

Promoting Basic Science Research in Thailand: Foundation for the Promotion of Science and Technology under the Patronage of His Majesty the King

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ABSTRACT: The Foundation for the Promotion of Science and Technology under the Patronage of His Majesty the King was established in 1982 as a non-governmental organization with the aim of promoting the advancement of science and technology in Thailand. The Foundation has established the Outstanding Scientist Award to recognize Thai researchers with outstanding scientific achievements each year, who can role models for future generations of scientists. It also awards a limited number of Young Scientist Awards annually to encourage young scientists to perform research work of quality. Both awards are among the most prestigious awards of their kind within the Thai scientific community.

KEYWORDS: Foundation for the Promotion of Science and Technology, Outstanding Scientist Award, Young Scientist Award.

Basic research is the foundation of science and technology. Yet in Thailand, research in fundamental areas of science such as physics, chemistry, biology and related fields is in a very weak state because it fails to attract the necessary interest from the government and the general public. In contrast, applied sciences such as medicine and engineering, have traditionally dominated the professional interests of the younger generation, presumably because of more lucrative career prospects. This weakness in the basic fields of science amongst our young students is a cause of great concern. Basic scientific research provides the necessary foundation for all types of scientific and technological pursuits, which provide the basic driving force for Thailand to become a knowledge-based society. Adequate strength in research in the fundamental sciences is crucial to the development and sustainability of the country.

To help tackle the above-mentioned weakness, the Foundation for the Promotion of Science and Technology under the Patronage of His Majesty the King was established as a non-governmental organization with the aim of promoting the advancement of science and technology in this country in 1982, the bicentennial anniversary of the establishment of Bangkok as the capital of Thailand. The inaugurating activity of the Foundation was the establishment of the Outstanding Scientist Award. In the first few years, the Award was strongly supported by the Siam Cement Group (SCG), which was later joined by the National Science and Technology Development Agency (NSTDA) and The Thailand

Research Fund (TRF). The purpose of the Award is to recognize and honor annually one or two carefully selected Thai scientists with outstanding achievements in scientific research. It was hoped that the Award will stimulate young Thai scientists by providing more incentives for them to produce high quality research work, and to give the younger generation of the scientific community good strong role models to look up to.

In recent years, each recipient of the Outstanding Scientist Award receives a certificate of merit, an honor shield and a cash award of 400,000 baht. What distinguishes this award from other science awards in Thailand is that the selection process is based solely on nomination - no application is accepted. The research work of potential awardees must have earned domestic and international recognition, and awardees are expected to have made continuous contribution of new knowledge and discoveries to his or her field for a minimum duration of five years. The work should also display potential for further development and relevance to the advancement of research or education. Also of great importance, the awardee must be a person who is well accepted and respected by his or her peers, and suitable to be a role model for other scientists and for the younger generation. He/she is typically already a leader of a thriving group of researchers in a recognized field.

Each year respected scientists, science administrators from universities and research institutes, executives of private companies operating research and development departments, and previous awardees

are invited to nominate qualified candidates. A selection committee, composed entirely of very distinguished scientists, including several prior awardees, is appointed by the Foundation Executive Board, to work anonymously, with only the name of the chair of the committee being announced to the public. The committee also independently screens scientific databases for additional qualified candidates. All names of qualified candidates are pooled together and each is individually reviewed in detail. Consultation with experts in the respective fields of individual candidates is carried out as necessary. Each candidate's research accomplishments over the immediate past five years are considered in terms of quality, novelty, significance, and potential for further development. Quality is judged on work continuity, author's contribution and the reputation of the journals in which the work was

published. The candidate's character, integrity, honesty, scientific conduct, and research devotion are also important criteria for the final round of consideration. The selection process is kept in complete secret until the committee has reached a final decision and the award recipient has been notified.

Since 1982 the Foundation for the Promotion of Science under the patronage of His Majesty the King has awarded 37 scientists in various fields, whose names are listed in Table 1. Except for the few who have since passed away, all these prominent scientists have continued to produce good research work, nurtured and mentored many more younger scientists, and have continued to serve as respected pillars of basic science in this country.

