

## PLASTICS COMPOSITES TECHNOLOGY CURRICULUM REVIEW COMMITTEE

July 11, 1989

Those Present: Daniel E. Adam, Lord Corporation Frank Beafore, Dow Automotive/SPI R. D. Campbell, PPG Ind./S.P.E. Colleen Corbeau, Hedwin Corporation Bob Dubensky, Chrysler Barbara Einhardt, O.C.C. Darren Erspamer, Coop Student (Hoechst Celanese) Jake Fenrick, Dupont Jack Fillmore, Hoechst Celanese Ray Finocchio, PPG Ind. Paul Graves, Dow Chemical Darl Haagen, Hedwin Corporation Chuck Hetter, Williams International Donald E. Jay, Chrysler Mike Kidd, Williams International Phil Palmer, Ashland Chemical Jim Peraro, Detroit Testing Lab/Soc. of Plastics Eng. Bill Rose, O.C.C. Dean Runk, Cincinnati Milacron Ralph Salansky, Creative Ind. Group Ray Sands, O.C.C. Ruth Springer, O.C.C. Carol F. Stencel, O.C.C. Gus Zielinski, Cincinnati Milacron

Following dinner, Dr. Bill Rose welcomed the group to the Auburn Hills Campus and asked each person to introduce him/herself. Following these introductions, Barbara Einhardt explained the curricular materials contained in the packets which each member had received. Dr. Carol Stencel gave a brief explanation of the Business and Professional Institute and its training programs, which currently number 58. She stressed the value of industrial partnerships to the College because of the prohibitive costs of developing and maintaining up-todate laboratories.

Dr. Rose then presented the proposed Plastics Composites Technology Curriculum, Needs Assessment, and Purposes and Functions of Advisory Committees. He stated that the Mission Statement, Goals, and Curriculum are proposals, subject to change following discussion by this group and further review. He emphasized the importance of industrial partnerships in order to keep the program current. He also mentioned the possibility that the O.C.C. program be designed to complement the Plastics program at Macomb Community College.

Don Jay spoke from the viewpoint of Chrysler Motors of the need for this type of program. He stated that O.C.C. is an excellent site for this program because of its extensive design facilities as well as the manufacturing capability in the CIM workcell.

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Bob Dubensky provided detail about the proposed curriculum and options of Design, Processing, and Computer Integrated Manufacturing.

Dr. Rose then asked for questions and comments from the group. A spirited discussion followed for approximately two hours. Guests voiced their individual suggestions and/or concerns regarding the program:

It was suggested that, in addition to the design background, students must be taught how to validate the work done on the computer. Bob Dubensky responded that, according to the current proposal, this need will be met through the work students will do in coop programs with our industrial partners at various plastics facilities in the area.

It was suggested that PCT 250 - SPC Principles and Integration into the Plastic Product Design Process - should include problem solving techniques to work out problems in the manufacturing cycle, team development and hands- on exercises regarding decision-making techniques.

• A strong point was made that the program should include a sound foundation of what is a polymer and a solid understanding of the curing process. It was suggested to include more theory of plastics and rheology.

A suggestion was made that organic chemistry needs to be added to the two semesters of general chemistry.

It was suggested that specialized Plastics Chemistry and Plastics Physics courses be included in the curriculum. Dr. Rose responded that this would require too many prerequisites for an Associate Degree program. This might be more appropriate on the graduate degree level.

A question was raised as to whether the courses would be transferable. Dr. Rose responded that the program will be articulated for transfer to a fouryear program.

There was discussion about the title of the program. It was suggested that the word "Composites" be dropped from the title and that the word "Design" be added. A suggested new title was "Plastic Product Design Technology."

A question was raised concerning what jobs graduates of this program will be prepared to do. This seems to be somewhat unclear. It was felt that the Mission Statement needs to include a clear explanation of this important matter.

It was suggested that the advisory committee for this program should include representatives from companies that will be likely to be hiring its graduates. It should include representatives of large companies such as ITT, Budd, and Huron Plastics. Plastics Composites Technology Curriculum Review Committee July 11, 1989 Page 3

A question was raised as to whether we are proposing to give students an indepth approach or a brief overview of the subject area. It seems that these courses are adequate if our goal is to give a brief overview. There is a need to bring together the three areas of materials, process, and design, so the student sees how these aspects interface in product design. There is also a need to consider the area of economics.

In conclusion, Dr. Rose thanked the participants for their interest in the program and their suggestions. He stated that the O.C.C. planning committee will meet to review the suggestions made by the group. He reiterated the need for industry representatives to serve on the advisory committee for this program and asked that those interested in doing so please contact him.

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