File

ASSOCIATION FOR WOMEN IN MATHEMATICS

AMS ELECTION SPECIAL Oct., 1978

I hope that you have held onto your AMS ballots. The current calendar for announcing the slate of candidates, etc., makes it impossible to get election news to you any sooner. Be sure to read both the statements below and the statements on the pink information sheets that come along with the ballots.

AWM and the Mathematics Action Group again sent out a joint questionnaire to the candidates for the contested offices in the AMS election. Thanks to Mary Gray for providing me with most of the questions! The answers we received from 12 of the 22 candidates appear on the following pages.

Every year, the AWM Executive Committee votes for those candidates whom they wish to support. The candidates who receive majority support are then listed in the Newsletter. This year, there was general agreement that we could not support a full slate. In fact, only three candidates received majority support. One reason is, of course, that we have different opinions on the qualifications of the candidates. Another difference of opinion was over whether or not we could support candidates who did not return answers to the questionnaire. The result was that a couple of candidates who would have been supported on the basis of their other qualifications were not supported because they did not answer us.

Candidates supported by a majority of the AWM *
Executive Committee:

Member-at-Large: CHANDLER DAVIS *

Nominating Committee: JUDY GREEN *
LIDA K. BARRETT *

Many of the AMS offices are uncontested. This is perhaps appropriate for the editorial committees. But leaving the choice of President, Secretary, and Treasurer entirely in the hands of the Nominating Committee is undemocratic at best and disastrous at worst. As a protest, against this policy, a write-in campaign for Alice Schafer for secretary is being conducted. She has had ample administrative experience. She has held many offices on the AWM Executive Committee, the latest being Member-at-Large. To cast your vote for her, write in ALICE T. SCHAFER, WELLESLEY COLLEGE. Do not check the box at the bottom of the page; it will invalidate a write-in vote.

Questions:

- What efforts should be made to increase the percentage of mathematicians who are women, black, or Hispanics?
- 2. What responsibility does the mathematics community have for training Ph.D.'s in such a way that they are employable?
- 3. What responsibility do colleges and universities have to students who come to them with inadequate preparation in mathematics?
- 4. To what extent, if any, should the American mathematical community refuse to cooperate in scientific matters with other countries which engage in egregious violations of human rights? For example, should meetings in a country be boycotted if that country denies freedom of travel to its own citizens? if it engages in systematic torture of its citizens? if it denies as a matter of state policy equality of opportunity to its citizens?
- 5. What is appropriate business for the AMS Council?

Candidates:

Vice-President: George D. Mostow, Jacob T. Schwartz

Member-at-Large: Gerald R. Chachere, Chandler Davis, Robert D. Edwards, Robert P. Gilbert, Johan H.B. Kemperman, Mark Mahowald, Bruce I. Rose, Wilfried Schmid, William P. Thurston, Karen Uhlenbeck, Daniel H. Wagner

Nominating Committee: Richard D. Anderson, Lida K. Barrett, Judy Green, Paul R. Halmos, Victor L. Klee, Jr., H.O. Pollak, Charles E. Rickart, James B. Serrin

VICE PRESIDENT

George D. Mostow

- 1. Efforts to increase the percentage of mathematicians who are women, black, or Hispanics should focus on the identification of the mathematically talented youth in these groups, the dissemination of information in such groups about careers in mathematics, and the removal of socio-psychological and economic barriers for entry into mathematical careers. This is not an easy goal to achieve, and intelligent effort must be continued over a long time period.
- 2. The mathematics community must be totally frank in informing aspiring Ph.D.'s about the economic realities that they will encounter. Mathematics departments should encourage their Ph.D. candidates to acquire skills that enhance their employability: viz, programming ability, and some familiarity with applications of mathematics in one of the physical, biological or social sciences.
- 3. Mathematical illiteracy even at the college level must be wiped out by effective programs.
- 4. In the normal course of events, the American mathematical community deals with scientific colleagues in other countries and not with the countries proper. Thus, the opportunity to register our disapproval of human rights violations in other countries are limited. I believe strongly in registering disapproval of the offending countries. A good example of such moral pressure is the recent boycott by leading French mathematicians of all official Soviet invitations until there is a reversal in the Orlov and Sharansky cases. This boycott, however, explicitly encourages undiminished mathematical interaction between individual Soviet and French mathematicians.
- 5. Any issue which seriously affects the health and welfare of mathematics or its practitioners is an appropriate subject for discussion and possible action by the AMS Council.

