

NATIONAL SCIENCE AND
TECHNOLOGY MUSEUM

2010
Annual Report



Foreword from the Director-general

The National Science and Technology Museum (NSTM) began publication of its annual report since 2002. The initial objective was to systematically present the NSTM's performance in the past year. As a public institution and a non-profitable organization, we at the NSTM, feel that we have the duty to honestly report our work to the public. It is also a preparation for the NSTM's internal review. Publication of the annual report has now come to the ninth year; therefore, a basic framework in the format and standards has been established. As a chronicle report, the past issues of the annual report sketch out the track of the NSTM's development.

In recent years, a general trend and consensus brought public museums to increasingly participate in social activities and actively seek independent financial resources. The NSTM's annual report has played a significant role to communicate with the public. In response to the need, partial modifications are made. A list of the NSTM's "non-official" employees (volunteers, temporary help, and suppliers stationed in the museum) was presented in the 2010 annual report in Chinese version. This gesture is to commend their contribution to the museum. The annual report production team has had good control on the publishing schedule, so they are able to present the NSTM's performances in the past year to the public timely. It is published in electronic format to conserve energy and achieve effective distribution through the Internet.

In addition, in 2010, the NSTM launched the Green Museum; through which, we strive to build an environmental-friendly museum based on our model of "technology in life and life with technology". From the four major aspects: environment, economy, culture, and social sustainability, we adopted the balance scorecard (BSC) framework to propose the overall planning and implementation strategies for the operations of the museum. We have achieved so much in the year of 2010. We completed the nation's first open storage, the nation's first permanent exhibition themed upon the subject of climate change, production of multiple quality exhibitions for external events, diversified science education activities, the IMAX 3D movies, and the exhibition facility that fulfills the functions of education, recreation, and entertainment. Our brilliant performance in 2010 proved that strategic management tools enable substantiation of the vision of "Green Museum" and promote upgrade in service and quality. In the future, we will continue to promote this ideology and we expect to see significant results in the annual report of the next year. Therefore, this year's annual report takes on the role to ensure the continuity of our mission. It is now a publication that presents the NSTM's performance and self-evaluation, serves as a communication and marketing tool to reach the public, and provides valuable information to domestic and international institutions.

