

## Full Membership in Sigma Xi

Examples of noteworthy achievements for **Members** include:

- Major contributor on at least two different scientific activities<sup>1</sup> including<sup>2</sup>:
  - All - Peer reviewed<sup>3</sup> journal articles
    - The most straightforward demonstration of 2 different scientific activities is to be listed as first author on your noteworthy achievements. If you are the primary author on a publication or patent, but are not listed first, please indicate why you are the primary author (e.g., discipline specific protocols).
    - Regardless of date published or time span between publications
    - Regardless of country or language of publication
    - Regardless of print or online publication
    - “in-press” citation is acceptable
    - “under/in- review” citation is not acceptable
  - Externally refereed reports
    - Technical reports *may* be accepted if:
      - Written for an agency (e.g., National Research Council, US Department of Agriculture, Environmental Protection Agency, or state governments) or other scientific organization (e.g., Resources for the Future, Pew Research Foundation)
      - Peer reviewed<sup>3</sup> by scientists
    - Books
    - Book chapters
    - Monographs
    - Dissertation and/or thesis alone are not considered sufficient for demonstration of this achievement and must be accompanied by at least two other scientific publications (see above).
      - The dissertation and/or thesis must be an original contribution, not a review essay.
      - Two different peer reviewed<sup>3</sup> scientific publications (see above) resulting from a dissertation and/or thesis are sufficient for Members.
- Patents
- Invited talks/lectures are not acceptable
- Conference proceedings are not acceptable unless the proceedings are peer-reviewed<sup>3</sup> prior to publication

<sup>1</sup> Scientific activities – research promoting advancement of pure science – mathematics, bench science, engineering etc.

<sup>2</sup> ALL citations must be Full citations; it can include a web-link but must be in and of itself a fully listed citation, name, name of publication, date, volume, pages etc.

<sup>3</sup> Peer review – a qualifying peer reviewed research publication shall be reviewed prior to publication by multiple scientists (anonymous or open) in the same/similar field of research selected by the journal editors and independent of and impartial to the author(s) of the research.

If the nominee is working or has worked for public or private entity on classified or proprietary research, a recommendation from a supervisor with appropriate security clearance (letter or formal conversation) should be included with the membership application or conducted prior to making a decision stating that they were a major contributor to classified or proprietary scientific activities.

### **Full Membership in Sigma Xi (continued)**

If you claim one of your major contributions is a team or collaborative activity, please provide an explanation of your role in the study to define why you are a major contributor.

Any nominations that do not fall within those described above can be reviewed by the Sigma Xi Committee on Qualifications and Membership and should include appropriate documentation indicating why Member status is merited if noteworthy achievement is not defined as above.

### **Associate Membership in Sigma Xi**

Examples of *initial* research achievement leading to scientific contributions for **Associate Members** include one of the following<sup>1</sup>:

- Presentation of research at a scientific conference (poster or oral)
- Authorship (primary or co-author)
  - Peer reviewed<sup>2</sup> journal article
  - Externally refereed report
  - Book
  - Book chapter
  - Monograph
  - Dissertation and/or thesis
  - Patent
- Contribution to ongoing research project, including:
  - Development of scientific protocol
  - Data collection and analysis
  - Research presented by someone else

Initial research contributions can be evidenced by:

- Research abstract
- Successfully defended dissertation proposal
- Successful grant proposal
- Citation of article
- Abstract of conference poster or presentation
- Letter of recommendation written or formal conversation provided by research supervisor or nominator.
  - If the nominee is working or has worked for public or private entity on classified or proprietary research, a recommendation from a supervisor with appropriate clearance (letter or formal conversation) should be included with the membership application or conducted prior to making a decision stating that they were a major contributor to classified or proprietary scientific activities.
- Note: Classes, classroom research, or classroom laboratory experiences that do not result in new scientific discoveries are not sufficient for Associate Member status.

Any cases that do not fall within those described above can be reviewed by the Sigma Xi Committee on Qualifications and Membership and should have appropriate documentation indicating why Associate Member status is merited if initial research achievement is not defined as above.

<sup>1</sup>Please include a full citation (name, event, title, date, if awarded a prize etc.) for presentations etc.

<sup>2</sup>Peer review – a qualifying peer reviewed research publication shall be reviewed prior to publication by multiple scientists (anonymous or open) in the same/similar field of research selected by the journal editors and independent of and impartial to the author(s) of the research.