# BY-LAWS OF THE UNIVERSITY OF TENNESSEE DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING 

As adopted by the faculty, May 01, 2018

## Preamble

To provide a basis whereby the faculty may achieve its mission of education, research and public service, the Department of Materials Science and Engineering at the University of Tennessee, Knoxville (hereafter referred to as the MSE Department) agrees to govern itself according to the By-laws presented herein.

These By-laws are intended for the internal operation of the MSE Department and shall not supersede any existing University of Tennessee regulations or policy, specifically including the document entitled "Policies Governing Academic Freedom, Responsibility, and Tenure," University Senate By-laws, and the current University of Tennessee Faculty Handbook. These By-laws are also intended to be consistent with the UTK College of Engineering document entitled "UT College of Engineering
Guidelines for the Tenure and Promotion Review Process".

## ARTICLE I GENERAL OPERATION OF THE DEPARTMENT

## A. The Faculty

The faculty of the MSE Department includes professors who are tenured in MSE, professors who are tenure track in MSE, and others that hold partial appointments in MSE: ORNL-based Joint Faculty, professors who hold joint appointments with MSE and other UT departments, Adjunct Professors, Research Professors, and Emeritus Professors and lecturers.

## B. Governance

General Approach

1. The business of the MSE Department will be conducted by individual faculty, committees of faculty, and the Faculty as a whole.
2. The individual faculty and faculty committees have the right to suggest ideas and make recommendations for change and improvements in the way the Department operates, conducts its business, or deals with its students, support personnel and faculty. As a faculty member, the Department Head also holds these rights and he or she is specifically given the responsibility to bring such issues to the attention of the faculty and faculty committees.
3. The Department Head is also charged with the administration of the Department and its budget, with the responsibility for effective day-to-day operation of the Department's business, and with communication of this to the faculty.
4. All final decisions on policy and procedures, curriculum and other routine matters will be made by majority vote at a duly called General Faculty Meeting (see section on
meetings below). Matters of retention, promotion and tenure will be considered in a special session as described in Article III.
5. The Standing Committees of the MSE Department are described in Article II, below.

## Voting Members

All faculty are invited to attend faculty meetings. Voting restrictions will apply as follows:
Hiring, promotion and tenure of tenured/tenure track faculty and policies related thereto:

1. Only tenured and tenure-track faculty within the department will vote on hiring of a new tenured/tenure track faculty member. Rank of a new hire will be voted on by faculty who are at or above the proposed rank.
2. Only tenured faculty will discuss and vote on retention matters.
3. Only tenured faculty who are at or above the proposed professorial level of each tenured/tenure track candidate will review and vote on tenure and promotion matters.

## Hiring and Promotion of lecturers:

Tenured/tenure track faculty and lecturers can vote on the hiring of lecturers. Only tenured/tenure track faculty and lecturers who are at or above the proposed lecturer level will review and vote on promotion of lecturers.

## Changes in departmental bylaws.

Only tenured/tenure track faculty vote on changes in the departmental bylaws. Changing the bylaws requires a positive vote by a two-thirds majority of tenured and tenure track faculty.

Curriculum issues:
All faculty members with regular appointments and recurring teaching responsibilities can vote on curriculum issues.

## Other voting matters

With the exception of the voting restrictions stipulated above, voting on other departmental matters is left to the department's discretion.

The voting members of the faculty may bestow voting rights to associated individuals (e.g., research faculty, center directors) on all Departmental business except retention, tenure and promotion matters. This requires the positive vote by a two-thirds majority of tenured and tenure track MSE faculty.

## Meetings

1. MSE Department General Faculty Meetings will be held at least twice each semester during the academic year. Additional General Faculty Meetings may be called by the Department Head or at the written request of 30 percent of the faculty. A quorum for the purpose of conducting the business of the MSE Department will be greater than one-half of the voting faculty including proxies.
2. Faculty committee and sub-committee meetings may be called by the committee chair or at the behest of 30 percent of the committee membership.
3. The Department Head, or his or her designee, shall serve as chairperson of General Faculty Meetings. The Committee Chairpersons will serve as chairperson at all committee meetings.
4. Whenever possible, at least five days advance notice of all General Faculty Meetings will be given to faculty.
5. An Agenda will be prepared by the Department Head and circulated at least two days in advance of each General Faculty Meeting. Appropriate communication of committee meeting times and agenda is also expected.
6. The Department Head will appoint a staff member to act as the Department's Recording Secretary. The Recording Secretary shall keep minutes of General Faculty meetings and distribute those minutes among the faculty. The Committee Chairpersons will be responsible for keeping and distributing records of actions taken by the various Departmental Committees.
7. At least once each semester, or at the request of the Department Head, the standing committees will report at a General Faculty Meeting on the progress of the committee deliberations. The full faculty has the right to review the work of the committees. The approval of the Faculty attending the General Faculty Meeting is required for final adoption of committee recommendations.