Jacob T. Schwartz

- 2. The employment of mathematicians rests, as I see it, on three grounds:

 A. As <u>teachers</u>, they propagate a central part of technical culture. Calculus, linear algebra, probability theory at elementary and intermediate levels are all increasingly vital to our world, and must be taught annually to hundreds of thousands of students. This is the main basis for employment of mathematicians.
- B. As <u>applied</u> (university or industrial) <u>mathematicians</u>, they provide a kind ofdir direct theoretical support to engineers, physical scientists, computer scientists, and social scientists. Because of the specialized nature of this function, the number of people in it can never be very large.
- C. As researchers in pure mathematics, they prepare for the future and contribute to what I regard as one of the most central aesthetic and spiritual endeavors of humankind. This also is the activity of a relatively small, but essential, group.

I would therefore say that departments ought to provide their most gifted students with the deepest mathematical insight of which the department disposes, even if this is at times quite specialized; but that since the numerical majority will perform as teachers rather than as researchers, an alternate education, emphasizing breadth more than depth ought to be available. An aim here should be flexibility in a teaching career; contact with subjects like computer science, probability and statistical theory, mathematical economics, mathematical biology, operations research, and traditional applied mathematics is therefore desirable.

An employment-related question that concerns me, and that seems to me to have received much less attention than it deserves, is that of the conditions of employment for part time university instructors. The mathematical unemployment picture has made it very easy to hire Ph.D. part-timers at disgracefully low salaries, e.g. \$1500 or even \$1,250 or \$1000 for a course. The persons involved want to keep up their contact with a subject they love, even at such rates of pay, while deans and chairmen have their own financial problems and drive relentlessly hard bargains. Though generally opposed to the notion that AMS should function as a trade union, I fell that a union-like stand is necessary here; for example, a stated minimum per-course rate for Ph.D.'s, which I believe could have considerable moral force.

- 3. When a school accepts a student they accept his/her strengths and shortcomings as they really are. Important shortcomings (e.g. in English exposition or mathematics) ought to be realistically recognized and addressed by solidly worked out remedial courses that are substantial without being threatening. Of course, most students who enter with this problem will not proceed very far with subsequent mathematical study (though a few may).
- 4. I believe that the AMS should continue its excellent tradition of defending the human rights of mathematicians. But I believe that the appropriate, and in most cases the only available action, is responsible exposure of injustices, firm but calm protest, and an appeal to the moral sensibility and scientific self-interest of the offender. If the offending government is without moral sensibilities, it is hard to see what can be done, since the AMS disposes of no military force, and is presumably unwilling to advocate the use of force by others. A flat-out boycott is a card that can be played only once, and may hurt oppressed mathematicians as much as or more than their oppressors. Of course, in any contact with a troubled country one must resist pressure to become a kind of temporary tool of the offending government, and if the situation becomes bad enough, this may make contact impossible. Overall, then, I would say that all cooperation should be refused only when one is entirely prevented from alleviating the bad situation with which one comes in contact.
- 1. I see no reason not to believe that scientific talent is distributed in the population without regard to race or sex. It is important for the health of mathematics that the full pool of talent be tapped. Sociological forces and traditional expectations still block this in serious ways. These forces are deep rooted and tenacious, but ought to be systematically combatted, e.g. by publicizing the achievements of eminent women or minority mathematicians. Where discrimination lingers, it ought to be responsibly but relentlessly exposed; in today's climate, it cannot survive exposure. Of course, where discrimination is shown, the AMS ought to participate actively in its exposure.

At the same time, I believe that people ought to be chosen for positions on an essentially individual basis oriented toward scientific strength (or teaching strength, in a department that as a matter of policy is more oriented toward teaching), rather than on a group basis.

MEMBERS-AT-LARGE

Chandler Davis

1. I strongly favor affirmative action to make place in the profession for groups which have been largely excluded in the past. Top-down HEW programs have done some good and should still be supported, but have the limitations of top-down reforms in general. We can achieve more by working to increase support for affirmative action in offending departments (such as my own).

