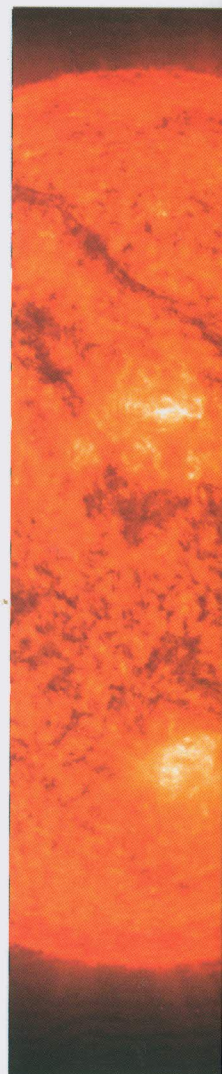
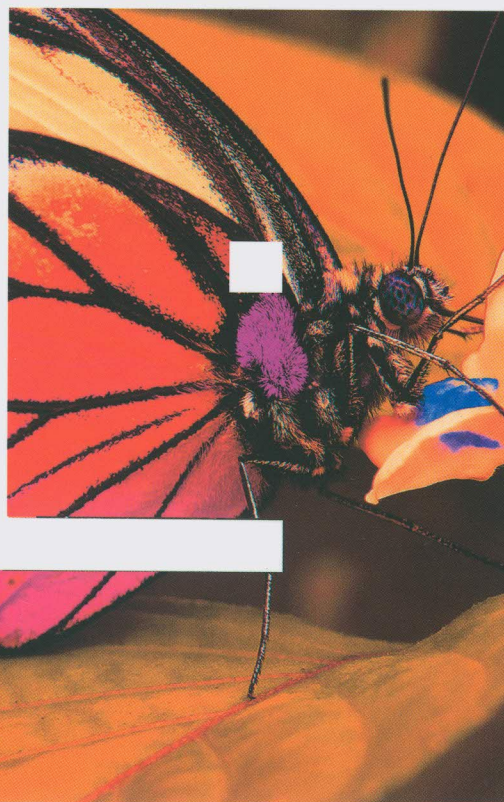
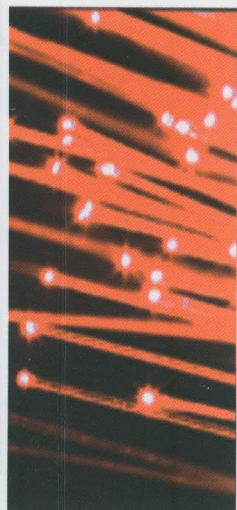
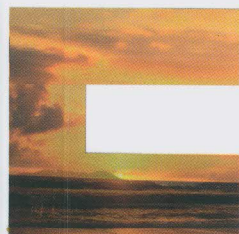


NATURAL  
**SCIENCE** *from the*  
WORLDVIEW *of the* **QUR'AN**  
AN INTRODUCTION



Chief Editor **M. KAMAL HASSAN**

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**Institut Terjemahan & Buku Malaysia**  
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## AUTHORS AND TEAM MEMBERS

### ABOUT THE AUTHORS AND OTHER MEMBERS OF THE TEAM

#### BIOLOGY

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Her passion on issues of Islamic ethics and education brought her to work with Distinguished Professor Dr. M. Kamal Hassan, who entrusted her with the onus of coordinating the *N.S.W.V.Q.* Project from its initiation (October 2011) to its completion. She did her Ph.D. dissertation under the supervision of the same professor. **Sabrina Sabri** (b. 1956) [B.Sc. (Hon.) Chem. University of Wales, U.K.; Dip. Islamic Studies, U.K.M. and M.Ed. (Sc. Educ.) U.K.M.], a senior lecturer of Chemistry at the CFS, IIUM is her co-author.

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## OTHER MEMBERS OF PROJECT N.S.W.V.Q.

### Research Team

Headed by the **Distinguished Professor Dr. M. Kamal Hassan** as the Principal Researcher, Chairman, and the Chief Editor; the members of the Research Team are **Professor Dr. Hamzah Mohd. Salleh** (Faculty of Engineering, IIUM); **Professor Dr. Ahmad Yousif** (Director, International Institute of *Wasatiyyah*, IIUM); **Dr. Agus Purwanto** (*Institut Teknologi Sepuluh Nopember*, Surabaya, Indonesia); **Mohd. Isa Mohd. Yusof** (Senior lecturer, UiTM) and **Dr. Nur Jannah Hassan** (International Institute of Islamic Thought and Civilisation, IIUM).

