

CONTENTS

Tritium Production in the National Defense	1
<i>V. H. Reis</i>	
A Brief History of High Power RF Proton Linear Accelerators	8
<i>J. C. Browne</i>	
Status of the Accelerator Production of Tritium (APT) Project	14
<i>J. C. Browne, et al.</i>	
Economic and Educational Impact of Building the Continuous Electron Beam Accelerator Facility	24
<i>B. K. Hartline</i>	
A National Spallation Neutron Source for Neutron Scattering	29
<i>B. R. Appleton</i>	
European Spallation Neutron Sources: An Overview	37
<i>A. D. Taylor</i>	
Neutron Science Opportunities at Pulsed Spallation Neutron Sources	47
<i>J. M. Carpenter</i>	
Science Opportunities at High Power Accelerators Like APT	60
<i>J. C. Browne</i>	
USC Symposium on Accelerators and Spallation Sources: Savannah River Site Perspective	72
<i>J. G. Angelos</i>	
APT Target/Blanket System Design	82
<i>M. Cappiello</i>	
Spallation Neutron Source Target Station Issues	90
<i>T. A. Gabriel, et al.</i>	
Accelerator Design Issues for the National Spallation Neutron Source	114
<i>J. R. Alonso</i>	
Using Spallation Neutron Sources for Defense Research	126
<i>R. Pynn, S. M. Sterbenz, and D. J. Weinacht</i>	

Neutrino Physics at Spallation Neutron Sources	137
<i>B. Zeitnitz</i>	
Physics Possibility with Ultra-High Intensity Proton Beams	148
<i>K. Kubodera and F. Myhrer</i>	
BNL-AGS Complex as a Spallation Target Test-Bed	160
<i>H. Ludewig et al.</i>	
Prospects for a Neutron \rightarrow Antineutron Transition Search at a Reactor or Spallation Source	164
<i>H. O. Cohn</i>	
A $\mu^+\mu^-$ Collider Using Bent Crystals and a Neutron Spallation Source Injector	167
<i>D. B. Clind</i>	
Cumulative and Independent Fission Product Yield Measurements	172
<i>W. A. Schier et al.</i>	
Materials Irradiation Program in Support of Accelerator Production of Tritium	176
<i>W. F. Sommer</i>	
“Depth of Field” of Beam for Spallation Targets	179
<i>N. Tsoupas, et al.</i>	
Note on the Development, Benchmarking and Validation of the APT Neutronics Engineering Code	182
<i>T. E. Ward, et al.</i>	
Halo Formation in LINAC’s	185
<i>J. H. Whealton and T. A. Gabriel</i>	
Accelerator Impact on Electric Power Quality	192
<i>C. W. Brice, R. A. Dougal, and J. L. Hudgins</i>	
Production and Extraction of Radioactive Isotopes from the Cooling Water of a High Power Proton Spallation Target	195
<i>A. P. Mills and T. Datta</i>	
List of Participants	197