- 2. The responsibility is not to tailor curriculum to market demands, because the market may be demanding the wrong mathematics. I wish we were teaching and learning more useful mathematics, and bringing pressure for creation of more jobs which would pay us to do it.
- 3. Students who want to learn mathematics at universities should be taught it! We need more student-directed teaching: teaching aimed to help students, not to select which of them can get into med school. The number of teachers required would be greater than are now on university payrolls—see Question 2. "Remedial" teaching deserves greater professional respect than it now gets.
- 4. I have supported many protests against repression in other countries. Boycotts are effective only in special circumstances, however, because they may break professional contacts which are the main means by which our mathematical sub-culture can exert influence across national boundaries. For example, I did not encourage (though I expressed sympathy with) Canadian colleagues who resigned from the AMS in protest against the US aggression in Vietnam.
- 5. Publication of mathematics, meetings, support of research, educational policy in mathematics, employment policy in mathematics, academic freedom... in short, as the deliberative body of one of the two principal US organizations of mathematicians, the AMS Council has a much wider responsibility than it has acknowledged. It can exercise the responsibility successfully only with much better contact with the membership. This means not only more democratic control over Council (e.g., nomination by petition, campaigns for election), but better contact in the course of each year's activities (e.g., through committees).

For example, the Council passed a good resolution against employers exploiting underpaid student and junior teachers to protect light teaching load of the senior staff. Membership pressure, including MAG and AWM, brought the Council to take this action. Now if more members realize the AMS weight is behind this position, it can help in local efforts to equalize pay and teaching load for non-tenured faculty.

Bruce I. Rose

- 1. It is in the interest of the mathematical community to approach this problem as part of the larger problem of improving employment opportunities and working conditions for all mathematicians. Any programs undertaken by individual universities or government which increase the professional security and professional development of young mathematicians should be applauded and encouraged. Exploitative employment practices (such as continual part-time hiring of faculty spouses) should be discouraged. Inter-departmental, shared intra-departmental and part-time faculty appointments should be encouraged.
- 2. For terminal B.S. and M.S. students, this soulld be a major objective of the department. Ph.D. students should be clearly informed of the existing employment situation.
- 3. When a university admits a weak student it ought to supply him or her with the appropriate level of instruction. However, this may make it necessary for that student to spend five or six years working to earn an undergraduate degree.
- 4. I strongly agree with the focus of this question. However, I do not think a "check-list" approach can be developed. Each situation must be handled separately. I think it is too easy to be self-righteous in such a situation, especially when the personal cost is quite small. I think our focus in these situations should be the repression, etc. of mathematicians rather than generic repression, etc. (We mathematicians are a comparatively small group not well-understood by the general public. If we don't care about the welfare of mathematicians, who will? Also we are maximally effective in this context.) This situation is further complicated in that at times boycott actions most hurt the people we want most to help (so I have been told by a Russian/Israeli mathematician).

William P. Thurston

- 1. I would very much like to see a greater percentage of women, black, and Hispanic mathematicians, but I'm not sure what actions by mathematicians will change the situation very much. To some extent, preference to under-represented groups in graduate admission can help, but the real problem is the general culture it is accepted only among certain small classes of people to take pleasure in fooling around with mathematical sorts of things. This situation could be greatly improved by better teaching of mathematics early in life. See (2).
- 2. I believe that knowledge and understanding is a goal worth pursuing for its own sake. We should not let economics rule our lives. We should try to make graduate students aware of the alternatives they face (as we see them) and give them opportunities to choose how to meet them, sometimes by studying subjects which make them more employable.

I also think there are many places where people with better mathematical training of any variety, can be useful to society - for instance, in community colleges, high schools and even (especially) in elementary schools. Though economically painful to mathematicians, the employment situation may be healthy for society and for us as individuals. See (1).

