

Press Release

COMAP Announces Winners of the 10th Annual Mathematical Contest in Modeling

A national panel of judges, including representatives from the Operations Research Society of America (ORSA) and the Society for Industrial and Applied Mathematics (SIAM), is pleased to announce the six outstanding winners of the 1994 Mathematical Contest in Modeling. The teams are: Beloit College, Beloit, WI; Grinnell College, Grinnell, IA; N.C. School of Science and Math, Durham, N.C; University of Calgary, Alberta, Canada; University of North Carolina, Chapel Hill, N.C; and University of Toronto, Ontario, Canada. ORSA designated Grinnell College and University of Toronto as the winning teams for their prize; SIAM chose N.C. School of Science and Mathematics and University of N.C. as their winners.

The 1994 MCM had 315 teams representing 198 schools in 10 countries: Bulgaria, Canada, China, Hong Kong, Ireland, Latvia, Lithuania, South Africa, United States, and Zimbabwe. The contest lasted four days, from Friday, February 18 to

Monday, February 21, in which the teams, up to three undergraduates, were asked to research and find a solution for one of two open-ended modeling problems. Modeling problems offer no "correct" answer; the idea is to arrive at an "optimal" solution based on the model you present. This year, problem A was to analyze the temperature variation of a concrete slab floor to determine if the temperature averaged can be maintained within a prescribed comfort zone throughout the year; problem B was to find an optimal schedule and the makespan for a given company's communications network, again as the network changed, and also as it expanded. The MCM differs from other mathematics contests in that it is the only international contest in which the teams of students work together to find a solution; other contests either have the students work alone, or have individuals work alone and combine scores for a team total.

Solomon Garfunkel, Executive Director of the contest sponsor, the Consortium for Mathematics Its Applications (COMAP), Inc. described the importance of this year's contest questions: "This year, student teams were challenged with important problems that affect the environment and the way we use computers to work together. Their work involved variables that ranged from human choice to physics, and they used the structured communication and organization of mathematics to tie these disparate factors together. These students, and the papers they prepared, are the best ambassadors we could choose to bring everyone a little closer to the excitement and discovery of mathematics."

Incorporated in 1980, COMAP, Inc. is a national, non-profit, organization that produces mathematics curriculum materials which demonstrate the real-world contexts of mathematics. COMAP publishes three quarterly publications, and develops curriculum units in print, video, and software that provide educators, K–Undergraduate, with materials that make learning and teaching mathematics challenging and fun.

Statistics

- 315 teams from 198 schools in 10 countries entered.
- A total of 58 teams placed either outstanding or meritorious (19%); 80 teams placed honorable mention (25%); and 177 teams were successful participants (56%).
- 257 teams had at least one woman team member (82%); 47 teams had 2 female members (15%); and 11 teams were all female (4%).
- 292 teams were from four -year colleges (93%) and 21 teams were from two-year colleges (7%). Two teams were from high schools, Thomas Jefferson H.S. for Sci. & Tech., Alexandria, VA; and Westminster Schools, Atlanta, GA. (meritorious and successful participant.)

Major funding for the 1994 MCM is provided by the National Security Agency

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