## Article II <br> COMMITTEES OF THE DEPARTMENT

## A. Standing Committees

The following standing committees shall be established to aid the Faculty in the execution of its academic and related responsibilities. Except where noted otherwise, the following rules will hold. The Department Head shall appoint members of each committee and its chairperson and shall be a member ex-officio of all standing committees.

## Undergraduate Affairs Committee

This committee shall be responsible for recommendations for continuous improvement of the undergraduate program, and for recommending solutions to all concerns and problems affecting the undergraduate program. This responsibility extends to, but is not limited to, the following: undergraduate program assessment, curriculum development and improvement; changes in course content; textbook selection; undergraduate extra-curricular activities; undergraduate accreditation; undergraduate equipment acquisitions; undergraduate recruitment; and awarding of scholarships.

The committee will consist of a chairperson and a minimum of four additional faculty appointed by the Department Head. The chairperson may appoint a number of subcommittees to deal with the various issues that arise (for example, preparation for accreditation).

Graduate Affairs Committee

This committee shall be responsible for recommendations for continuous improvement of the graduate programs, and for recommending solutions to all concerns and problems affecting the graduate programs. This responsibility extends to, but is not limited to, the following: graduate program assessment; graduate program curriculum development and improvement; preparation and administration of PhD preliminary examinations; recruitment and admission of graduate students; and updates of the Graduate Student Handbook.

The committee shall consist of a chairperson and a minimum of four additional faculty appointed by the Department Head. The chairperson may appoint a number of subcommittees to deal with the various issues that arise (for example, admission of graduate students).

## External Affairs Committee

This committee shall be responsible for improving the visibility of the department through the use of effective written and oral communication. This committee will design and maintain a state of the art website, publish a yearly newsletter, periodically update MSE brochures and encourage faculty and students to include identifying departmental information in their external presentations and invited lectures. The formation of an advisory board and periodic meetings shall be organized by the Department Head.

## Retention and Promotion Committee

This committee shall consist of all tenured faculty in the department. Its operating procedures are described in detail in Article III which deals with Faculty Responsibilities, Retention, Promotion and Tenure.

## B. Other Committees

## Honors and Awards Committee

The Department Head shall appoint three faculty members to recommend and prepare nominations for awards for faculty, staff and students in the Department. The awards to be considered include all Departmental, College and University level awards for which the faculty, staff and students are eligible. The committee will also nominate individuals for external honors and awards (e.g. professional society awards) and prepare the necessary documentation. However, the committee, at its discretion, may elect not to nominate individuals for certain awards in any given year.

## College of Engineering Committees

Faculty of this Department will be recommended by the Department Head to each of the various College committees.

## Safety Committee

The responsibility of this safety committee and the safety officer will be to ensure that the Chemical Hygiene Plan is up-to-date, to act as liaison with the University Safety and Hazardous Chemicals Committee, and to ensure that all students, faculty and staff are informed of safety policy and procedures. Further, in the event of a spill or accident, the
safety officer will ensure that proper procedures are followed and that follow-up reporting is carried out.

## Ad Hoc Committees

The Department Head may appoint ad hoc committees as the need arises. The responsibilities and membership of these committees shall be established at the time of the announcement of their creation.

## C. Officers and Representatives

## Library Representative

The Department Head shall appoint one faculty member to be the Department's Library Representative. The duties of this office shall include the establishment and maintenance of liaison with the University of Tennessee Library, making requests for library books to be added in the field of materials, and other such duties as may be requested by the administration of the library or the Department Head.

