermal-hydraulics.

The THD ~~H&A Scholarship Committee~~ shall be responsible for ~~or at least represented in~~ the selection process of the awardee.