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Preparing Graduate Students to Make Oral Presentations

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Abstract – Establishment of a course aimed at honing the skills of graduate students studying polymer science and technology at the Institute of Macromolecules of Federal University of Rio de Janeiro (IMA/UFRJ) in making oral presentations, in Portuguese and other languages.

The Institute of Macromolecules (IMA) is a part of Federal University of Rio de Janeiro (UFRJ). Besides its research activities, it is responsible for the graduate program in polymer science and technology, offering advanced specialization, MSc and PhD degree programs. Other teaching activities are also performed, such as participation in the undergraduate courses offered by other units of the university and a wide range of extension courses. Various graduates of the IMA, including the authors of this study, are on the faculties of various Brazilian universities and foreign institutions as well. The training of all these students in the technology area previously did not include any specific classes on techniques of oral presentation of research works at seminars or other events, or to develop teaching skills. These skills were largely left to the students' own devices. Although a large percentage of these people manage to develop excellent ability in speaking in front of groups, others become outstanding researchers but do not excel at self-expression and public speaking.

In recent years, the teaching staff of IMA/UFRJ has been noting that the fraction of students able to develop their verbal ability on their own has been declining gradually. Based on the assumption that this difficulty mainly rests in timidity, low self-esteem and a level of knowledge below that necessary to support self-confidence, a course was recently created, lasting two hours a week for two months, focused on two main points: (1) to stimulate reading the largest possible amount of bibliographical material on a determined subject, and (2) to teach techniques of presentation and stimulate enjoyment of making oral presentations. There are two class hours a week, are accompanied by a good deal of outside activities. Although errors in interpretation of texts and presentation are corrected by the professors, the students are graded not only on these aspects, but also on their participation in the reading and presentation activities. This grading scheme seeks to stimulate the students to read and present what they have learned as often as possible, to give them a chance to develop their reading and oral presentation and lose their fear of "having to be perfect." This "having to be perfect" criterion is required in another course, called Seminars, in which the students must write a monograph on a determined subject, based on a thorough review of the literature, and then explain it in a fifty-minute oral presentation.

The recently implemented discipline is divided into two levels, one for master's students and the other for doctoral candidates. The master's students are oriented to start their research on a little known subject in encyclopedias available in the area. This procedure provides a foundation for the students on the theme as a whole and facilitates the choice of appropriate key words for more advanced research in scientific periodicals. Then instructions are given on how to use databases as a source of bibliographical material. The students must choose the articles that will be read and interpreted, and then presented orally after receiving training in oral presentation techniques in Portuguese. The doctoral students, besides having to read a greater number of articles in Portuguese, are also encouraged to read and present articles in English, because this is the language used in most international scientific and technical events, as well as in interactions in the global scientific community. Although presentation in other languages is not required, the students are stimulated to take language courses to acquire the fluency necessary to make oral presentations in international venues.

The first results have been very positive. The participating students have become noticeably more secure and less inhibited to defend their theses, better able to present research projects or teach classes, either in Brazil or abroad.