Shiunn-Shyang Chen

Director-general



CONTENTS

II Foreword from the Director-general

2 Introduction

3 History

5 Organization and Staffing

9 Development Objectives

11 Performance

12 Collections and Research

15 Exhibitions

21 Promotion of Science and Technology Education

25 Public Services

30 General Administration and the Environment

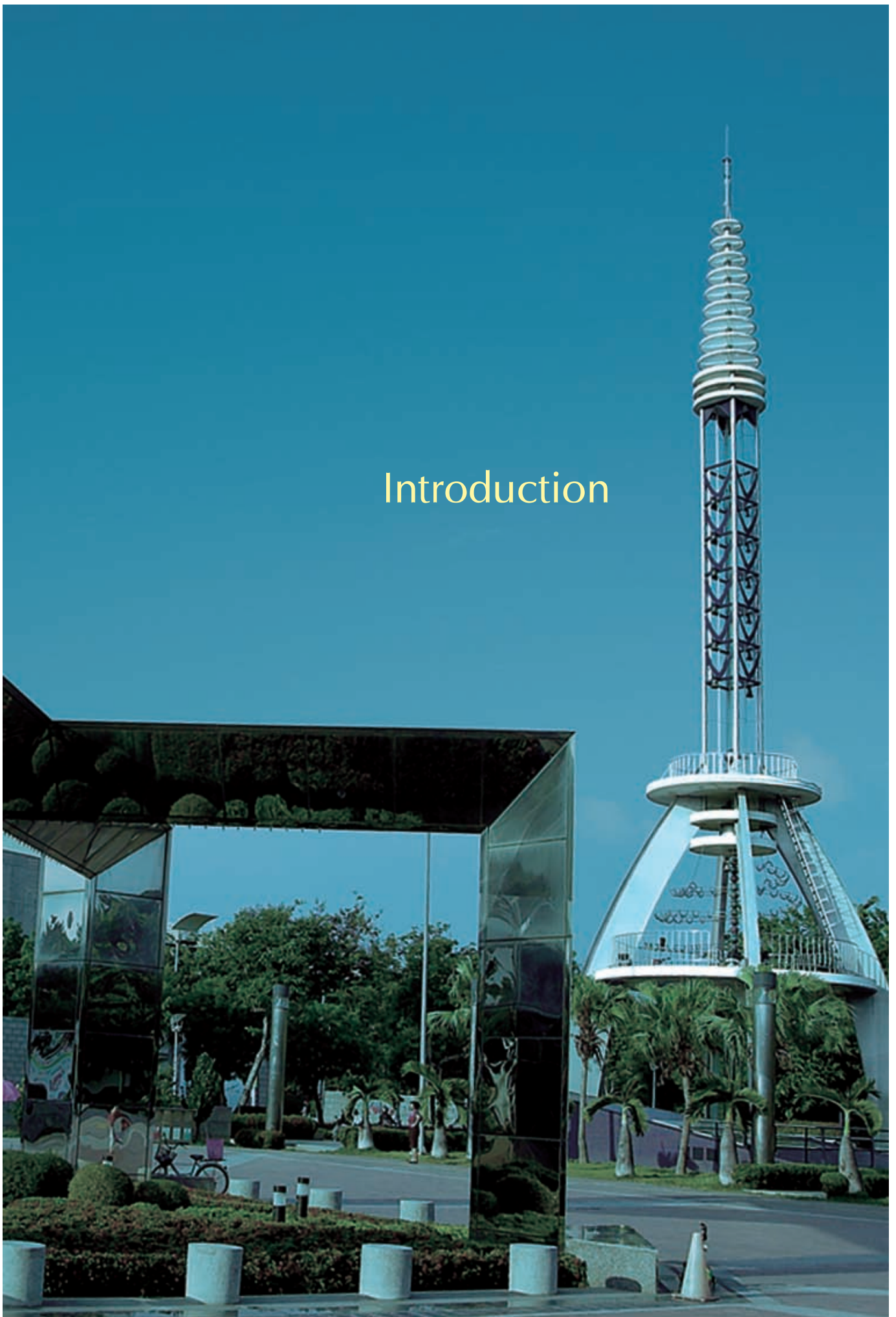
34 Fund Utilization

38 Calendar of Events



NATIONAL SCIENCE AND TECHNOLOGY MUSEUM
2010 Annual Report

Introduction



I History

The National Science and Technology Museum (NSTM) was one of the central cultural facilities constructed in the “Project of County/City Cultural Center Construction” in The Twelve Construction Projects announced by the Executive Yuan in 1979. As the first museum of applied science in Taiwan as well as the first national institute of public education in Southern Taiwan, the focus of the museum is to collect and study scientific and technological objects, hold exhibitions related to science and technology and promote education as well as provide the public with a place for leisure and lifelong learning.

Located on Jiouru 1st Road, Kaohsiung City (originally City Park No. 6), the museum covers 18.37 hectares of land. The buildings contain a total building area of 20,682.83 m² and the floor area is 168,874.31 m² with 36.89 meters of structural height.

- (1) North building: 15,007.55 m² of building area is used for the administration center, permanent exhibition halls, temporary exhibition halls, IMAX® 3D Theater, Wasic Science Theater, Open Storage and Maintenance Workshop as well as for gift shops.
- (2) South complex: 5,412.61 m² of building area is used for the Library and Audiovisual Center, research center, auditorium, lecture rooms and storage. The LOHAS Energy Conservation House was set up in 2009 and sits on an architectural dimension of 262.67 m².



Brief Description of the Preparatory Process:

- | | |
|-----------------------|--|
| 1. July 1986 | The Planning Council for NSTM was established. |
| 2. November 1988 | The Executive Yuan approved the construction plan. |
| 3. October 2, 1989 | Construction of the museum commenced. |
| 4. January 1, 1997 | The museum was officially established with the approval of the Executive Yuan and the Ministry of Education. |
| 5. July 26, 1997 | The south complex was opened. |
| 6. September 21, 1997 | The museum park was opened. |
| 7. November 9, 1997 | The museum was opened to the public. |

