

---

## Foreword

---

This Special Issue of *ScienceAsia* has been compiled to celebrate the 80<sup>th</sup> Birthday Anniversary of His Majesty King Bhumibol Adulyadej (Rama IX) on 5<sup>th</sup> December 2007. His Majesty has ruled Thailand for more than 60 years and is the longest reigning monarch in the world. He is revered and loved by the Thai people, because he has devoted his life for their welfare and prosperity. He has travelled throughout the country, including the most remote regions, meeting with the people, so that he can understand their problems, and devise simple solutions. His Majesty has initiated more than 4,000 “Royal Projects” to help the people, covering various aspects, such as agriculture, fisheries, land development, irrigation schemes, watershed development, animal husbandry, and rain making.

In these many endeavors, His Majesty has been innovative, and used science and technology as an important basic foundation for innovation. As a result, he is the only Thai monarch, and perhaps the only monarch in the world, to have received patents for his inventions. These have included the Chai Patana device for aerating polluted water, as well as rain making patents based on chemical seeding, including a recent patent granted by the European Patent Office for “Weather modification by royal rainmaking technology”. Consequently, His Majesty has been named the “Father of Technology in Thailand”, just as his great grandfather, Rama IV, was named the “Father of Science in Thailand”.

As a mark of homage to His Majesty King Bhumibol Adulyadej on the occasion of His 80<sup>th</sup> Birthday Anniversary, *ScienceAsia*, the *Journal of the Science Society of Thailand*, is publishing this Special Issue to pay tribute to His Majesty’s numerous research programs, which have benefited the Thai people over so many years. As Thailand’s foremost international research journal in science, *ScienceAsia* has enlisted the help of eminent scientists in Thailand, to contribute short articles describing their views on various aspects of science and technology, or describing their special interests and expertise. To make this issue truly special, authors have been invited from the Outstanding Scientists of Thailand, Senior Scholars of The Thailand Research Fund, and senior administrators of organizations supporting science. We are grateful to the twenty-one authors who have contributed articles on a variety of fields, in the categories of General Articles, Physical Sciences and Mathematics, Engineering, Biological Sciences and Agriculture, and Biomedical Sciences and Medicine.

*ScienceAsia* would also like to thank The Foundation for the Promotion of Science and Technology under the Patronage of His Majesty the King, The Thailand Research Fund, and The Science Society of Thailand under the Patronage of His Majesty the King for providing support for the publication of this Special Issue.

We hope that this Special Issue will be interest to all those who are interested in science and technology, both in Thailand and elsewhere.

M.R. Jisnuson Svasti,  
Editor, *ScienceAsia*

3 November 2007