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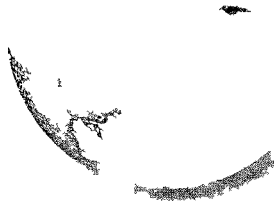






MAHATHIR

Leadership *and* Vision *in* Science & Technology



"This book is
dedicated to the
advancement of
Science and Technology
in our country"

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of SAPURA towards the publication of this book.

MAHATHIR

Leadership *and* Vision *in* Science & Technology

Abdul Aziz Abdul Rahman
Sumangala Pillai



Academy of Sciences Malaysia

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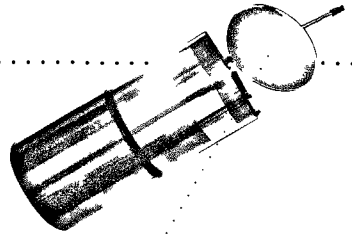
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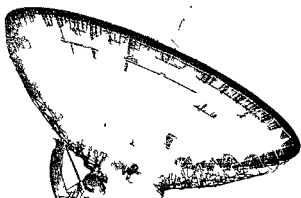




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Foreword

T

he conferment of Honorary Fellow on YAB Dato' Seri Dr. Mahathir Mohamad, the Prime Minister of Malaysia, is a hallmark in the brief history of the Academy of Sciences Malaysia. Dr. Mahathir Mohamad was the major force behind the formation of the Academy, and the man who put into place much of the enabling mechanism and is the inspiration for the advancement of science and technology in our country. The Academy sees in Dr. Mahathir a role model for our younger generation. What better time than now to place on record his leadership and vision in S&T in a book to commemorate this significant event.

Today in Malaysia we have the counterpart structures and institutions to those that exist in countries that are in the leading edge of science and technology. We have our institutions of higher learning, our research centres, our policy and think-tank groups and our scientists and technologists. We have an educational system that offers a variety of courses of study in various fields of S&T. We can operate complex and sophisticated tools and products of a technological age. We have learnt to maintain and keep these in a good state of repair. We can relate to S&T advances and to inventions or innovations in various parts of the world. We fully appreciate scientific and systematic methods of inquiry and learning.


The applications of S&T are not just confined to industry. Its applications cut across the whole spectrum of our lives and of our progress – in medicine, health, agriculture, social sciences, education... and... politics.

But a certain weakness exists. Despite our varying degrees of success in S&T, there has been a lack of a zest, passion and drive for science and technology and the desire to achieve the superlative. This may explain in part why we have yet to produce a Nobel laureate. This lack of the desire to aim for the superlative, barring few exceptions, will make us 'also-rans' in the field of S&T, not leaders and winners.

Our schools and institutions of higher learning must re-evaluate, where necessary, our teaching methods, our means of funding and our mindset towards S&T. Perhaps we also lack a clear philosophical basis and rationale for promoting S&T and a clear perception of its role in our history, our present attainments and our future development as a nation and a people.

I believe the government's unstinting efforts towards both keeping abreast of S&T developments and also acquiring S&T capability in areas hitherto unfamiliar to us, offer the S&T community a wonderful opportunity to gain exposure, gather experience and inculcate the desire to be the best in various fields of S&T. To be a leading edge nation, second best simply will not be sufficient.

A book of this nature will help towards this all important process. We hope it inspires our younger generation to recognise the manifold and unique opportunities coming their way as the nation under the guidance of a man of science gears up for the arduous but exciting journey ahead. These opportunities exist simply because the push of our nation towards S&T competency and excellence requires more than just leadership efforts. It must be underscored by the concomitant desire and passion for learning and doing in all its various and multifarious forms from all of us.

True progress and true excellence are only achieved when we learn to surpass ourselves in all the things we do, large or small. Dr. Mahathir Mohamad has amply demonstrated this in all his undertakings. The S&T community of this nation must hold this fact to be the guiding light of all our endeavours for now and for the future. 

Tan Sri Datuk Dr. Omar bin Abdul Rahman
President, Academy of Sciences Malaysia



reface

r. Mahathir Mohamad has made thinking, conceptualising and planning his vocation. For over half a century, he has been expressing his thoughts, expounding his views and articulating his ideas and concepts on a wide range of subjects and interests. He started young. In half a century he has in turn been a student, doctor, politician and the leader of the government of this nation. We may not be wrong in thinking he has never stopped being any of these.


This book attempts to focus on his ideas and contributions in a particular field – science and technology. The difficulty is obvious. Dr. Mahathir's ideas are singular in one aspect. They are never stand-alones confined to a particular field. They show a rich inter-connectivity of ideas and thoughts. At times when sounding most like a development guru, there are connecting ideas expounding his views on the nature of, say, party politics or culture. At other times, his ideas and hopes on developing a culture of science and technology allude to discoveries that speak of the glory of the Divine.

In the milieu of our nation's democratic political tradition, his thoughts and ideas have not remained unchallenged. He has been out of the party he now heads and out of politics. It was not of his choice. He has defended his views and actions stoutly. He has shown the strength of his convictions in forums, discussions, speeches, addresses and political debates within and without the country.

He has promoted and pursued with great spirit and determination his convictions in science and technology and has implemented many of his plans. He has shown pragmatism in adopting new and old ideas. These efforts form a vast canvas. This slim book may not appear to have done justice to the large amount of available material.

Time constraints have had a strong influence on both the writing and the structure of the book. Chapter 1 sets the tone and introduces Dr. Mahathir Mohamad to the reader. Chapter 2 traces his interest in science and technology and his perceived comfortable nexus of it with development and wealth creation. Chapter 3 focuses on Dr. Mahathir's pivotal role as a prime mover of science and technology and its applications in our country. Chapters 4, 5 and 6 deal entirely with his contributions to the automobile, aerospace and information technology industries respectively. In Chapter 7, the authors have highlighted emerging technologies that are likely to gain increasing importance.

The book does not aim for exhaustiveness given the simple reason that so many of Dr. Mahathir's achievements and initiatives are still ongoing. It would be far better then, to aim for succinctness by stating the issues, making the point and leaving the reader to form an opinion.

It would be in the tradition of Dr. Mahathir himself if this book serves to promote and provoke in some way, the faculty of critical thinking in the general reader and students experiencing a healthy belief or scepticism in the role of science and technology in advancing the progress of nations and of mankind. 

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