- 3. I think we should meet the needs of students who want to learn mathematics but have poor backgrounds, through special courses and sympathetic teaching.
- 4. I believe it is important to try to maintain a worldwide mathematical community, by keeping communication and contact as free as possible between mathematicians of different countries. Thus, it seems to me that boycotts are antiproductive. I think what we should do is to express freely our opinions about such issues as freedom of travel, torture, and equality of opportunity to inhabitants of a country.
- 5. Any matter of common interest to mathematicians is appropriate business for the Council. What is of common interest changes with the attitudes of mathematicians, so it does not seem reasonable to put a priori restrictions on the agenda.

Daniel H. Wagner

- 1. I would restate the desideratum as removing barriers to entry to or progress in the profession on the basis of sex, race, or other extraneous factors. Much progress has been made. Laws have gone as far as they should. Important past and future progress centers on individual attitudes. One can best contribute by exhibiting attitudes oneself that are free of extraneous prejudice.
- 2. The main responsibility for training Ph.D.'s in employable ways is to emphasize quality. All math students should learn some computing. Active support of industrial internships of, say, three months is extremely desirable from employability and pedagogical standpoints. Additional views are in my MONTHLY article, Nov. 1975.
- 3. They should offer such students an opportunity to obtain adequate preparation in mathematics.
- 4. Full cooperation in purely scientific matters should be maintained with mathematicians of all nations. International professional meetings (and other cultural exchanges) help to break down barriers and misunderstandings among peoples. Boycotts would be completely counter productive.
- 5. The following criteria should be met by a problem considered by the AMS Council: (1) the problem pertains to the mathematics profession as such, (2) the AMS has a reasonable prospect of making an impact on the problem, and (3) it is not clear that the problem is better dealt with by another organization.

Robert P. Gilbert

First, I am sympathetic to the idea of increasing the percentage of mathematicians who are women, blacks, or Hispanics. How this may be done on a national scale is somewhat difficult to decide. On a personal level, I am giving a small seminar for women students who are returning to college after a number of years absence from the academic scene. As Director of our Institute I am responsible for monitoring the special programs in Applied Mathematics and Operations Research. These are interdisciplinary programs at the graduate level which require the students to complete an internship in industry or a government laboratory. The aim of the programs is to provide a "professional" education and prepare the students to be employable. These programs have been particularly attractive to students.

A point which may be of interest to your group is that about half of the students in the Applied Math program are women. I can only assume that women find the atmosphere here to be conducive to furthering their educational goals. I would be pleased if this information were made available to the AWM in the anticipation that women students contemplating graduate study in mathematics would consider the University of Delaware. With this in mind I enclose a copy of our Institute brochure. Further information concerning the various graduate programs may be obtained by writing directly to me.

I believe the above answers the questions (1) and (2), namely women and minorities must be directly encouraged to enter programs, and then, once there, they must be supported and encouraged. To make Ph.D.'s employable something other than the classical mathematical training must be provided, for example, something along the lines of our interdisciplinary programs mentioned above. The mathematical community should be committed to doing this.

- 3. I suppose colleges have some responsibility to students with inadequate preparation. I would prefer, however, to apply pressure on the high schools to do their jobs properly.
- 4. I prefer not to make the AMS into an international political force. I have traveled to the Soviet Union on several occasions to give invited lectures and also the German Democratic Republic. I have colleagues there whom I regard as friends and who value very much scientific contact with the West. I do not see cutting off relations with them as doing anything other than punishing innocent people for the misdeeds of their leaders. This type of thinking could lead also to many people from Western Europe refusing to visit the U.S. (because of our involvements in Vietnam and Chile, for example).
- 5. Anything that has to do with either mathematics, mathematicians, and the profession. This is pretty open-ended but a more precise statement would lead to several more pages.

NOMINATING COMMITTEE

Richard D. Anderson

- 1. I am in favor of efforts to interest more members of the groups you identify in careers in mathematics and science with particular emphasis on the junior high school level where many members now opt out. From one-fourth to one-third of my own Ph.D. students have been women. I presently serve on the NSF Advisory Committee on Minority Programs. Ultimately emphasis should be on fully equal opportunities for all individuals, not on group membership.
- 2. My record and statements as a past chairman of the AMS Committee on Employment and Educational Policy (CEEP) is consistent with the view that the mathematics community should be fully aware of employment opportunities (or the lack thereof) in training and advising students in the mathematical sciences.