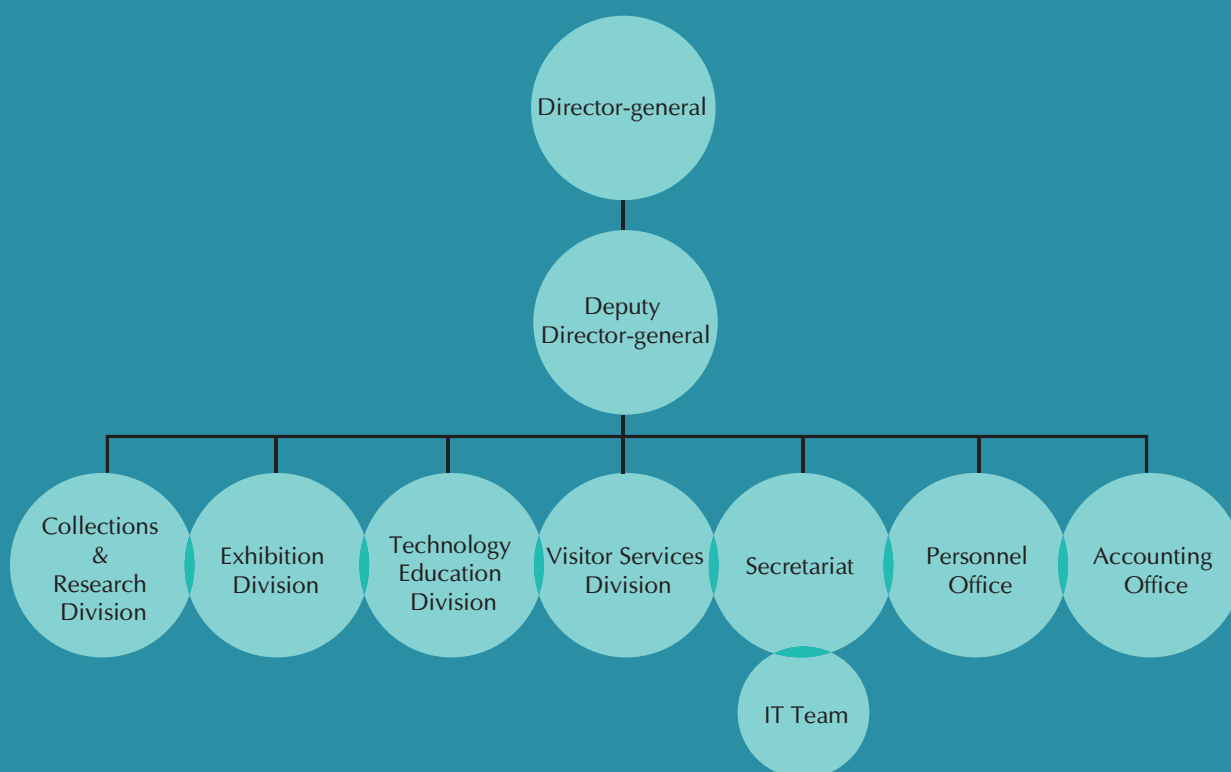




II Organization and Staffing

(1) Organization

In compliance with the temporary organizational rules of the NSTM and the organization chart stipulated and issued by the Ministry of Education on December 30, 1996, a director-general and a deputy director-general were placed over the Exhibition Division, the Technology Education Division, the Visitor Services Division, the Secretariat, the Personnel Office and the Accounting Office. To meet the development requirement of the museum, an IT team and a Collections and Research Team was established on July 16, 1998 and February 1, 2001, respectively. On August 5, 2003 the Ministry of Education approved the temporary organizational regulations which allowed the museum to officially establish the Collections and Research Division on September 1, 2003. This establishment was later agreed by the Examination Yuan on September 22, 2003.



Organizational Structure

(2) Number of Staff

1. Statutory Staff

The museum is allowed to employ a total of 139 staff members, including 43 civil servants, 28 professionals, 16 technical and maintenance workers, 52 contract employees (including 30 senior contract employees and 22 junior contract employees).



2. Current Number of Staff

NSTM currently has staff of 134 employees (68 male and 66 female persons, excluding volunteers and contracted suppliers), including 28 professionals (12 male and 16 female), 41 civil servants (26 male and 15 female), 49 contract employees (20 male and 29 female), 16 technical and maintenance workers (10 male and 6 female). The staff includes 9 senior managers (including the director-general and the deputy director-general). And the ratio of female in the staff of senior managers is 44.4%. The following is a summary of the statistics of NSTM's staff by gender.

Statistics of NSTM Staff by Gender

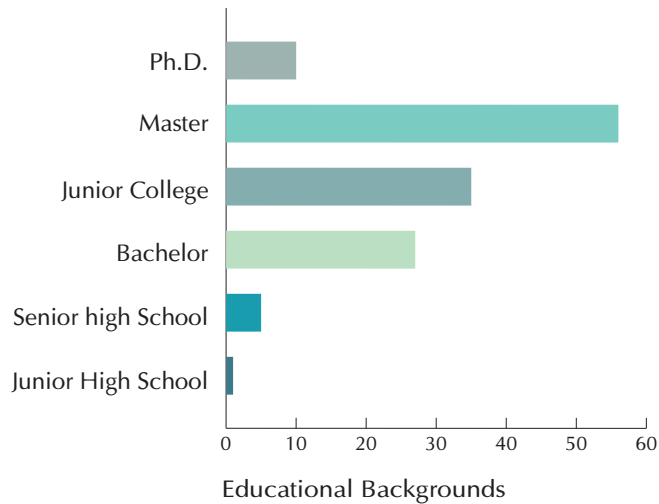
	Current Staff	Male Staff	Ratio of Male Staff	Female Staff	Ratio of Female Staff
Total	134	68	50.8%	66	49.2%
Professionals	28	12	42.9%	16	57.1%
Civil Servants	41	26	63.4%	15	36.6%
Contract Employees	49	20	40.8%	29	59.2%
Technical And Maintenance Workers	16	10	62.5%	6	37.5%



(3) Educational Backgrounds of Staff

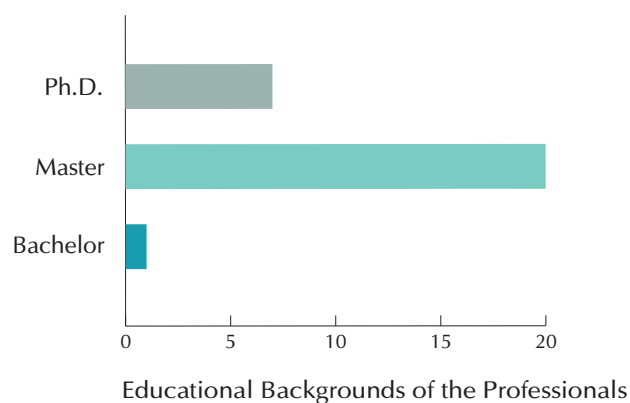
1. Educational Backgrounds

Currently, the museum employs a total of 134 people. Out of these, 10 staff members have Ph.D. degrees, 56 have master's degrees and 35 have bachelor's degrees (including those who graduated from police or military academy). 27 graduated from junior colleges, 5 from senior high schools and 1 from the junior high school.



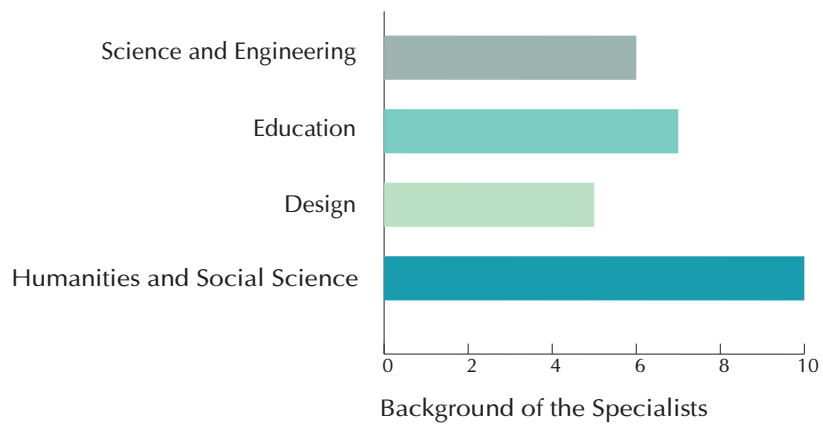
2. Educational Backgrounds of the Professionals

The museum currently employs a total of 28 researchers, including 7 with Ph.D. degrees, 20 with master's degrees and 1 with bachelor's degree.



