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978-1-108-01967-5 - A New System of Chemical Philosophy, Volume 1

John Dalton

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VOLUME 1

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A  
NEW SYSTEM  
OF  
CHEMICAL PHILOSOPHY

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PART I.

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BY  
JOHN DALTON.

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TO THE  
PROFESSORS OF THE UNIVERSITIES,  
AND OTHER RESIDENTS,  
OF  
*EDINBURGH AND GLASGOW,*  
who gave  
THEIR ATTENTION AND ENCOURAGEMENT  
TO THE  
*Lectures on Heat and Chemical Elements,*  
Delivered in those Cities in 1807;  
AND  
TO THE MEMBERS OF THE  
LITERARY AND PHILOSOPHICAL SOCIETY  
OF MANCHESTER,  
who have  
UNIFORMLY PROMOTED HIS RESEARCHES;  
*THIS WORK IS RESPECTFULLY INSCRIBED,*  
BY THE  
*AUTHOR.*

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## PREFACE.

**I**T was the author's intention when this work was put to press to publish it entire in one volume ; but he is now induced to publish it in two parts, for reasons which it may be proper to announce.

Various essays of his were read before the Literary and Philosophical Society of Manchester, chiefly on heat and elastic fluids, and were published in the 5th Volume of their Memoirs, in 1802. The new views which these essays developed, were considered both curious and important. The essays were republished in several Philosophical Journals, and soon after translated into French and German, and circulated abroad through the medium of the foreign Journals. The author was not remiss in prosecuting his researches, in which he was considerably assisted by the application of principles derived from the above essays. In 1803, he was gradually led to those primary Laws, which seem to obtain in regard to heat, and to chemical combinations, and which it is the object of the present work to exhibit and elucidate. A brief outline of them was first publicly given the ensuing winter in a course of Lectures on Natural Philosophy, at the Royal Institution in London, and was left for publication in the Journals of the Institution ; but he is not informed whether that was done. The author has ever since been occasionally urged by several of his philosophical friends to lose no time in communicating the results of his enquiries to the public, alledging, that the interests of science, and his own reputation, might

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## PREFACE.

suffer by delay. In the spring of 1807, he was induced to offer the exposition of the principles herein contained in a course of Lectures, which were twice read in Edinburgh, and once in Glasgow. On these occasions he was honoured with the attention of gentlemen, universally acknowledged to be of the first respectability for their scientific attainments: most of whom were pleased to express their desire to see the publication of the doctrine in the present form, as soon as convenient. Upon the author's return to Manchester he began to prepare for the press. Several experiments required to be repeated; other new ones were to be made; almost the whole system both in matter and manner was to be new, and consequently required more time for the composition and arrangement. These considerations, together with the daily avocations of profession, have delayed the work nearly a year; and, judging from the past, it may require another year before it can be completed. In the mean time, as the doctrine of heat, and the general principles of Chemical Synthesis, are in a good degree independent of the future details, there can no great detriment arise to the author, or inconvenience to his readers, in submitting what is already prepared, to the inspection of the public.

MAY, 1808.



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