## ARTICLE III <br> FACULTY RESPONSIBILITIES, HIRING, RETENTION, PROMOTION AND TENURE

A faculty member's responsibility is to inspire excellence in others and to strive to maintain and improve the academic quality of the Department, College and University. In return, he or she merits trust and recognition from the University being manifest in tangible form by retention, promotion and, ultimately, tenure. The overriding criterion in all deliberations regarding retention, promotion and tenure is evidence of commitment to superior intellectual attainment. Demonstrations of achievement in the areas of teaching, research and scholarship, and University and Professional service, are indispensable qualifications for promotion and tenure. For retention, a reasonable potential for achieving these criteria must be evident. Insistence on the highest attainable standards for faculty members is essential for the maintenance of the quality of the University as an institution dedicated to the discovery as well as the assimilation and dissemination of knowledge. Maintaining these standards throughout a faculty member's working lifetime is also necessary. To this end, annual reviews and a periodic thorough re-evaluation of a faculty member's contributions must be carried out in accord with University Regulations.

## A. General Procedures

4. All tenured and tenure track faculty can vote on all faculty hiring, irrespective of the rank of hire. Furthermore, all lecturers can vote on lecture hiring irrespective of rank of hire.
5. The Retention, Promotion and Tenure Committee (RPT) shall consist of all tenured MSE faculty. For lecturer promotions, lecturers at or above the rank may also participate on the committee.
6. A chairperson of the committee shall be appointed by the Department Head at the first General Faculty Meeting of each fall semester.
7. All tenured faculty above the rank of assistant professor will vote on retention matters.
8. All tenured faculty who are at and above the proposed professorial level of each candidate will review and vote on promotion matters.
9. All tenured faculty will discuss and vote on tenure matters.
10. Each candidate may choose to name an advocate to represent them in MSE promotion and tenure meetings.
11. It is the responsibility of each candidate to ensure that all required documentation is submitted to the chairperson in a timely manner.
12. All formal actions for tenure and promotion will require letters from external reviewers and the reviewers must adhere to the College and University promotion and tenure guidelines.
13. A formal meeting of the RPT Committee will be held at an appropriate time to meet the deadlines set by the College for forwarding the results to the College RPT Committee.
14. The formal RPT Committee Meeting will consider as needed:
a) Retention of assistant professors
b) Promotion from assistant to associate professor
c) Retention of associate professors
d) Tenure of associate professors
e) Promotion from associate professor to professor
f) Tenure of professors
15. The chairman of the RPT Committee will submit a report to the Head of Department on each candidate. The Head of Department will submit his report to the College Committee and the Dean of Engineering with the RPT Committee report as an appendix.

## B. Specific Procedures

## Annual Review of Performance

The Department Head shall, each year, review the teaching, research, thesis and dissertation supervision, committee assignments, publication record, scholarly contributions, and University and public service activities of tenured and tenure-track MSE faculty at all levels. The Department Head and the faculty member will discuss plans for the future and individual goals and objectives. How these goals and objectives relate to the Department's long-term objectives and strategic plan will also be discussed. The review may culminate in a narrative describing strengths, weaknesses and expectations of the faculty member and a rating of the faculty performance using the scale outlined in "the manual for faculty evaluation"

A faculty member who does not meet expectations is required to submit an improvement plan, following procedures outlined in the Manual for Faculty Evaluation and submit the plan to the department head within 30 days of receipt of the fully executed Annual Review Form.

## Termination

A faculty member may be terminated due to (a) misconduct, (b) financial exigency or program discontinuance, (c) unsatisfactory performance in teaching, research, or service or other reasons as explained in the Faculty Handbook.

## Retention

In addition to the annual performance review conducted by the Department Head, retention reviews will be conducted by the RPT committee for untenured assistant professors each year of their probationary period leading up to (but not including) the year of tenure consideration. An enhanced retention review will be conducted in the academic year following the midpoint in his or her probationary period. In instances of unsatisfactory performance, the untenured faculty member may be terminated after review by the faculty, Dean, and Chief Academic Officer. These review processes are detailed in the "Manual for Faculty Evaluation".

## Promotion

The normal times at which promotion will be awarded to appropriate individuals are the seventh year for assistant professors and the fifth year for associate professors. Early promotion can be awarded to suitably qualified individuals, especially when prior service has occurred at equivalent institutions. Years spent in full time administration will not be included in the time period except at the request of the candidate. Documentation on the case will follow the most recent UT College of Engineering Guidelines for the Tenure and Promotion Review Process.

As stated in the preamble, a commitment to superior intellectual attainment is of overriding importance and is manifest through excellence in teaching, the education of graduate students, authorship of refereed articles all corroborated by peer review, and the citations of ones work by the scientific community. Additionally, a candidate must demonstrate the ability to obtain external funding to support the research enterprise. Individual overall assessments by authorities in a candidate's chosen area of specialty are also essential. Per the Manual for Faculty Evaluation the department head or designate, in consultation with departmental faculty, assembles a list of potential external evaluators with the following guidelines.

