

CONTENTS

Foreword	v
Welcoming Remarks	1
<i>James Luyten</i> , Director for Research, Woods Hole Oceanographic Institution	
Special Presentation: "Ray Herb — In Memoriam"	
Raymond G. Herb — A Chronology	5
<i>Greg Norton</i> , National Electrostatics Corp.	
Applicatics of Electrostatic Accelerators	11
<i>Greg Norton</i> , National Electrostatics Corp.	
Facility Status Reports	
Chairman: R. Schneider , Woods Hole Oceanographic Institution	
Thirteen Years Experience with a 1.7 MV Tandetron	27
<i>Friedrich Dworschak</i> , Forschungszentrum Jülich GmbH	
New Facilities	
Chairman: K. von Reden , Woods Hole Oceanographic Institution	
The Leibniz-Labor AMS Facility at the Christian-Albrechts University	37
<i>Anke Rieck</i> , Christian – Albrechts Universität, Kiel	
The Northeast Proton Therapy Center at MGH/Harvard	51
<i>Jay Flanz</i> , Massachusetts General Hospital, Boston	
Accelerator Systems — Instrumentation	
Chairman: Tl Gray , Kansas State University	
Chairman: Richard Hyder , Yale University	

Superconducting LINAC Booster at ANU the Commencing Physics Operations	61
<i>David Weisser</i> , Australian National University, Canberra	
An Environment-Friendly Method for Resonator Surface Fabrication	76
<i>John Noé</i> , SUNY, Stony Brook	
Conversion of Doublet Structure of 15UD Pelletron at NSC to Singlets	88
<i>Sutinath Gargari</i> , Jawahar Lal Nehru University, New Delhi	
A Recirculating Gas Stripping System for the HVEC Model FN Accelerator at Antares	98
<i>John Fallon</i> , ANSTO, Australia	
Stability of Column Resistors in Shielded Mounts in the FN Tandem Accelerator	105
<i>Larry Lamm</i> , University of Notre Dame	
A Correction for Aberrations in the Woods Hole Recombinator	123
<i>Robert Schneider</i> , Woods Hole Oceanographic Institution	
Control Systems — Instrumentation	
Chairman: <i>Nathan Jones</i> , Oak Ridge National Laboratory	
Chairman: <i>David Knies</i> , <i>NRL</i>	
Implementation of a Computer Control System for a 1.7 MV Tandem Accelerator	131
<i>Steve Brawn</i> , University of Western Ontario	
The Telemetry and Control System for the New Naval Research Laboratory Trace Element Accelerator Mass Spectrometer	143
<i>David Knies</i> , Naval Research Laboratories	
Test and Commissioning of the Terminal Control System for the ESTU Tandem at Yale	158
<i>Richard Hyder</i> , Yale University	

A New Control System for an Old Tandem 169
Nathan Jones, Oak Ridge National Laboratory

A PC Based Energy Control System for the TUNL KN-3000 180
Chris Westerfeldt, Triangle Universities Nuclear Laboratory

NOSAMS Controls with Labview? 189
Karl von Reden, Woods Hole Oceanographic Institution

Ion Sources

Chairman: Mark Roberts, LLNL

Chairman: John Wills, AECL

A Versatile Microwave Ion Source 203
John Wills, AECL, Chalk River

IMC-SNICS-12 G/S Multiple Cathode Source of Negative Ions by
Cesium Sputtering Twelve (12) Samples Gas or Solid 220
Roger Loger, NEC

Lithium Ion Beam for RBS at Small Accelerators 232
Jiarui Liu, University of Houston

General Topics — New Developments

Chairman: Chris Westerfeldt, Duke University,
Triangle Universities Nuclear Laboratory

General Discussion 241

Discussion: SF₆ — Where Do We Stand?
El Paul Carter, Triangle Universities Nuclear Laboratory

Laboratory Reports

Atomic Energy of Canada Limited 251
Australian National University 253

Australian Nuclear Science and Technology Organization	255
Brookhaven National Laboratory	259
Chalk River Laboratories	260
Christian-Albrechts Universität	262
Florida State University	264
Kansas State University	267
Lawrence Livermore National Laboratory	269
Los Alamos National Laboratory	271
Naval Research Laboratory	273
Nuclear Science Centre, New Delhi	275
Oak Ridge National Laboratory, EN Tandem	278
Oak Ridge National Laboratory	280
Oak Ridge National Laboratory, 25 URC Tandem	282
Purdue University	284
SUNY at Stony Brook	286
Triangle Universities Nuclear Laboratory	288
University of California, Santa Barbara	290
University of Houston	292
University of Notre Dame	293
University of Toronto	295
University of Washington	297
University of Western Ontario	299
Vivitron, Strasbourg Centre de Recherche Nucléaire	307
Western Michigan University	309
Woods Hole Oceanographic Institution	311
Yale University	313
Participants List	317