

SECTION III

EXPERIMENTS APPROVED AT  
PROGRAM ADVISORY COMMITTEE MEETINGS  
(PAC-6 AND PAC-7)

PAC6 AND THE EXPERIMENTAL PROGRAM

The sixth meeting of the NSCL Program Advisory Committee (PAC6) was held April 6-7, 1986. The Committee consisted of:

1. W. Benenson, NSCL
2. J. Cramer, Washington
3. S. Koonin, Caltech
4. P. Siemens, Texas
5. F. Stephens, Berkeley
6. V. Viola, Indiana
7. S. Austin, NSCL, Convenor

The Committee considered 24 proposals for 3026 hours from 84 individual scientists from 21 institutions and 5 countries. The Committee recommended to the Research Director, allocation of 1304 hours.

APPROVED EXPERIMENTS NSCL PAC6

Experiment Number	Title and Authors (Spokesperson Underlined)	Hours Apvd
86001	Mass Measurements of Proton-Rich Nuclei. <u>W. Benenson</u> , E. Kashy, J.A. Nolen, Jr. J. van der Plicht, J.S. Winfield, J. Stevenson, B.S. Sherrill, R. Smith. NSCL.	72
86002	Spallation and Fragmentation of Medium-A Targets by Heavy Ions. <u>N. Porile</u> , S.Y. Cho, M. Bronikowski, D. Morrissey. Purdue, NSCL.	8
86003	Evaluation of BGO detection efficiency for 30 MeV γ-rays. <u>D. Morrissey</u> , W. Benenson, E. Kashy, J. Stevenson, <u>K. Hanold</u> . NSCL.	24
86005	Coherent Production of High Energy Gamma Rays. <u>J. Stevenson</u> , E. Kashy, W. Benenson, J. Clayton, <u>A. Lampis</u> , D. Morrissey, M. Samuel, R. Smith, A. Tam, J. Winfield. NSCL.	120
86006	Population of Low-Lying Neutron-Unbound States of Light Nuclei via Heavy-Ion Collisions. <u>A. Galonsky</u> , A. Kiss, F. Deak, C.K. Gelbke, L. Heilbronn, J. Kolata, W. Lynch, B. Remington, H. Schelin, Z. Seres, M.B. Tsang. NSCL, Eötvös, Notre Dame, Rose Hulman Inst. Technology, Central Research Institute- Budapest.	120
86007	Measurement of Total Reaction Cross-Sections in Nucleus-Nucleus Collisions. <u>J. Cramer</u> , R. Loveman, D. Leach, W. Lynch, T. Murakami. U. of Washington, U. of Colorado, NSCL.	80
86008	Widths of the Giant Quadrupole Resonance in Os Isotopes. <u>R. Peterson</u> , R. Loveman, J. Ullmann, <u>R. Ristinen</u> , J. Mitchell, M. Braunstein, B. Clausen. U. of Colorado.	120
86009	Characterization of target fragmentation in inter- mediate energy Ar-nucleus collisions. <u>W. Loveland</u> , G. Seaborg, D. Morrissey, K. Aleklett, L. Sihver, A. Behkami, C. Casey, S. Xue, J. Liljenzin. Oregon, Berkeley, NSCL, Studsvik Science Research Lab, Nyköping Sweden, Chalmers U. Sweden.	24

86010	Studies of Statistical Equilibrium in Small Nuclear Systems. <u>D. Morrissey</u> , W. Benenson, R. Blue, C. Bloch, E. Kashy, R. Ronningen, D. Goswami, J. Lee. NSCL	112
86011	Is ( $^{12}\text{C}$ , $^{12}\text{N}$ ) a One-Step Reaction at 50 MeV/nucleon? <u>J. Winfield</u> , N. Anantaraman, S. Austin, L. Harwood, R. Smith, H.L. Wu. NSCL.	60
86013	Nonequilibrium Emission from the Reactions of 50 MeV/u $^{16}\text{O}$ with $^{58}\text{Ni}$ . <u>P. Gonthier</u> , G. Westfall, D. Fox, D. Cebra, K. Wilson, P. Harper. Hope College, NSCL.	100
86015	Lifetime Measurements of Neutron Rich Isotopes. <u>J. Nolen</u> , J. Stevenson, J. Winfield, B.A. Brown, J. Clayton, L. Harwood, A. Lampis, D. Mikolas, B. Sherrill, R. Smith. NSCL.	96
86017	Survey of the Production of Intermediate Mass Fragments. <u>K. Kwiatkowski</u> , V. Viola, D. Fields, S. Rose, S. Austin, Z.P. Chen, C.K. Gelbke, W. Lynch, D. Scott, M.B. Tsang, J. Winfield. Indiana, NSCL.	108
86020	New, High-Excitation States in $^9\text{B}$ and $^9\text{Be}$ . <u>D. Mikolas</u> , W. Benenson, R. Sherr, E. Kashy, J. Stevenson, J. Nolen. NSCL, Princeton.	36
86022	High Resolution Light Particle Correlations. <u>C.K. Gelbke</u> , Z.P. Chen, D. Fields, W. Gong, W. Lynch, T. Murakami, T. Nayak, J. Pochodzalla, M.B. Tsang, H. Xu, K. Kwiatkowski, V. Viola. NSCL, Indiana.	200
86024	Beta Delayed Charged Particle Emission. <u>J. Stevenson</u> , J. Nolen, W. Benenson, B.A. Brown, J. Clayton, L. Harwood, E. Kashy, A. Lampis, D. Mikolas, B. Sherrill, R. Smith. NSCL.	24