In order to recognize and encourage active younger researchers, the Foundation has initiated another prize,

Table 1. List of Outstanding Scientists*

Year	Award Recipient(s)	Field
1982	Professor Dr. Virulh Sa-yakanit	Physics
1983	Professor Dr. Prawase Wasi	Genetics
1984	Professor Dr. Puttipong Varavudhi	Biology
	Professor Dr. Yongyuth Yuthavong	Biochemistry
1985	Associate Professor Dr. Sakol Panyim	Biochemistry
1986	Associate Professor Dr. Yodhathai Thebtaranonth	Chemistry
1987	Professor Dr. Suthat Yoksan	Theoretical Physics
1988	Professor Dr. Stitaya Sirisinha	Microbiology
1989	Professor Dr. Thavorn Vajrabhaya	Botany
1990	Associate Professor Sodsri Thaihong	Biology (Zoology)
	Professor Dr. Visut Baimai	Biology (Genetics)
1991	Professor Dr. Pairash Thajchayapong	Computer Science
1992	Professor Dr. Amaret Bhumiratana	Biotechnology
1993	Professor Dr. Natth Bhamarpravati	Medical Science
1994	Professor Dr. Visith Sitprija	Medical Science
	Professor Dr. Aree Valyasevi	Medical Science
1995	Professor Dr. Prasert Sobhon	Cell Biology
1996	Professor Dr. Wanlop Surakampontorn	Mathematical Physics
1997	Associate Professor Dr. Prapon Wilairat	Biochemistry
	Professor Dr. Yong Poovorawan	Medical Science
1998	Associate Professor Dr. Apichart Suksamrarn	Organic Chemistry
	Assistant Professor Dr. Skorn Mongkolsuk	Biotechnology
1999	Professor Dr. Wanpen Chaicumpa	Immunology
2000	Professor Dr. Chongrak Polprasert	Environmental Engineering
	Professor Dr. Somchart Soponronnarit	Energy Technology
2001	Associate Professor Dr. Kate Grudpan	Analytical Chemistry
2002	Professor Dr. M.R. Jisnuson Svasti	Biochemistry
	Professor Dr. Suthat Fucharoen	Medical Science
2003	Associate Professor Dr. Jumras Limtrakul	Chemistry
	Associate Professor Dr. Supot Hannongbua	Chemistry
2004	Professor Dr. Thiravat Hemachudha	Medical Science
2005	Professor Dr. Rajata Rajatanavin	Medical Science
	Professor Dr. Boonsong Ongphiphadhanakul	Medical Science
2006	Professor Dr. Piyasan Praserttham	Chemical Engineering
	Professor Dr. Somchai Wongwises	Mechanical Engineering
2007	Professor Dr. Yongwimon Lenbury	Mathematics
	Professor Dr. Sompong Dhompongsa	Mathematics

*Academic Positions shown are those at the time that each award was made.

the Young Scientist Award in 1991. Eligibility is for those not over 35 years old, who have proven their ability to do independent research of quality. Each award includes prize money of 100,000 baht and a certificate, and, in order to broaden impact, this award may be granted to up to a maximum of six persons each year. A total of 63 individuals have so far been named as recipients of the Young Scientist Award, with two of them doing exceptionally well, having recently continued to receive the Outstanding Scientist Award! The Foundation has also established the Outstanding Technologist Award and the Young Technologist Award to promote technological development, but in this article, we will focus only on the promotion of basic science research.

The Outstanding Scientist Award and the Young Scientist Awards have sparked strong interest among all Thai working scientists. We, at the Foundation, believe that the Awards have helped kindled a stronger desire to pursue science among young Thai scientists and students. We certainly hope that the Awards have helped to lift the morale of the Thai scientific research community, which will, in turn, lay the foundation for furthering the development of applied science and technology. Recognition of individuals as role models for the younger generation and for the value of his/her research work was the principal concept when the Foundation for Promotion of Science and Technology under the Patronage of His Majesty the King was established twenty five years ago, and this principle is still strongly upheld and pursued today.

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