

## CONTENTS

Preface .....	vii
Welcome Address .....	xiii
<i>K Yagi</i>	
Opening Address .....	xv
<i>T Mikumo</i>	
<b>I SUB-BARRIER FUSION</b>	
Effects of Neutron Transfer and Inelastic Scattering in Sub-Barrier Fusion of $^{32,33,36}\text{S}$ -Ions with $A \sim 100$ Nuclei .....	3
<i>S J Skorka, W K Schomburg, A M Borges, M Clemente, U Lenz, K E G Löbner, R Pengo, U Quade, K Rudolph, M Steinmayer and I Weidl</i>	
Potential Renormalization and the Angular Momentum Distribution of Heavy Ion Fusion Cross Section .....	20
<i>N Takigawa</i>	
Enhancement of the Fusion Cross Section Due to the Neck Formation .....	32
<i>A Iwamoto and K Harada</i>	
<b>II NEW ASPECTS OF FUSION MODELS</b>	
Fusion of Heavy Ions at Energies above the Coulomb-Barrier within the Surface-Friction Model .....	43
<i>D H E Gross</i>	
Effects of Successive Critical Distances in Heavy Ion Fusion Reactions .....	62
<i>S M Lee, T Nakagawa and T Matsuse</i>	
Fusion Cross Section Enhancement beyond a Geometrical Isotope Effect .....	78
<i>D Disdier</i>	
Diabatic Effects in Heavy-Ion Fusion Reactions .....	87
<i>W Nörenberg</i>	

<b>III COMPETITION OF DECAY MODES IN FUSION REACTIONS</b>	
Recent Advances in Fusion-Fission Reactions . . . . .	95
<i>F Plasil</i>	
Statistical Analysis of Particle-to-Fission Competition by Extended Hauser-Feshbach Method . . . . .	113
<i>T Matsuse</i>	
Evaporation-to-Fission Competition in the Fusion Reactions $^{16}\text{O} + ^{170,174}\text{Yb}$ and $^{32}\text{S} + ^{144,154}\text{Sm}$ . . . . .	129
<i>T Nakagawa, S M Lee, K Furuno, Y Nagashima, Y Fukuchi, W Yokota, K Komatsubara, S Kinouchi, T Mikumo, J C Adloff, D Disdier, A Kamili, G Rudolf and F Scheibling</i>	
<b>IV PHENOMENA ASSOCIATED WITH FUSION REACTIONS</b>	
The Role of Dynamics in the Fusion Process . . . . .	143
<i>C Ngô</i>	
What Can We Learn about Heavy Ion Fusion by Studying Fission Angular Distributions? . . . . .	161
<i>B B Back</i>	
Fissionlike Phenomena for Systems with Mass $A \sim 110$ . . . . .	172
<i>B Heusch</i>	
Mass Rearrangement in Collisions Undergoing a Quasi-Fission Process . . . . .	187
<i>A Gobbi</i>	
On the Dynamics of the Mass Asymmetry . . . . .	199
<i>H Feldmeier</i>	
Sequential Fission after Quasi-Elastic Scattering . . . . .	205
<i>G Dai, R Bock, A Gobbi, S Gralla, K D Hildenbrand, J Kuzminski, U Lynen, W F J Müller, A Olmi, H Stelzer, J Toke and S Bjornholm</i>	
Two Modes of $\alpha$ -Particle Emission in $^{12}\text{C}$ Induced Reaction at Lower Energy . . . . .	218
<i>G Dai, G Jin, D Wang, Z Li, L Zhang</i>	

<b>V COMPLETE AND INCOMPLETE FUSION REACTIONS</b>	
Competition of Complete and Incomplete Fusion Leading to Compound Nuclei with $A_{\text{CN}} < 100$ . . . . .	231
<i>W Bohne, H Morgenstern, W Galster, K Grabisch and A Kyanowski</i>	
Determination of the Complete and Incomplete Fusion Components and Some Related Topics . . . . .	248
<i>W Galster, H Morgenstern, W Bohne, K Grabisch and A Kyanowski</i>	
Complete and Incomplete Fusion at High Incident Energies . . . . .	264
<i>M Ohta, K Hatogai, S Okai and Y Abe</i>	
Incomplete Fusion in the $^{16}\text{O} + ^{27}\text{Al}$ Reaction . . . . .	273
<i>H Ikezoe, N Shikazono, Y Tomita, K Ideno, Y Sugiyama and E Takekoshi</i>	
Present Status of Peripheral Collision Models on Incomplete Fusion Reactions . . . . .	285
<i>H Yamada</i>	
Incomplete Fusion Reaction in $^{14}\text{N}$ Induced Reaction at 10-15 MeV/A . . . . .	297
<i>T Fukuda, M Ishihara, H Ogata, T Shimoda, K Katori, S Shimoura and T Nomura</i>	
<b>VI TOPICS ASSOCIATED WITH FUSION</b>	
Characteristics of Violent Collisions in Ar-Induced Reactions at Intermediate Energies . . . . .	311
<i>M F Rivet and B Borderie</i>	
Statistical Windows and its Effects on the Light Particle Emission . . . . .	328
<i>A Szanto de Toledo</i>	
Fusion Cross Sections for $^3\text{He} + ^{165}\text{Ho}$ and $^4\text{He} + ^{165}\text{Ho}$ Systems at 10-30 MeV/u . . . . .	336
<i>T Motobayashi</i>	

Fusion Structures and Molecular Resonances in the $^{16}\text{O} + ^{20}\text{Ne}$ System . . . . .	343
<i>Y Kondō, B A Robson and R Smith</i>	
Summary . . . . .	355
<i>R Vandenbosch</i>	
Contributed Papers . . . . .	381
List of Participants . . . . .	417