

# **Third International Conference on Chemical Vapor Deposition 1972**

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**Editor:**

**F.A. Glaski**

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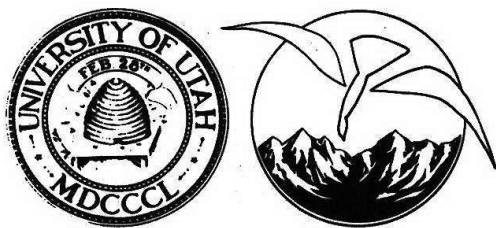
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Proceedings Of  
**THE THIRD INTERNATIONAL  
CONFERENCE ON  
CHEMICAL VAPOR DEPOSITION**

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Edited by  
F. A. Glaski



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## PREFACE

Chemical Vapor Deposition (CVD), the process of obtaining solid materials in various forms by chemical reaction of gaseous precursors, has continued to find new applications, and has become of increasing importance in established applications. For example, since the Second International CVD Conference, sponsored by the Electrochemical Society in May of 1970, the use of titanium-carbide-coated machine-tool inserts has seen particularly rapid growth. Indeed, this application of CVD represents one of the milestones in the history of metals fabrication.

So widespread was the interest in TiC coatings that an entire session on the subject was arranged for this Third CVD Conference. We are fortunate in having as chairman of that session, Dr. Wilhelm Ruppert, who, through his work at the Metallgesellschaft, was the first to recognize and apply the superior wear resistance of TiC coatings on metal working tools.

In addition to titanium-carbide coatings, topics being considered at this Conference include: Fundamentals of CVD processes; techniques of CVD processes; CVD of thin films; CVD composites, coated fibers and powders; protective and wear-resistant coatings (other than TiC); CVD applications; and the evaluation and properties of CVD materials. In all, 63 papers are scheduled for presentation, of which 55 are included in their entirety in this volume. Abstracts are also included for the remaining papers which missed the publication date. The authors of these abstracts should be contacted directly by those who wish copies of the entire paper.

We are honored by the participation of a large number of scientists from outside of the United States. Their contribution is appreciated, and it is hoped that their visit is both pleasant and rewarding.

Thanks are due the following members of the CVD Conference Committee for their efforts on behalf of the Conference:

D. Beard	R. W. Haskell
J. M. Blocher, Jr.	R. B. Kaplan
R. C. Bracken	G. G. Pinneo
J. Chin	M. Robinson
J. J. Cuomo	G. F. Wakefield
J. I. Federer	J. C. Withers
F. A. Glaski	

The help of the following session chairmen who are not members of the Conference Committee is also gratefully acknowledged.

J. G. Byrne	F. A. Schauffelberger
C. Hayman	A. M. Schroff
W. Ruppert	N. D. Veigel

Special thanks are due Professor R. W. Haskell of the University of Utah for handling the local arrangements.

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John M. Blocher, Jr.  
General Chairman

Fred A. Glaski  
Program Chairman

January, 1972



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