

Publications in Walailak Journal of Science and Technology from 2004 to 2009

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Abstract

Publications in the Walailak Journal of Science and Technology from 2004 to 2009 are analyzed according to their types, research fields, sources of submission and authorships. The amount of submitted manuscripts is rather constant during this period with a rejection ratio about 0.12. Issued twice a year, one hundred and eighteen published papers are mostly full-length original articles with a small number of minireview articles and short communications. Most contributors and corresponding authors of the journal are Walailak University academic staff but there are on average 3 articles in each volume which are not attached to Walailak University. The journal covers diversified areas of science and technology classified as Science (38.14 %), Agricultural technology (25.42 %), Engineering and resources (24.58 %) and Health science (10.17 %). All contributions have placed Walailak Journal of Science and Technology in the Thai Citation Index (TCI) since 2006 and achieved the highest ranking in the top-ten list in that year.

Keywords: Walailak Journal of Science and Technology, Thai Citation Index, publication indicators

Introduction

Walailak Journal of Science and Technology, a peer-reviewed journal covering all areas of science and technology, was launched in 2004. Published twice a year by the Institute of Research and Development of Walailak University, the 12th issue has marked the 6th anniversary of the journal. One hundred and thirty four manuscripts have been submitted to the journal and 118 research papers in forms of minireview articles, original articles and short communications have been published. Hard copies of the Walailak Journal of Science and Technology are distributed to the libraries and institutions throughout Thailand. Publications are also available in an electronic format at the website of Institute of Research and Development, Walailak University [1].

Since 2006, the journal has been covered by the Thai-journal Citation Index (TCI) database [2]. The database operated by the TCI centre evaluates

the impact factor and ranks Thai journals according to the criteria set out by Institute of Scientific Information (ISI) [3]. In 2010, the journal was submitted to the Thailand Commission of Higher Education's (CHE) approved list [4]. In this paper, information from the 1st to the 6th volume of the Walailak Journal of Science and Technology is presented and analyzed to reflect the status of the journal.

Materials and methods

The data was acquired from the Walailak Journal of Science and Technology volumes 1-6 as well as all submitted manuscripts and evaluation letters. Publications were classified according to types (minireview articles, original articles, short communications), research fields (science, health science, agricultural technology, engineering and resources) and affiliation of authors. Since the majority of the current research work is multi-

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disciplinary, the faculty of authors is one factor to determine the research field. The affiliation of the corresponding author is also used to indicate a source of submission. Authorships are divided into 4 categories in order to analyze the involvement of Walailak University staff. These categories are the work carried out solely by Walailak University staff (WU), the work without participation of Walailak University staff (Other institutions) as well as the collaborations between Walailak University staff and institutions in Thailand or abroad. The research papers are fitted into the last category when at least one author is attached to an institution outside Thailand. TCI impact factors and journal ranking are also reported. Data from 2007 to 2009 are taken from the documents on the Website of the TCI centre [4].

Results and discussion

From the record over the past 6 years in **Table 1**, the number of manuscripts submitted to Walailak Journal of Science and Technology has

remained almost constant, about 22 submissions each year. Nearly 12 % of these manuscripts are turned down. Most published papers are in forms of full length original articles. Nevertheless, submissions in forms of short communications (less than 8 pages) have become more common since 2009.

Table 2 indicates that despite more than half of contributions coming from academic staff and students of Walailak University, the journal has constantly published work from other universities and institutions. In each volume, about 3 papers are not attached to Walailak University. **Table 2** also shows collaborations between Walailak University and other institutions. These collaborations gave rise to about a quarter of the publications in the Walailak Journal of Science and Technology while, during the same period, such co-authorship led to more than a half of the published papers in the ISI database for Walailak University [5].

Table 1 Numbers of manuscripts and published papers sorted by year and types of articles.

Year	Submitted manuscript	Rejected manuscript	Published Papers			Papers in total
			Minireview articles	Original articles	Short communications	
2004	22	2	3	17	0	20
2005	22	2	0	20	0	20
2006	22	3	2	17	0	19
2007	23	3	2	18	0	20
2008	21	2	0	19	0	19
2009	24	4	3	14	3	20
Total	134	16	10	105	3	118
Average per year	22.33	2.67	1.67	17.50	0.50	19.67

Table 2 Published papers classified according to sources of submission and authorships.

Year	Source of submission				Authorship		
	Within WU	From outside WU	From aboard	WU	WU with institutions in Thailand	WU with institutions abroad	Other institutions
2004	18	2	0	12	1	5	2
2005	16	4	0	11	4	1	4
2006	17	2	0	12	5	0	2
2007	17	3	0	15	2	0	3
2008	15	3	1	11	4	1	3
2009	17	3	0	13	2	2	3
Total	100	17	1	74	18	9	17
Average per year	16.67	2.83	0.17	12.33	3.00	1.50	2.83

Table 3 Numbers of published papers classified by their research fields.

Year	Science	Agricultural technology	Engineering and resources	Health science	Others
2004	5	8	6	1	0
2005	9	5	4	2	0
2006	11	2	5	0	1
2007	9	5	3	2	1
2008	5	2	6	6	0
2009	6	8	5	1	0
Total	45	30	29	12	2
Percent	38.14 %	25.42 %	24.58 %	10.17 %	1.69 %

According to **Table 3**, publications in the Walailak Journal of Science and Technology are from all areas of science and technology including Science (38.14 %), Agricultural technology (25.42 %), Engineering and resources (24.58 %) and Health science (10.17 %). In each field, the number of articles fluctuates with time without an exact trend. Research papers in Physics, Chemistry,

Biology, Mathematics and Computational science are considered Science-related and account for the highest number between 2005 and 2007. Publications in Agricultural technology and the field of Engineering and resources are nearly equal in quantity but the number of papers in agricultural technology was exceptionally high in 2004 and 2009 surpassing that of Science.

Table 4 TCI Impact Factors of Walailak Journal of Science and Technology from 2006 to 2008

Year	Total citations	Impact factor	Ranking by impact factor	Number of journals in the TCI database
2006	5	0.125	10	166
2007	2	0.051	42	295
2008	2	0.077	41	164
Average	3	0.084	31	208

After fulfilling the condition of publishing for 3 consecutive years [4], the Walailak Journal of Science and Technology obtained a TCI impact factor in 2006. From **Table 4**, the impact factor of 0.125 put the journal in the 10th place among 166 journals in the rankings that year. In 2007 and 2008, the impact factor dropped below 0.100 since the number of citations was reduced. The susceptibility in the impact factor can be explained by the modest number of papers and citations among Thai journals. The fluctuations in the impact factor and journal ranking are therefore typical for Thai journals in the relatively early years of the TCI.

Conclusions

Over a period of 6 years, the Walailak Journal of Science and Technology has emerged as a journal that meets the national standard. About 20 research papers related to science and technology are published each year with 12 % rejection. In terms of authorship, the journal has welcomed contributions from other institutes and about a quarter of published papers are products of collaborations between institutions. Like other Thai journals, the impact factor may still be unstable but all contributions have established a platform for the journal to consolidate. Improvements can be made by encouraging researchers to publish their valuable works in the Walailak Journal of Science and Technology.

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