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Publications of the NASA CELSS (Controlled Ecological Life Support Systems) Program

Patricia A. Dufour, Judy L. Solberg,
and Janice S. Wallace

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**Publications of the NASA CELSS
(Controlled Ecological Life
Support Systems) Program**

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and Janice S. Wallace

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Washington, D.C.*

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Foreword

The CELSS (Controlled Ecological Life Support Systems) Program, within the Office of Space Science and Applications of the National Aeronautics and Space Administration (NASA), was established in 1979. The purpose of this program is to investigate the bioregeneration of food, water, and oxygen, with recycling of all wastes produced in the system, in order to maintain humans on long-term space missions independent of the need for resupply from Earth. Research supported by this program is divided into the following broad areas: 1) human requirements; 2) food production; 3) waste management; and 4) system management and control.

The arrangement of references in this bibliography follows the four divisions of research described above. Articles are listed alphabetically by author under the research area with which they are associated. Publications from 1979 to 1985, which are the result of research supported by the CELSS Program, have been included. Some references published prior to 1979 that involve background research for the development of the CELSS Program have also been included. This listing is not complete; it only includes references identified and entered into the Life Sciences Bibliography Data Base of The George Washington University as of May 1985. The majority of 1985 references identified during the preparation of this report were in press and will be included in the next CELSS bibliography.

Our intent in compiling this bibliography is twofold. First, we would like to provide the scientific community with a list of current publications resulting from research pursued under the auspices of NASA's CELSS Program. Secondly, we hope to stimulate the exchange of information and ideas among scientists working in the different areas of the program. We have identified for each publication, by asterisk, the author (principal investigator) participating in the program.

We wish to acknowledge the assistance of James H. Bredt for overall direction, of April Commodore Roy for data entry, and of the CELSS principal investigators for furnishing their reprints.

Table of Contents

	Page
Foreword.	iii
I. Human Requirements.	1
II. Food Production.	5
III. Waste Management.19
IV. System Management and Control.27

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