3. Professionals' Specialties

There are a total of 28 professionals, 6 specializing in science and engineering, 7 in education, 5 in design and 10 in humanities and social science.





III Development Objectives

- (1) To reinforce technological collections management and research: continuation of holding conservation and maintenance seminars and improving the conservation environment, as well as strengthening research and applications for technological collections.
- (2) To establish an exhibition renewal mechanism and gradually alter exhibitions, so as to vitalize the exhibiting functions of the NSTM and make the NSTM a venue for displaying the industrial achievement of Taiwan as well as permanent establishment to record important industrial achievement.
- (3) To develop new teaching aids and combine resources from businesses, schools and society to organize more activities for technology education.
- (4) To enhance public services, utilize the power of the media as well as community resources and establish a diversified marketing strategy to increase the number of visitors.
- (5) To strengthen public safety around the museum and create quality visiting environment for better service.

- (6) To promote automation of administration affairs of the museum and provide life-long learning access on the Internet.
- (7) To enhance and increase Internet software and hardware in the museum for better efficiency.
- (8) To plan a digitalized library to provide the public with information from Internet databases and to create a specialized book repository for different research topics in the museum.
- (9) To strengthen cooperation among museums by holding various seminars and inviting guest speakers to improve research quality.





Performance



I Collections and Research

(1) Acquisitions

In 2010, NSTM registered 162 collections, including 157 from gifts and 5 from field collections. NSTM also temporarily managed 120 artifacts from Chunghwa Telecom and 20 from Taiwan Television Enterprise, Ltd.

Statistics on Collections

Item Year	Total number of annual collections	Field collection	Purchase	Gift	Transfer	Other	Total	Temporarily managed artifacts
2006	33	4	15	14	0	0	805	277
2007	82	15	1	61	5	0	887	378
2008	194	7	1	157	29	0	1,081	0
2009	78	0	27	51	0	0	1,159	16
2010	162	5	0	157	0	0	1,321	140

(2) Operations of the Open Storage

NSTM's mission is to safe-keep the significant artifacts that witnessed the development of technology in Taiwan. Therefore, based on the concept of "public ownership", we think that the majority of the collections kept in the storage should be shown to the public through certain viable channels. This will bring the collections across the boundaries set by the curators into interaction with the audiences. Through manifestation of the spirit of a "friendly museum", we aim to stimulate the interest of the public in science and technology.

Construction of the open storage was completed in August 2009 and the trial run commenced in March 2010. During the trial run period, the public was treated to free visits and viewing of the real-time collection conservation works that were guided by delegated staff. Official operation began in July; a small fee was charged for admission (individuals NT\$30 per person; groups of more than 20 NT\$25 per person). In addition to the regular visits, the visitors were treated with hands-on experiences with the letterpress proofer for card-making and the knitting machine. An accumulated total of 1,962 persons visited the open storage from July to December.



Open Storage (photo supplied by Huan, Wen-Hsin)

(3) Upgrade of the Library for Popular Science

The Audio-Visual Library of NSTM has become a favored public facility for the public since its reopening in 2004 after a series of renovation. To substantiate the policy of “technology in life and life with technology”, a plan to upgrade the library commenced in 2010 and the axis was centered on the concept of “science reading”. As a green museum, we aim to bring the public an experience of in-depth reading; therefore, the Library for Popular Science was targeted to become a living and learning center for the public. During the upgrade operations, the convenient study room service was also adjusted through several stages, making it more convenient for the users without affecting the needs of the students who were preparing for the college entrance exam next year. In the future, the Library for Popular Science will become a complimentary mechanism to the museum to advocate reading of popular science and extended knowledge. Our goal is to achieve the ideal of “science in everyone’s life”.



The Library for Popular Science under Planning
(photo supplied by Tseng, Chi-Shu)

(4) Academic Exchange

In 2010, NSTM teamed up with the Graduate Institute of Museum Studies, Fu Jen Catholic University and the Museum Computer Network, Taiwan Chapter to host the 2010 Workshop of Functional Assessment and Integration of Collection Management Systems. Two workshops were conducted in Taipei and Kaohsiung respectively. NSTM has also joined the National University of Education and National Taiwan Museum to organize the International Symposium on Museum Management. Two sessions have also been conducted in Taipei and Kaohsiung respectively.

(5) Researches and publications

We have achieved so much in researches, including 32 journal articles, 24 conference papers, etc. Meanwhile, A variety of publications have been created, which include books, CDs, etc (see table below).

Statistics on Researches and Publications

Year	Journal articles	Conference papers	Research projects		Academic presentations	Publications					Academic Conferences	Academic Seminars
			Led by NSTM staff	Participated by NSTM staff		Books	CDs	Newsletters	Brochures	Journals		
2006	31	10	12	9	57	8	1	6	25	4	6	5
2007	33	22	17	12	29	12	1	7	9	3	4	15
2008	31	12	19	17	8	5	1	2	17	0	4	0
2009	23	21	16	22	24	5	0	13	6	1	5	0
2010	32	24	14	14	21	4	1	1	4	2	3	0

II Exhibitions

This year NSTM launched 24 exhibitions, including 6 in-house exhibitions and 18 joint exhibitions. In 2010, NSTM has also completed overall renovation of two permanent exhibitions and partial update on two permanent exhibitions. For continuous care of the exhibits, the administrative office implemented a work quantification system and kept the rate of normal operation up to 90%. In the summer, NSTM also hosted the Giant Screen Film Festival to boost the performance of the theater.