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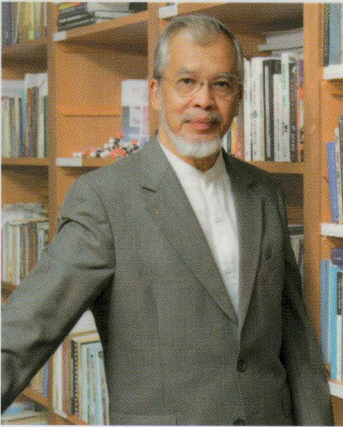
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- (2) **Professor Dr. Hamzah Mohd. Salleh** (Dept. of Biotechnology Engineering, Faculty of Engineering, IIUM) [B.Sc. (Hon.) Biochem., M.Sc., Chem. (Enzymology) and Ph.D., Chem. (Enzymology), U. of Waterloo, Canada] as the Chemistry editor;
- (3) **Assoc. Prof. Dr. Raihan Othman** (Head, Department of Science in Engineering, Faculty of Engineering, IIUM) [B.Sc. (Hon. Physics), M.Sc. (Physics) and Ph.D. (Electrochemical Power Sources) U. of Malaya] and **Professor Dato' Dr. Mohd Zambri Zainuddin** (ISTAC, IIUM, with specialisation in Astronomy, Astrophysics and Astronomy Education) as the Physics editors;
- (4) **Tuan Syed Salim Agha** (Former Chief Librarian, IIUM) [B.Sc. (Botany) U. of Madras; Associate of the Library Association, U.K.] as the English language editor;
- (5) **Dr. Esam Eltigani** (Dept. of Qur'an and Sunnah, Faculty of Islamic Revealed Knowledge and Human Sciences, IIUM) [B. Engin. Southern Illinois U., USA; M.A. and Ph.D. (Qur'an & *Sunnah*) IIUM] as the Editor for Islamic Input (Qur'an & *Turath*); and
- (6) **Dr. Nur Jannah Hassan** (IIUM) as the General Editor, assisted by a team of Copy Editors including Dr. Asma El-Muhammady (IRKHS, IIUM) and a wonderful and dedicated team of type-setters (Attin Press).





### **Distinguished Prof. Dr. M. Kamal Hassan**

Prof. M. Kamal Hassan (b. 1942 in Malaysia) was the third Rector (Vice-Chancellor) of the International Islamic University Malaysia (IIUM). He obtained his B.A. (First Class Honours) in Islamic Studies (1966) from the University of Malaya in Kuala Lumpur; and M.A. (1970), M.Phil. (1973) and Ph.D. (1976) from Columbia University, New York, specialising in contemporary Islamic thought. He was Head of the Department of Islamic Theology and Philosophy at the National University Malaysia in 1980; and then served the International Islamic University Malaysia since 1983, as the founding Dean of the new Faculty of Islamic Revealed Knowledge and Human Sciences. He was appointed as the Deputy Rector for Academic Affairs at IIUM and held the post for 7 years, before being appointed as the first Malaysian Rector of IIUM from 1999 to 2006.

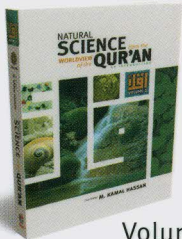
He was appointed as the first Malaysian Chair of Islam in Southeast Asia as well as Visiting Professor at the Centre for Muslim-Christian Understanding, Georgetown University, Washington D.C. from 1997–1999. One of his major intellectual missions is the reintegration of human reason with Divine Revelation and Wisdom. The award of Distinguished Professor was conferred upon him by the Ministry of Higher Education, Malaysia, in December 2010. He is currently teaching at IIUM as a professor and assumed the leadership of the Distinguished Professor's project (which is now known as the *N.S.W.V.Q.* Project) in 2011.

**VOLUME THREE**, the last of a three-volume work on natural science for secondary school students, consists of three chapters.

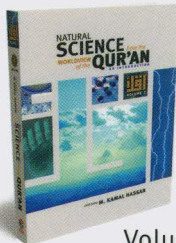
CHAPTER 1 carries the theme “Management of the Environment, Balance, Sustainability and the Continuity of Life”. It starts with an elaboration of biodiversity followed by the nature of interdependence among living things and the environment. What naturally follows are matters of concern in regards to the preservation and conservation of the environment, which are of great importance and pivotal concern in the Qur’anic worldview. The world around us is visualised through our senses. Since our daily living depends on them, the matter of nutrition and production of food is dealt with. The physiological functions of living things on which life depends so much, such as circulation, reproduction, coordination and heredity are elaborated upon.

CHAPTER 2 discusses broad aspects of “Technology and Development”. These include the physics of strength and stability, machines, information and communication technology, chemicals in industry, food production, food technology, biotechnology and the developments of various synthetic materials used in industries. Technological knowhow, awareness, accountability and responsibility are the key elements stressed.

“Astronomy and Space Exploration” being the theme of CHAPTER 3, the last chapter of this work, looks at the bigger picture of the Universe. It traverses the inner and outer regions of our solar system and into space with a glimpse of the stars and galaxies that litter the vastness of the Universe with their beautiful twinkling lights that have been the subject of intrigue, awe and wonder; guiding caravans of travellers, ships and scientists since ancient time. Thus *N.S.W.V.Q.* concludes with a gesture that welcomes learners of all ages to unlock their hearts and read the Signs of Allah The Most Gracious in His two Books – the Qur’an and the Cosmos...



Volume 1



Volume 2

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