- 3. As a faculty member at a university which admits all students with high school diplomas and as a member of the MAA Committee on the Placement Testing Program, I fully subscribe to the need for colleges and universities to face the issues inherent in open admissions, with special courses and programs for inadequately prepared students. But final graduation from college should depend only on demonstrated performance at the traditional level of accomplishment.
- 4. My own view is that mathematics is international and universal in nature and that we should cooperate with mathematicians everywhere in their pursuit of mathematics. Such cooperation should not be dependent on the vagaries of the government under which our fellow mathematicians live. I personally would like to see mathematics divorced from politics.
 - 5. See my statement prepared for the AMS ballot.

Lida K. Barrett

- 1. Affirmative action measures should be taken. There is a distinction between affirmative action and equal opportunity. Equal opportunity includes listing positions openly, being sure that all have opportunity to apply, etc., and then the selection of the best qualified candidate. Affirmative action means taking further steps to see that qualified women, blacks, or Hispanics are sought out and encouraged to apply for a position. It is my conviction that in this way qualified applicants can be hired and a reduction in quality in order to add minorities is not necessary.
- 2. Mathematics should continue to train Ph.D.'s in pure mathematics who may have a difficult time in the employment market. These individuals should be informed of possible difficulty in finding employment but if they enjoy mathematics, are good at it, and desire to complete a doctorate, they certainly should be encouraged to do so. However, given the realities of the job market, the advising should also include information on supporting courses in numerical analysis, computer science, statistics, or in applied fields that would help individuals be more marketable, not only in the non-academic world, but also in the academic world. Faculty in departments with graduate programs should be well informed of the current state of the job market and current breadth of employment opportunities.
- 3. Colleges and universities who admit students into a clearly established program can expect to have students with appropriate preparation. If students with inadequate preparation are recruited by an institution, then it is only fair that the institution provide courses that meet them at their level of expertise.
- 4. This question has no simple answer. Far be it from me to try to establish a single policy for the wide variety of situations and for the whole American mathematical community. Each individual should be aware of what is happening, should try to be informed as to what might be helpful, not only in ways of a protest but actions that can cause change for the better to occur.
- 5. Clearly the American Mathematical Society is an organization whose primary raison d'etre is mathematics. The primary obligation of the council is to see to it that opportunities continue to grow for the creation of mathematics, the publication of results, and the use of the latest mathematics in an appropriate way. Also, that the quality of mathematics in these matters is of the highest level of excellence possible. However, mathematics is not created in a vacuum mathematicians should be informed and knowledgeable about concerns such as those addressed above and be able and willing to take responsible actions as individuals. The AMS should take a stand as an organization in cases where a general consensus can be reached.

Judy Green

- 1. These percentages are not likely to increase if we do not maintain serious affirmative action programs at all levels. We should try to put the recruitment of students and faculty in the hands of people who have internalized the objectives of affirmative action programs rather than those who regard them as something to be circumvented.
- 2. What makes mathematicians employable is the existence of jobs for them. I am skeptical as to whether the current trend toward broadening graduate education in the direction of applied mathematics, statistics and computer science will expand the job pool for mathematicians more than slightly. The employment problem is primarily a political and economic issue rather than an educational one. The support of education at all levels has become politically unfashionable but to tailor programs in acceptance of this is extremely dangerous.
- 3. At least all publicly funded colleges should offer programs designed to remedy shortcomings in the precollege education of their students. While it is clear that not all of these courses should carry college credit, they cannot succeed unless they are given at least the same priority with respect to planning and staffing as any other course offerings.
- 4. This is not the kind of question one can answer categorically. I have advocated, and continue to advocate, such an attitude as you describe toward South Africa because of the racial policies of its government. I do not on the other hand believe that a comparable attitude toward the Soviet Union is called for by that government's restrictions on travel by its citizens.
- 5. Anything that concerns mathematics or mathematicians is appropriate business for the AMS.

Victor L. Klee, Jr.