(1) The Major Special Exhibitions

A. Traditional Weapons from Central Africa

NSTM teamed up with the National Museum of History and Hong Kong Ethnic Art & Culture Ltd. to host the *Exhibition of Traditional Weapons from Central Africa*. This exhibition features collections from the Royal Military Museum (Belgium) and several other collectors. This inter-museum joint venture is a manifestation of NSTM's mission to facilitate cultural exchange and technology education. Over 500 artifacts were exhibited at this event, making it an international scale exhibition. This event was held from November 28th 2009 to February 28th 2010 and a total of 63,931 people visited this exhibition.

B. 400 Years of Heaven Gazing

With the project grant from the National Science Council, NSTM brought the special exhibition of *2009 Science Season: 400 Years of Heaven Gazing*, to the museum. This exhibition was planned and supervised by the Institute of Astrophysics of National Taiwan University. Furthermore, Delta Electronics Inc. sponsored the high-tech giant projection facility. This facility projected clear and detailed images to create a zero time-gap and borderless technology field. This exhibition was held from January 23rd to April 11th 2010 and around 85,000 people visited this exhibition.

C. Formosa Tea Special Exhibition

NSTM joined the Tea Research and Extension Station (TRES), Uni-President Enterprise Corporation (UPEC), and Tait Marketing & Distribution Co. Ltd. to host the Formosa Tea Special Exhibition. This exhibition showcased the development of the tea culture in Taiwan and the modern-day industrial tea packaging technology. Several valuable machines left from the Japanese Colonial Era, including the Jackson Tea Roller, Mochizuki-style Tea Roller, Cloth Ball Rolling Machine, and Lotus Constrict Machine, were featured in this exhibition. This event was held from April 20th to October 31st 2010 and around 3000,000 people visited the exhibition.



A corner of the Formosa Tea Special Exhibition

D. Da Vinci -The Genius

Da Vinci - The Genius Exhibition was jointly hosted by NSTM and the United Daily News Group. This exhibition showcased Da Vinci's works in three sections- Machines and Gadgets, Paintings of the Renaissance, and 25 Secrets of Mona Lisa. This exhibition did not appeal to the audience of the authentic works of Da Vinci. Instead, it conveys exploration of the cross-disciplinary integration of science and art through the achievements and contributions of Da Vinci and pays tribute to his spirit of research, innovation, invention, and quest of knowledge. This event was held from May 29th to September 12th 2010 and attracted around 220,000 people to visit this exhibition.

E. Greenery in New Kaohsiung: Special show of Energy Saving and Carbon Reduction

The Greenery in New Kaohsiung: Special show of Energy Saving and Carbon Reduction was jointly hosted by NSTM and the Environmental Protection Bureau of Kaohsiung City. This event aims to let the public know the phenomenon of global warming and climate change, the progress and current status of the international efforts in controlling greenhouse gases, and Kaohsiung City's policies and efforts in energy-saving and carbon reduction. This event was held from July 2nd to November 21st 2010 and around 80,000 people visited the exhibition. This exhibition was later relocated to the Kaohsiung City Government Environmental Protection Bureau Central District Waste Management Plant for permanent exhibition.



LOHAS Genie welcomes the visitors at the entrance of the *Greenery in New Kaohsiung: Special show of Energy Saving and Carbon Reduction*

F. Treasures from the Roof of the World

The Treasures from the Roof of the World Exhibition, jointly organized by NSTM and the United Daily News Group, This exhibition features 130 sets of treasured artifacts from 12 cultural sites, including the Potala Palace and the Norbulingka Lhasa, the Tibet Museum, the Mountain Resort Museum Chengde, and the Cultural Palace of Nationalities Beijing, showing exclusive art achievements of the Tibetans in Buddhism, medicine, religious instruments, music and dances, musical instruments, and costumes. This event was held from September 30th 2010 to January 9th 2011, and up to the end of December 2010 around 45,467 people visited the exhibition.

(2) Updates for the Permanent Exhibitions

A. 2010 Science Season: Climate Change Exhibition

Commission by the National Science Council, NSTM organized the 2010 Science Season under a special project grant. This is a five-year exhibition, featuring five theme areas built with 100% green building materials and the first mechanical energy-saving moveable theater. On a permanent basis, this exhibition hall showcases ten eye-catching interactive activities of sound, light, visual, and audio technologies and 52 exhibition units to bring the public a whole new experience of environmental education. This exhibition was inaugurated in August 8th 2010, and up to the end of December 2010 totally attracted 80,759 visitors.



Opening Ceremony of the 2010 Science Season: Climate Change Exhibition

B. Update on the Paddy Husker Unit in the Power and Machines Exhibition Hall

NSTM strives to maximize the effects of the exhibits and the functions of the Museum. In order to better demonstrate the operations of the Paddy Husker and the process of making rice, the original Paddy Husker exhibit was reinforced with LED light strips and further supplemented with tangible rice and photos. The new setup allows the audience to experience the operations of rice husking at an earlier time through the simple push of a button.

C. Update on the Exhibit for Water Saving Implementation in the Utilization of Water Resources Hall

NSTM applied to the Water Resources Agency (Ministry of Economic Affairs) for special project grants to conduct the 2009 Water-Saving Education and Promotion Facilities and Water-Saving Facility Implementation Project. This grant supplied the funds to the museum for a partial update of the Utilization of Water Resources Hall. Two units were added in this project - Water Shortage in Taiwan and Water Saving Expert. The update work was completed on December 31st 2010.