- The department head or designate requests the names of potential evaluators from the candidate.
- The department head or designate also requests names of individuals the candidate wants excluded and the reasons for the exclusions.
- The department head or designate will normally solicit 8-10 letters. No more than half of the letters solicited should come from the list suggested by the candidate.
- The dossier will normally include no fewer than five letters from external evaluators.
- All letters solicited and received must be included in the dossier unless the Office of

Academic Affairs approves their removal from the review process.

None of these references may be the candidate's former thesis advisor or postdoctoral mentor.

After having been denied promotion from associate professor to professor, an individual may request reconsideration of the case for promotion after a period of no less than two years.

## Tenure

Granting of tenure is regarded as the University's most critical personnel decision and will not be considered for assistant professors. Whenever possible, tenure will be granted on promotion to associate professor status, but it will entail a separate decision. The award of tenure is in response to an individual's demonstrated achievements in teaching, research, scholarship and service. It involves a strong assumption that those standards will be maintained or surpassed in future years. Accordingly, documentation must cover the areas of (a) teaching, (b) research, (c) scholarship, and (d) University and professional service. Per the Manuel for Faculty Evaluation the department head or designate, in consultation with departmental faculty, assembles a list of potential external evaluators with the following guidelines.

- The department head or designate requests the names of potential evaluators from the candidate.
- The department head or designate also requests names of individuals the candidate wants excluded and the reasons for the exclusions.
- The department head or designate will normally solicit 8-10 letters. No more than half of the letters solicited should come from the list suggested by the candidate.
- The dossier will normally include no fewer than five letters from external evaluators.
- All letters solicited and received must be included in the dossier unless the Office of Academic Affairs approves their removal from the review process.

None of these references may be the candidate's former thesis advisor or postdoctoral mentor.

## C. Documentary Evidence

Each candidate will consult the UT College of Engineering Guidelines for the Tenure and Promotion Review Process document to facilitate the preparation of their dossier. Briefly the four main evaluative areas are enumerated.

## Teaching

Ability to teach effectively, at both the undergraduate and graduate levels is required of all faculty. Appropriate sources of documentation include student evaluations, peer review by colleagues (following the TCE peer review of teaching guidelines) and exit interviews of graduates. Demonstrated ability to develop courses and participate effectively in curriculum design is essential.

## Research

Participation in both personal research and direction of graduate student research is required. All faculty should serve on graduate supervisory committees and chair some of those committees. The ability to direct research is manifest in the production of undergraduate and master's theses and doctoral dissertations by supervised students. The following are all forms of recognition of research ability: (a) publication of research papers and patents, (b) the award of research funds by organizations using peer review, (c) active participation at research meetings of professional societies, (d) presentation of seminars and invited lectures, and (e) reviewing of journal articles and research proposals.

## Scholarship

There are many forms of evidence of scholarly activities. These include: (a) awards and prizes, (b) fellowships in professional societies, (c) authorship of texts, (d) authorship of review articles and book chapters, (e) sole authorship of articles in peer-reviewed journals, (f) co-authorship of articles in peer-reviewed journals, (g) authorship of articles in conference publications.

## Service

Two major forms of service indispensable to the University and the profession are (a) willing and active participation in committee activities at the departmental, college and university levels, and (b) participation in the activities of professional societies at the local, regional, national, and international levels.

Examples of the former include curriculum development, student advising, recruiting at all levels, service as safety officer, and active efforts to solve the various problems and concerns raised in routine committee assignments, service on the Faculty Senate, and service on the Undergraduate and/or Graduate Counsel, to name but a few.

Examples of the latter include such activities as serving as an officer of a professional society, development of symposia at regional, national or international meetings, and serving on professional society committees. Other examples of professional service include participation, as advisors, in local, state and federal government agencies as well as to national organizations.

## D. Level of Performance Expected by Rank

Faculty are expected to perform at a level that will bring respect and honor to themselves, to the Department of Materials Science and Engineering and to the University of Tennessee. Such efforts will involve certain activities carried out at a level that is sufficient to maintain and grow both our undergraduate and graduate programs. It is recognized that faculty are a diverse group with some being more adept at teaching, while others may be more capable researchers. However, all tenure track faculty must engage in
scholarly activities, teaching, research and service at a reasonable level. In general faculty evaluations will be based on a 3 year rolling average in most categories.