- 1. Efforts should be made to combat the impression, apparently held by many people, that mathematics and professions that use mathematics are somehow "unsuitable" for members of certain groups, or that members of these groups do not do well in mathematics. The WAM (Women and Mathematics) program is making an effective effort on the high-school level, and funding is now being sought for a college-level program formulated by the AMS-MAA-SIAM Joint Committee on Women (of which I am a member).
- 2. Both undergraduate and graduate students in mathematics should be made fully aware of the dim employment prospects facing those who are trained only in pure mathematics, and they should be encouraged (in many cases, required) to take some applications-oriented courses. More detailed proposals for overhaul of the mathematics curriculum are being prepared by the National Research Council's Committee on Applied Mathematics Training (of which I am a member) and by the MAA's CUPM Panel on Curricula in the Mathematical Sciences. If followed, these recommendations will have their most direct effect on undergraduate programs, but the resulting change in the spirit of those programs would also, I believe, make itself felt in Ph.D. programs and would therefore lead to greater employability of Ph.D.'s in mathematics.
- 3. This responsibility varies widely according to the type of institution. At one extreme are the most prestigious research-oriented institutions. It is appropriate for them to have service courses that attempt to compensate for weak high school mathematics preparation, but even this should be done sparingly to avoid compromising the contributions that these institutions are uniquely qualified to make. At the other extreme are community colleges that have a policy of "open enrollment". They are often forced to teach remedial arithmetic, and that is appropriate if it's what their students really need. Most large state universities lie somewhere between these two extremes.

- 4. To refuse cooperation, and to make known the reasons for one's refusal, provides an opportunity to protest against pernicious governmental practices and policies. Are such protests likely to be effective in changing the practices and policies? Will cooperation be more beneficial to the government per se, or to fellow mathematicians who may be blameless? One's actions should be guided by the answers to these questions, and the answers are likely to vary from case to case.
- 5. Appropriate business for the AMS Council is no doubt specified in the AMS By-Laws and Charter. Lacking copies of these documents, I can nevertheless surmise that the central business of the AMS (and hence of its Council) is declared to be the support, encouragement, and promulgation of mathematical research. I wholeheartedly support this emphasis. I also recognize that, within the framework supplied by the documents mentioned, there are various opinions of the extent to which the Council should concern itself with questions that deal more with the society in which we live than they do with mathematics per se. I am sympathetic to these broader concerns but feel that, in the conduct of AMS business, they must and should remain subordinate to matters more directly related to mathematical research.

James B. Serrin

- 1. The question is not so much how to increase the percentage of mathematicians who are women or who come from minority races as to find good mathematicians of all kinds, with no artificially inserted barriers to their training or recruitment. In one sense I am myself a minority in the mathematical world, since I came from a family that lived in the Midwest for four generations—on the other hand there were no barriers raised to my becoming a mathematician, outside of the initial financial problems of working my way through school. At the University of Minnesota, similarly, there are no barriers placed on becoming a mathematician, either at the undergraduate level or the graduate level. I cannot answer the same at the national level, because of lack of knowledge.
- 2. The mathematical community has always had a responsibility for giving Ph.D. candidates the best possible training, and I have always maintained that we should keep this responsibility in mind. In the future, however, we may have to consider how we must train Ph.D.'s if they are to be employed in community colleges. This and other examples of the changing job market, of course, must always be in our minds, though I do feel that first and foremost we must train our students to think clearly about good mathematical problems.
- 3. The answer here probably depends on the college in question. In Minnesota, for example, we are building a large number of community colleges which may or could serve precisely the purpose of remedying inadequate high school education. At the University level such a goal might be valid, but it would require at the same time an administrative dilution of our efforts in career and professional mathematical training. Balancing these various requirements is not a matter which can be handled in a short statement universally applicable to everyone's circumstances.
- 4. The human rights issue is almost impossible to discuss in a letter. As an example of the diverse opinions which must be taken into account, I included herewith two letters and a long paper which recently appeared in <u>Science</u> (Aug. 11, 1978), showing the extreme complication of the problem.
- 5. The AMS Council must be concerned with committees, meetings, prizes and awards, books, and expository writing. It must be concerned with maintaining an organization reflecting the health of American mathematics and it must place those matters first. By and large, if the Council is to consider political matters these matters must be those that affect mathematics <u>directly</u>, and a proven case should be made, for we are a professional group and not a political party or politically motivated.

Gerald R. Chachere (Response received just at press time.)