D. Completion of the Telecom @ Taiwan Exhibition Hall

NSTM joined Chunghua Telecom Co., Ltd. in a resource alliance and applied to the Ministry of Education for a special second stage service upgrade grant. This grant provided the museum with the funds for an overall upgrade on the Telecom @ Taiwan Exhibition Hall, which was certified complete at the end of 2010. This hall features over 900 exhibits and over 40 AV interactive games, and showcases the development of telecommunications in Taiwan from the beginning until now.



An exhibit at the Telecom @ Taiwan Exhibition Hall- Standard Clock

(3) Other Major Achievements

A. Science Train Exhibition at the Little Ding-Dong Science Park

The Little Ding-Dong Science Park commissioned NSTM to plan its General Science Hall. This project was a reinstallation of NSTM's exhibition resources, consolidated from nine exhibition units displayed previously with the subjects of physics, energy, and momentum. Reinstallation was tailor-made to fit into the exhibitions spaces and coordinated to the existing exhibitions of the Little Ding-Dong Science Park. From July 1st to December 31st 2010, this exhibition has attracted 63,530 visitors.

B. The Diseases Prevention Mobile Museum

The Disease Prevention Combat Camp was jointly hosted by NSTM and the Centers for Disease Control. The featured exhibits from this exhibition were later converted into exhibits for the Disease Prevention Mobile Museum, which carries the mission to host activities at the communities, junior high schools and elementary schools at the remote areas. A total of five activities have been conducted, servicing a total of 2,256 persons-times of school teachers, students and community residents.

C. Giant Screen Film Festival

The 2010 Summer Giant Screen Film Festival was held from July 17th to August 15th, showcasing six 3D films played in nine sessions per day. The films feature a variety of subjects, including outdoor adventure, flying, surfing, science fiction, and fun animations. The event attracted 28,599 persons and generated NT\$2,053,350 in box office receipts.

D. Development of the Exhibit Maintenance and Management Information System

NSTM developed an in-house exhibit maintenance and management information system, incorporating PDAs as mobile inspection units. Information collected from the terminals is released on the intranet for open viewing, aiming to boost the efficiency of maintenance work. Training and education relevant to exhibit maintenance were also conducted to reinforce the mutual proxy mechanism.

E. The Legend of Whale Island- Dengue Fever and Enterovirus Film was selected as an outstanding educational film in 2010

This film, jointly produced by NSTM and the Centers for Disease Control, was selected for the Institutional Nomination category in the 2010 Outstanding Educational Film Festival organized by the National Institute of Educational Resources and Research.

F. US-Taiwan Energy Forum & Exhibition

NSTM teamed up with the American Institute in Taiwan, Kaohsiung City Government, and National Sun Yat-Sen University to host the US-Taiwan Energy Forum & Exhibition. This event was held from December 14th to 24th at NSTM. President Ma Ying-jiou presided over the opening ceremony in person. A total of 4,047 persons participated in this event.



III Promotion of Science and Technology Education

(1) Science Education Activity Series in Children's Science Center

The Children's Science Center series were designed for pre-school children groups. A total of 275 activities were launched, servicing a total of 10,056 persons. Among the activities, the "Ocean's Secretes" and "Mottainai Grandma" were designed in coordination with the subjects of marine and environmental education. These series of activities enabled children to learn through multiple sensory, brought them to feel the beauty of the ocean, and raised their awareness in the threats faced by the marine ecology. Through the activities, the children came to experience the importance of saving water and learned to love the Earth through actions.



Animation Turntable

(2) Extension of Science Education to the Rural Areas

To sow the seeds of science education on the campuses of rural areas, NSTM applied for a three-year project grant from the National Science Council and began to organize creative technology activities for the youth of the aboriginal tribes and rural townships since 2008. In 2010, NSTM conducted 15 workshops for the teachers and a total of 406 persons/times of school teachers from the aboriginal tribes and rural townships participated in this event. In addition, to bring science education deep into the rural areas, NSTM brought its services directly to the campuses during the summer vacation. A total of 5 workshops for team instructors and 8 tribal creative technology experience camps were conducted and 284 students participated in the events.



(3) Promotional Activities for Energy Saving and Carbon Reduction Education

In coordination with the National Energy Education and Promotion Policy, NSTM teamed up with the Promotion Office for NSC Energy Education Project of the National Science Council to host the Energy Education Festival. The events featured the Exhibition of Energy Saving and Carbon Reduction Education Projects, energy technology education promotional activities, the Competition of Energy Saving and Carbon Reduction Creative Lesson Planning, and the Tracing Carbon Footprint Family Challenge Game. These events attracted over 16,000 persons/times of visitors. And the winning projects of the creative lesson plan competition were digitalized and shared to all secondary and primary school teachers nationwide over the internet. This was an initiation to maximize the effectiveness of the follow-up project implementations. In addition, workshops for the teachers and activity sessions were also conducted in coordination with the 2010 Science Season- Climate Change Exhibition and Greenery in New Kaohsiung- Special Exhibition of Energy Saving and Carbon Reduction. NSTM also teamed up with the National Kaohsiung University of Applied Science to organize the Fifth Competition of Solar Energy Model Car for Southern Taiwan Science Park and hosted the Hybrid Fuel Cell-Powered Mini-Train System riding activities during the weekend. A total of 324 sessions have been held, attracting 38,889 persons/times to the event.



In the Tracing Carbon Footprint Family Challenge Game, the participants must answer all questions of energy-saving and carbon reduction correctly to pass the Carbon-Reduction Arena.

