# 1979 GREAT LAKES REGIONAL MEETING Rochford College AMERICAN CHEMICAL SOCIETY

June 4-6, 1979

MONDAY MORNING June 4, 1979

#### Symposium on the Application of Piaget's Theory to the Teaching of Chemistry

- B. Z. Shakhashiri, Presiding
- Introduction, Bassam Z. Shakhashiri, University of Wisconsin-Madison 9:00 -
- 9:10 -All the Way With Piaget? David W. Brooks, University of Nebraska-Lincoln
- 9:40 -Discussion
- 9:45 -A Tempest in a Pottage of T. Henry A. Bent, North Carolina State University
- 10:15 -Discussion
- 10:20 -Applications of Piaget's Theory to the Organic Chemistry Lecture Hall. Richard Steiner, University of Utah
- 10:40 -Discussion
- 10:45 -Learning Cycles in General Chemistry: Integrated Lectures and Laboratories. D. M. Whisnant, Northland College
- 11:05 -Discussion
- 11:10 -Combining Power: A Ghost from the Past. J. Dudley Herron, Purdue University
- 11:30 -Discussion
- 11:35 -Effect of Using Models on Chemistry Achievement According to Piagetian Level. D. L. Gabel and R. D. Sherwood, Indiana University
- 11:55 -Discussion

# Symposium on the Application of Piaget's Theory to the Teaching of Chemistry

- B. Z. Shakhashiri, Presiding
- 1:30 Helping Concrete and Formal Students Understand Formal Chemical Concepts. C. R. Ward, Purdue University
- 2:00 Discussion
- 2:05 Gagne Instead of Piaget. <u>W. D. Smith</u> and N. C. Gill, Illinois State
  University
- 2:35 Discussion
- 2:40 Panel Discussion
- 3:30 Adjourn

#### Symposium on Laboratory Instruction in Undergraduate Chemistry

- B. Z. Shakhashiri, Presiding
- 9:00 Introduction. Bassam Z. Shakhashiri, University of Wisconsin-Madison
- 9:10 To Supplement or to Supplant... Ay, There's the Rub! <u>Jerry A. Bell</u>, Simmons College
- 9:40 Discussion
- 9:45 Freshman General Chemistry Laboratory Why and How? <u>W. Hutton</u>,
  S. A. Heideman, Iowa State University
- 10:10 Discussion
- 10:15 A New Approach to Freshman Chemistry Laboratory. P. G. Rasmussen,
  R. L. Hough, and W. M. Butler, The University of Michigan
- 10:40 Discussion
- 10:45 Laboratory Instruction In the Two-Year College. <u>T. Y. Susskind</u>,
  Oakland Community College, Auburn Heights Campus
- 11:00 Discussion
- 11:05 Laboratory Instruction at a Vocational-Technical College. <u>David B. Shaw</u>,

  Madison Area Technical College
- 11:20 Discussion
- 11:25 A One Credit-Hour Inorganic Laboratory Course The Reason Why.

  D. A. Davenport and R. A. Walton, Purdue University
- 11:50 Discussion

## Symposium on Laboratory Instruction in Undergraduate Chemistry

- B. Z. Shakhashiri, Presiding
- 1:30 The Organic Chemistry Laboratory Why and How. <u>Jerry R. Mohrig</u>,

  Carleton College
- 1:55 Discussion
- 2:00 The Core Laboratory Program at University of Illinois at Urbana-Champaign. Peter Beak, University of Illinois
- 2:25 Discussion
- 2:30 Exploiting the Equilibrium/Analytical Interface. R. W. Ramette,
  Carleton College
- 2:55 Discussion
- 3:00 The Role of the Physical Chemistry Laboratory Course. C. D. Cornwell,
  University of Wisconsin-Madison
- 3:25 Discussion
- 3:30 Computer-Aided Experimentation in the Teaching Lab. Steve Engh and K. L. Ratzlaff, Northern Illinois University
- 3:45 Discussion
- 3:50 Use of Video Tapes for Laboratory Instruction in General Chemistry,

  In Conjunction with an Open Lab Format. Fred H. Redmore, Highland

  Community College
- 4:05 Discussion
- 4:10 One Semester Laboratory Program in General Chemistry. Thaddeus C.

  Ichniowski and Daniel A. Liebman, Illinois State University
- 4:25 Discussion
- 4:30 An Inorganic Laboratory Experiment Involving Photolysis, LC, and IR.

  Elroy W. Post, University of Wisconsin-Oshkosh
- 4:45 Discussion

## Symposium on Laboratory Instruction in Undergraduate Chemistry (cont'd)

- R. R. Roskos, Presiding
- 9:00 Three More Open-Ended Organic Laboratory Experiments. Kenneth E. Kolb,
  Bradley J. Helmer, and Kurt W. Field, Bradley University
- 9:15 Discussion
- 9:20 Natural Product Synthesis in the Undergraduate Organic Chemistry

  Laboratory. Paul F. Schatz, University of Wisconsin-Madison
- 9:35 Discussion
- 9:40 Spectrophotometric Determination of the Solubility Product of Copper Chromate in a Freshman Laboratory. E. S. Scott and N. F. Phelan, Ripon College
- 9:55 Discussion
- 10:00 Break