## Assistant Professor

A faculty member in the first 3 years of their Assistant Professor appointment will be considered in their "start-up" period. In general, and depending plans determined by the faculty and department head, the faculty in this "start-up" mode might realize a lighter teaching and service load as they build their lab and work to secure external funding. To achieve meets expectations, the candidate will demonstrate progress towards securing external funding by submitting proposals and will submit and publish at least 1 paper per year in an SCI indexed refereed journal. The "start-up" faculty member should also build a group of approximately 2-3 graduate students during this period.
Beyond the start-up period, Assistant Professors will teach the regular teaching load, but may still have a smaller Departmental service load while external service to the profession will be required. As external funding is critical to promotion and tenure, expectations at this rank by years $3-5$ are on the order of $>\$ 100 \mathrm{k}$ per year.

## Associate Professor

A typical associate professor faculty member is expected to continuously support and direct the research of 2-4 graduate students, teach three classes per year, publish twothree refereed journal articles per year, participate actively in appropriate professional technical societies (including presentation of papers at national and international meetings, holding offices, serving on committees, organizing symposia, etc.), and effectively serving on the Department, College, and University wide committees and governing bodies.
Full Professor
A typical full professor faculty member is expected to continuously support and direct the research of 3-5 graduate students, teach three classes per year, publish three or more refereed journal articles per year, participate actively and take leadership roles in appropriate professional technical societies (including presentation of papers at national and international meetings, holding offices, serving on committees, organizing symposia, etc.), and effectively serving on the Department, College, and University wide committees and governing bodies.

While quantity of effort and output must be sufficient to maintain an active presence in the field of expertise, quality of teaching, research, scholarship and service are of the greatest significance in determining level of performance and qualifications for promotion and pay increase.

The following represent some guidelines that may be used to establish rankings in individual categories based on the above described scale. It is important to keep in mind that the final assessment is an overall determination, averaged over all the faculty member's activities. For instance, if a faculty member's research productivity does not meet the above expectations, they may choose to take on a higher teaching and/or service load to overall meet expectation. Similarly, a faculty member with high research productivity may realize a lower teaching or service load. Each faculty member should discuss his/her plans to meet or exceed expectations at the yearly faculty evaluation.

## Teaching

The normal faculty teaching load for a research active faculty is 3 courses per year.
Scores that assess "Course as a whole", "Instructor's contribution to the course", and "Instructor's effectiveness in teaching material" which are consistently below 2.8 out of 5.0 on the Student Assessment of Instruction System (SAIS) raise serious questions about the quality of teaching. In such cases the faculty member will be required to provide other evidence that their teaching is satisfactory. Possible other evidence includes other types of evaluation such as the Tau Beta Pi Evaluation Form, letters from students testifying to the quality of instruction, etc.

The Department Head may use the following criteria as guidelines for assessing teaching performance:

| Score | Suggested Category <br> $<2.8$ |
| :--- | :--- |
| falls far short of expectations |  |
| $\geq 2.8$ and $<3.3$ | falls short of expectations |
| $\geq 3.3$ and $<3.8$ | Meets Expectations |
| $\geq 3.8$ | Exceeds Expectations |

Of course, other forms of evidence of quality teaching will also be considered in making the final evaluation. The SAIS ratings are only one readily available measure. Faculty are encouraged to find other means to show the quality of their teaching.

Faculty are also expected to comply with the department's plan for continuous assessment and improvement of our courses. For undergraduate courses, this includes completion of assessments of students' progress toward department outcomes, collecting samples of student work that demonstrate outcomes, and regularly updating the outcomes defined for each course.

## Research

Publication of research papers in peer reviewed journals is the primary measure of research accomplishment. A faculty member is expected to publish in refereed journal articles per year as outlined above by rank. Invited seminars and presentations at national and international meetings are also expected. In order to achieve "meets expectations", a faculty member must typically also provide support for graduate students from externally funded research projects. Faculty who rarely publish and who do not contribute to the support of graduate students, will be categorized as "falls short of expectations" with respect to the research function. For a faculty member to be categorized as "exceeds expectations" with respect to research, he or she must substantially exceed the above stated criteria for "meets expectations". Assistant professors are expected to show adequate progression to these expected levels of performance.