(4) Nanotechnology Promotion Activities

This year's promotional campaigns for nanotechnology were planned with diversified activities, including nano-objects exhibitions, teaching materials, multimedia teaching, challenge games, DIY sessions, experiments, teachers' workshops, science camps, popular science lectures, and industry-academic matching. Through different experiences, NSTM brought the audiences into contact with nanotechnology, with the aim to raise the awareness in nanotechnology and its applications. In 2010, a total of 55 promotional activities were held, attracting 14,848 persons/times of participants.

(5) Cross-Strait Mechanics Exchange Events and Summer Camp of Mechanics Contest for Senior High School Students

NSTM has been commissioned by the Society of Theoretical and Applied Mechanics of the Republic of China to organize the Mechanics Contest for the Domestic Senior High School Students and Cross-Strait Summer Camp of Mechanics Contest for Senior High School Students since 2004. A total of 30 students from Taiwan, 15 high school students from China, and 15 teachers participated in the 2010 Cross-Strait Mechanics Contest for Senior High School Students. Significant results of exchange events and competitions of Mechanics have been achieved.

(6) Educational and Promotional Activities for the Special Groups (including the Elderly)

In an effort to care for the minority students, NSTM proposed the Science Feast Theme Activities- Science Go Go to the Shui-Lai Chen Foundation for sponsorship. This project aims to service students in the rural areas and children of the new migrants. A total of 24 schools, including 2,000 students and teachers, benefited from this project. NSTM has also been commissioned by the National Science Council to organize the Hands-on and Minds-on Science Education Project. A total of 15 events under this project have been conducted, attracting 2,140 persons-times of participants. For the elderly groups, NSTM planned the activities with a high teacher-student ratio and high interactivity for the first time and offered the elderly groups attentive tour services to bring the elderly citizens a different view in education. A total 79 sessions have been conducted, attracted a total of 2,932 participants. In addition, NSTM also hosted a series of activities, integrating sports technologies into physical development.



Opening ceremony of the Science Go Go event on April 15th, 2010.



(7) Meeting the Scientists on Sunday Science Lecture Series

To promote science education to the general public, the National Science Council has provided grants to the National Cheng Kung University, NSTM, National Kaohsiung University of Applied Science, and the National Center for High-Performance Computing to organize this series of lectures. In 2010, a total of 12 lectures were held at the South Complex International Conference Room of the museum and a total of 3,900 persons/times attended the lectures. The lectures were also broadcasted live through the internet to provide the domestic and international viewers a channel for remote participation.

(8) Motech Award- Creative Design Competition Using Solar Cell

NSTM teamed up with Motech Industries Inc. to host the solar-energy optoelectronic application activities. The Motech Award- Creative Design Competition Using Solar Cells were targeted on the undergraduate and postgraduate students. During this year (2010), NSTM hosted the first competition, which attracted enrollment of nearly 370 teams (nearly 1,000 students) to compete in the event. After the preliminary round, a total of 40 teams were selected for the finals. The creative models made by the participating students were carefully judged and winners of gold, silver, and bronze medals were announced on the same day.

Statistics of Science and Technology Education Activities

YEAR	Categories	Lectures	Conferences	Workshops	Activities	On-location Services	Others	Total
2006	Number of Events	18	7	199	977	137	76	1,414
	Number of Participants	1,048	894	38,134	143,562	65,458	18,714	267,810
2007	Number of Events	28	4	144	1,329	52	10	1,567
	Number of Participants	1,790	206	10,391	129,759	76,957	829	219,932
2008	Number of Events	39	1	276	1,651	82	3	2,052
	Number of Participants	4,991	135	17,939	216,267	30,695	166	270,193
2009	Number of Events	22	3	323	1,562	137	13	2,060
	Number of Participants	3,595	412	15,787	151,432	37,722	10,263	219,211
2010	Number of Events	79	14	780	1,607	46	135	2,661
	Number of Participants	7,696	935	28,522	199,624	23,539	3,021	263,337

IV Public Services

(1) Reinforce the functions of public services and the quality of services to boost the rate of museum visits

The number of visitors to the museum is one of the indicators of a museum's success in operations and the Visitor Services Division sees it as a major goal to strive for high growth every year. In the fast advancing society, NSTM adapts the strategy of consolidating the social resources to reach non visitors and minority groups through a diversified range of marketing channels. With "quality service" in mind, NSTM conducts community activities to maintain the basic customer base and establish a good interactive mechanism. In 2010, NSTM was visited by/for a total of 1,861,010 persons-times, which recorded a growth of 5% compared to last year.

Statistics of Visitors

Year	Exhibition Halls	IMAX 3D Theater	Wa-sci Science Theater	Fee-charging Special Exhibitions	South Complex	Outdoor Activities	Others*	Total
2006	660,711	214,713	9,205	200,050	167,438	249,543	557,604	2,059,264
2007	498,892	190,502	6,334	14,391	202,269	278,492	538,172	1,729,052
2008	580,034	156,462	0	70,486	224,394	206,321	413,815	1,584,695
2009	533,509	147,606	0	99,339	225,491	119,021	184,985	1,309,951
2010	665,992	164,627	0	260,418	194,747	130,949	444,277	1,861,010

*Others: technology education activities, Open Storage, LOHAS Energy Conservation House, library, outreach activities.

(2) Expand marketing channels by full utilization of the media resources

The Visitor Services Division delivers the most updated news of special exhibitions, activities, and events to the public through press conference, news release, media program production, and text messages. Through a variety of communication channels, NSTM makes the museum's services known to the public and builds up good relationships with media. In 2010, a total of 841 news releases have been published on printed media and a total of 56 issues (containing 259 reports) of NSTM's newsletters were also published.