- 1. Elimination of existing racist and sexist procedures and policies will increase the percentage of non-white Americans and woman mathematicians. A recent article in the NOTICES listed the ways in which mathematics departments use non-whites and women to make it seem that the institution has a legitimate affirmative program for their faculty. Graduate school is not much better. The AMS should take an active role to eliminate the oppressive actions among its institutional members.
- 2. The AMS should take an active role in fostering education and scholarship in more practical area of mathematics. Employment opportunities will increase through industry and through mathematicians teaching mathematics courses now taught by other departments. All hints of the idea that mathematicians should not teach elementary or nontraditional mathematics should be abandoned.
- 3. Mathematics departments of colleges and universities should take responsibility for students with inadequate preparation in mathematics. The facts are these: a large number of inadequately prepared students are admitted to colleges and universities and they should be able to receive mathematical education; mathematics departments are best prepared to teach mathematics. Also, if departments take this responsibility, our employment situation would improve.
- 4. There are probably few countries whose government does not systematically violate the human rights of some portion of its residents. I feel that the American mathematical community's degree of non-cooperation should be in proportion to the degree to which human rights are violated. This policy must necessarily be an issue by issue matter, but our actions should be consistent.
- 5. Anything that effects the professional life of members of the mathematical community should be the business of the AMS. In particular the following articles of business should be addressed: elimination of racism and sexism in the community, employment, and blind refereeing.

JOB ADS Univ. of Maryland. Asst. Prof. in Applied Mathematics beginning Aug., 1979. New or recent PhD required. Asst. Prof. in mathematics & statistics. Substantial research record necessary. Deadline Jan., 1979. Contact Prof. W.E.Kirwan, Chmn., Dept. of Math., Univ. of MD. College Pk., Md. Mich Tech. Univ. Statistician (Fall 1979); Computer Scientist (Nov., 1978 or later) PhD's desirable Write Zane Motteler, Mathematical/Computer Sciences, Mich. Technological Univ., Houghton MI 49931 Ohio State Univ. We need at all professorial ranks mathematicians working in Numerical Analysis, Partial Differential Equations & Applied Mathematics. Send applications to Prof. Joan R. Leitzel, Dept. of Mathematics, 231 W.18th Ave., Columbus, Ohio 43210 Univ. of Pennsylvania. Asst. or Assoc. Prof. of Statistics beginning 9/1979. PhD required. Send curriculum vitae & names of 3 references to Prof. D.F. Morrison, Chmn., Dept. of Statistics, Wharton School, Univ. of Penna., Philadelphia , Penna. 19104. Vassar College. Dept. of Mathematics: 2 three-year renewable asst. prof. positions & 1 one-year non-renewable position starting 9/1979. PhD required. Salary around 14,000. Send resume to Prof. David Merriell, Chmn., Mathematics Dept., Vassar College, Poughkeepsie, N.Y. 12601. University of Illinois, Urbana-Champaign. Assistant professorship in partial differential equations. PhD required. Salary 17,000. Deadline date 2/2/79. Several visiting lectureships beginning 8/21/79 (Temporary positions of at most 2 years duration.) PhD in Mathematics required. Salary 15,000. Deadline 2/2/79. Write Paul T. Bateman, Dept. of Mathematics, University of Illinois, Urbana, IL 61801 or Phone 217-333-3352.

State University of New York (SUNY) - Buffalo. Chairperson, Dept. of Computer Science (summer, fall, 1979). Applicant needs outstanding record of intellectual distinction & achievement. Contact Prof. D.G.Lainiotis, Chairperson, Computer Sci.Chairperson Search Comm., Dept. of Elec. Engineering SUNY at Buffalo, Bell Hall, Amherst, N.Y. 14260.

2 faculty positions (at any level) to begin 9/1979. PhD's required. Contact Stuart C. Shapiro.

2 faculty positions (at any level) to begin 9/1979. PhD's required. Contact Stuart C. Shapiro, Acting Chmn., Dept. of Comp. Sci., SUNY at Buffalo, 4226 Ridge Lea Rd., Amherst, N.Y. 14226.

MEMBERSHIP APPLICATION	The AWM membership year is October 1 to October 1.
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