PAC7 AND THE EXPERIMENTAL PROGRAM

The seventh meeting of the NSCL Program Advisory Committee (PAC7) was held October 26-27, 1986. The Committee consisted of:

1. W. Benenson, NSCL
2. J. Cramer, Washington
3. P. Siemens, Texas
4. F. Stephens, Berkeley
5. J. Vary, Caltech
6. V. Viola, Indiana
7. S. Austin, NSCL, Convenor

The Committee considered 17 proposals for 1797 hours from 71 individual scientists from 9 institutions and 2 countries. The Committee recommended to the Research Director, allocation of 1096 hours.

APPROVED EXPERIMENTS NSCL PAC7

Experiment Number	Title and Authors (Spokesperson Underlined)	Hours Apvd	Hours Resvd
86026	In-Beam Gamma-Ray Spectroscopy of Odd-Odd Deformed Nuclei in the Re Region and below N=82. <u>W. McHarris</u> , R. Aryaeinejad, W. Chou, W. Olivier, D. Mason, M. Havrilla, J. Batchelder, I. Ahmad, T.-L. Khoo, R. Janssens, M. Drigert, R. Holzmann, B. Dichter, M.Ma. NSCL, Argonne.	96	0
86027	Study of Very-High-Energy Particle Production with Ar and Kr Beams, E/A=20 to 35 MeV/u. <u>S. Shaheen</u> , F. Becchetti, J. Janecke, D. Roberts, W. Liu, A. Nadasen. Univ. of Michigan.	72	0
86028	Study of ( $^{20}\text{Ne},\alpha$ ) and ( $^{16}\text{O},\alpha$ ) as Cluster Transfer Reactions. <u>F. Becchetti</u> , J. Janecke, D. Roberts, W. Liu, S. Shaheen, A. Nadasen. Univ. of Michigan.	48	0
86029	Production of High Energy Gamma Rays by Light Ions. <u>J. Stevenson</u> , E. Kashy, W. Benenson, J. Clayton, A. Lampis, D. Morrissey, M. Samuel, A. Tam, J. Winfield. NSCL.	124	0
86030	Production of Light and Complex Fragments at Intermediate Energies. <u>R. Wada</u> , G. Nebbia, D. Fabris, J. Natowitz, K. Hagel, M. Nambodiri, P. Gonthier, G. Viesti, G. Prete. Texas A&M Univ., Lawrence Livermore Lab, Hope College, Padova University, Italy	72	0
86032	Mass Measurement of $^{10}\text{Li}$ . <u>E. Kashy</u> , B. Sherrill, W. Benenson, Y. Chen, D. Mikolas, A. Tam. NSCL.	0	48
86033	Subthreshold Charged Pion Production. <u>Y. Chen</u> , W. Benenson, E. Kashy, J. Stevenson, D. Morrissey. NSCL.	48	0
86034	Entropy Production in Intermediate Energy Nucleus-Nucleus Collisions. <u>W. Wilson</u> , G. Westfall, D. Cebra, D. Fox, P. Gonthier, J. Karn, M. Maier, A. Pradhan, A. Vandermolten. NSCL, Hope College.	108	0

86035	Total Reaction Cross Sections of Boron Isotope with Si. <u>Y. Chen</u> , D. Morrissey, E. Kashy, D. Mikolas, A. Tam, M. Mohar. NSCL.	48	0
86036	A Search for the Proton Drip Line Between A=56 and A=76. <u>B. Sherrill</u> , R. Ronningen, W. Benenson, D. Mikolas, M. Mohar, D. Morrissey, J. Nolen, J. Stevenson, J. Winfield. NSCL.	96	0
86037	Measurement of 10 to 30 MeV $\gamma$ -rays from symmetric systems. <u>D. Morrissey</u> , W. Benenson, K. Hanold, M. Mohar. NSCL.	48	0
86040	Light Particle Correlations for Equilibrated Systems. <u>C. Gelbke</u> , W. Lynch, T. Murakami, M. Tsang, W. Gong, Z. Chen, H. Kim, T. Nayak, H. Xu, F. Zhu, J. Pochodzalla, L. Moretto, G. Wozniak. NSCL, U of Frankfurt-W.Germany, Lawrence Berkeley Lab.	120	0
86041	Unstable Resonances from Central Collisions. <u>D. Cebra</u> , G. Westfall, D. Fox, J. Karn, M. Maier, A. Pradhan, R. Tickle, A. Vandermolen, W. Wilson. NSCL, Univ. of Michigan.	160	0
86042	Spallation and Fragmentation of Medium-A Targets by Heavy Ions. <u>N. Porile</u> , S. Cho, M. Bronikowski, D. Klingensmith, D. Morrissey. Purdue University, NSCL.	8	0