## University, Professional, and Departmental Service

Departmental, College and University Service - Faculty must demonstrate meaningful University service by serving as: at least 1 Departmental, College or University committee chair; or a member of a combination of 2 Departmental, College or University committees. Other service responsibilities can satisfy (faculty senate, special external service, etc.) the UT service responsibility and can be negotiated with the Department Head at the faculty evaluation or by appointment.

Faculty are expected to accept and perform well in the various departmental, college and university wide committees. A consistent absence of such efforts will constitute grounds for concern in the overall evaluation. Faculty are also expected to associate with appropriate professional societies consistent with their area of special expertise. They should seek leadership positions in these societies and, in particular, they should perform such service as developing symposia at national and international meetings, refereeing papers and proposals, etc.

## ORNL-Based Joint Faculty

The duties and expectations of ORNL based Joint Faculty (JFO's) are the same as tenured/tenure track faculty (T/TT) but apportioned relative to their allocation of effort at UT. In evaluating their productivity for annual reviews and promotions, the following guidelines shall be used:

1. Teaching shall be assessed using the same measures used for T/TT faculty. Teaching loads will be apportioned relative to the JFO's allocation of effort at UT.
2. Expectations for UT research funding and graduate student production shall be apportioned according to the allocation of effort at UT. Other measures of research productivity and scholarship such as publications, patents, and presentations at scholarly meetings are expected to be at the same level as T/TT faculty since JFO's are expected to be productive in these areas as part of their duties at ORNL.
3. Service shall be judged broadly based on service to the University, the profession, and the community. Expectations for service to the University shall be apportioned relative to the allocation of effort at UT.

## Review of Other Non-Tenure Track Faculty

For non-tenure-track faculty, the promotion process shall conform to the standards and procedures set forth in the Faculty Handbook, the Manual for Faculty Evaluation, and the Board of Trustees Policies Governing Academic Freedom, Responsibility, and Tenure (BT0006)

## Lecturers

As the primary function of a lecturer is teaching, the department head will evaluate the lecturer based on their teaching responsibilities. A typical teaching load will be 6 courses per year with adjustments made for appropriate other activities. Factors impacting the evaluation will include SAIS scores (see metrics above), lecture/lab course developments/improvements, departmental outreach as well as other service to the department. Other activities can include proposal development for undergraduate
research or curricular development. Promotion of lecturers will be handled in accordance with the College of Engineering Guidelines for the Promotion of Lecturers, Guidelines for UTK Lecturer Promotion Process, and the Tickle College of Engineering Peer Teaching Review Procedure.

## Research Faculty

Research faculty will be evaluated by the primary research advisor and approved by the department head. Promotion of research faculty will be in accordance with the The College of Engineering Guidelines for the Promotion of Research Faculty and voted on by all tenure and tenure track faculty.

## ARTICLE IV RECOMMENDATIONS FOR NEW APPOINTMENTS

Recommendations for an appointment of a tenure-track faculty member will be made in accordance with the Faculty Handbook and will be preceded by a thorough search and careful selection. As part of this process, a search committee will be appointed to identify candidates to be considered for interviews. In case of an opportunity hire, the search committee will be responsible to collect reference letters and schedule an interview just like in the case of a regular search. The tenured and tenure-track faculty will evaluate and vote on the candidates and make a recommendation to the department head. No vote on an appointment shall be taken until all voting members of the Faculty have been notified of the candidacy.

For non-tenure-track faculty, the promotion process shall conform to the standards and procedures set forth in the Faculty Handbook, the Manual for Faculty Evaluation, and the Board of Trustees Policies Governing Academic Freedom, Responsibility, and Tenure ( $B T 0006$ ). Non tenure-track lecturer appointments will be made by a vote of all tenure and tenure track faculty as well as other lecturers and approved by a two thirds majority.

Non tenure track research professor appointments will be voted on by all tenure and tenure track faculty and approved by a two thirds majority.

## ARTICLE V DEPARTMENT HEAD

A recommendation to the Dean of Engineering concerning continuation of the appointment of the MSE Department Head shall be made every five years by the tenured and tenure track faculty; or at such other times when at least two-thirds of the tenured and tenure track faculty deem that such a recommendation is necessary.

## ARTICLE VI AMENDMENTS OF BY-LAWS

The by-laws of the Department of Materials Science and Engineering may be amended, after all faculty have had an opportunity to present their views on the proposed changes, by a two-thirds majority of the following: tenured and tenure track MSE faculty. Any proposed amendments must be circulated in writing to the tenured and tenure track faculty at least two weeks before the date on which they are to be voted.

