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## PREFACE

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Like its predecessor, *Measures for Progress*, this volume is intended for a variety of audiences. They range from the technical specialist with an active interest in the work of this institution to those among the more general public with an appreciation for how the threads of science, technology and society have intertwined during a critical period in our nation's history.

It aspires to paint a picture, admittedly incomplete but clearly indicative, of an institution rich in tradition, with a wonderful reputation for both "academic" excellence and industrial relevance. The time span covered by this volume, 1950-1969, was a period of tremendous change for this nation. Those changes are reflected in the variety of assignments made to the National Bureau of Standards and the issues that faced NBS during these two decades.

The success of the "Bureau"—as it is still fondly called by many of the agency's staff, alumni and friends—presaged and laid the foundation for the expanded role given to the agency when Congress changed the institution's name and transformed it into the National Institute of Standards and Technology in 1988. In large part, it was NBS' ability to creatively tackle new assignments while maintaining both its integrity and its industrial relevance which led Congress to establish NIST.

A considerable amount of space—an entire chapter, in fact—is devoted to the so-called AD-X2 battery additive case. That is fitting, because the way in which NBS officials and staff handled themselves in the face of extreme outside pressure reflects the nature of the institution. This chapter speaks volumes about the importance of technical integrity for this agency. More than 40 years later, the AD-X2 example remains as a constant reminder, as a guidepost, for the institution's staff whenever they are faced with difficult situations. Maintaining our technical integrity was foremost when it came to the AD-X2, and it remains the defining characteristic and core value of NIST today.

Measurements and standards always have been at the heart of this institution's mission, its premier *raison d'être*, and this history spotlights key technical accomplishments that served to advance our technical infrastructure. It is appropriate that this summary features standards developments and issues, as well as the establishment of the National Standard Reference Data System.

During the period covered by this volume, NBS expanded to its Boulder, Colorado, site and the agency's major laboratories and headquarters were relocated from their long-time home in downtown Washington, D.C. to the expanded, more capable and then-rural facilities in Gaithersburg, Maryland. Both moves are chronicled in this history, and they serve as an excellent frame of reference as we are beginning to make urgently needed major laboratory upgrades more than 30 years later. The similarities in both technical need and management challenges are instructive.

As the role of technology in the economy and society continues to take on even greater importance, the mission and work of this agency is even more crucial today than it was earlier in the century. If the old adage is correct, and past is prologue, this volume should be required reading for the many individuals who are steering or observing this institution as it reaches its centennial and as we move into the next millennium. For it is, indeed, A Unique Institution.

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