(3) Utilization of social media and network communities

Along with the development of network communities, NSTM took the lead to establish a marketing platform on Facebook, with the aim of bringing the museum's news into the lives of the public. The Visitor Services Division set up a Facebook fan page in October 2009 (<http://www.facebook.com/ilovenstm>). Up to December 16th 2010, a total of 1,493 users have sent NSTM news to other network members through this portal and content includes event news, exhibition news, selection of collections, museum news, and movies synopsis.

(4) Establishment of the Customer Relationship Management System

The Visitor Services Division set up the Customer Relationship Management (CRM) system to centrally manage customer information. The database consolidates the customers demographic data, such as age, and visitor attributes into the management system and the relevant information is provided for expansion of customer relations and the design of customized services and events. Through this system, NSTM effectively fortified customer loyalty. Currently, NSTM members are classified into seven categories, who are given different membership groups, including the Science Education Activities, Golden Card, Student Card, Member Card, Student Pass, Family Card, and Corporate Card. In 2010, a total of 88,441 entries were consolidated into the system, which recorded 4.13% growth compared to the previous year.

(5) Team up with the schools to expand NSTM's communication channels

NSTM specially invited the principals of Kaohsiung County/City's junior high and elementary schools to serve as the Museum Ambassadors and each of the school principals were invited to recommend a teacher for the post of Museum Specialist. There are currently a total of 373 museum delegates, including 198 Museum Ambassadors and 175 Museum Specialists. In addition, museum webpages were also opened for public linking, with the aim to expand the marketing effectiveness for the museum's activities. Currently, a total of 74 schools have made links to NSTM.

(6) Cross-industrial integration for expanded customer base

NSTM invited hotels and travel agencies to join in co-op marketing projects. The private tourism industry incorporates NSTM's events into their tour designs and launches special discount packages to attract tourists and field trip students. In 2010, NSTM joined 20 hotels in several projects, which yielded ticket revenue of NT\$96,850. In addition, travel agencies organizing school field trips were given a 30% ticket discount and further discount for tour managers booking tickets over NT\$200,000. Up to the end of 2010, a total of 50 travel agencies have participated in the projects.

(7) Consolidate enterprise resources to help the minority groups

NSTM actively seeks resources from corporations and organizations. The resources were used to bring children of the minority groups the opportunities to visit the museum. This program is expected to bring added growth to the museum's income and visitors, as well as satisfying its social responsibilities in museum and science education. In this year, NSTM continues to implement the Children's Charity Program, which attracted a sum of NT\$252,100 in donation, and this resource was used to help 2,521 children. In 2010, 8% growth was recorded as compared to the previous year.

(8) Enrich the content of museum tours through providing quality museum guide service

In coordination with the special exhibitions, NSTM launched specialized museum guide services. The services were provided to the major events, including the National Science Council projects- "400 Years of Heaven Gazing" and "Climate Change Exhibition", and media projects- "Da Vinci- The Genius" and "Tibet- Treasure from the Roof of the World". A total of 1,772 fixed time/location holiday museum guide tours were given in 2010.



Children's Charity Program Event

(9) Good neighbor events established good community relationships

A. Community Activity

The Energy Conservation Community Activity was held from April 25th to October 16th 2010. A total of 63,825 persons-times participated in this event.

B. IMAX 3D Movies

Twelve movie activities were held from March 27th to April 4th 2010, featuring special productions- The Quantum Quest-A Cassini Space Odyssey and Three serial movies (ROBO+Travel to Mars+Exploring Mars). A total of 992 persons-times participated in the events. Addition eight movie screening activities were also held from September 25th to October 3rd, featuring "Dream Holiday, The Secret to Happiness, Dinosaurs and Mosquitoes" and "Bubble Town, A Bug's Life, and ROBO". A total of 1,248 persons-times participated in the events.



Community Activity



Technology Tour of Volunteers

(10) Utilizing the human resources from the communities

NSTM's volunteers have helped the museum's staff in the museum operation for over a decade. They are the greatest contributors to science education. For the purpose of helping in the operations of the exhibitions and with a goal to bring in the expertise of enthusiastic specialists in science and technology, as well as to effectively utilize the limited human resources, NSTM makes its contributions to the communities and the development of science education in Taiwan through implementing training of professional knowledge and cultivation of the spirit for service to the volunteers. This year, NSTM expanded its recruitment for volunteer services, with the aim of establishing a staff of volunteers that are enthusiastic to work with NSTM for the communities. We wish that the volunteers will see NSTM as their home and stay with us to witness the coming of a bright future. Up to the end of 2010, NSTM has 907 volunteers. This year, Visitor Services Division hosted four volunteer seminars, which attracted 459 participants, and one volunteer commendation ceremony, which had 390 persons participated.



V General Administration and the Environment

(1) General Affairs

A. Open tendering procedures to cut back spending

In 2010, there were 81 procurement contracts over NT\$ 100,000, and the accumulated tender budget was NT\$ 160,852,649, while the award amount of contracts was NT\$ 145,007,274. Therefore, NT\$ 15,845,375 in total was saved, and 9.85% of reduction was reached. There were 392 procurement contracts above NT\$10,000 and under NT\$100,000, and the accumulated tender budget was NT\$14,042,213, while the award amount of contracts was NT\$12,815,447. Therefore, NT\$1,226,766 in total was saved and 8.74% of reduction was reached.

B. Venue rentals adding revenues

By actively promoting and expanding the sale, the revenues of venue rentals were NT\$6,914,910 in 2009 and NT\$8,422,243 in 2010, which increased 17.9%.

C. Increasing interest income

By breaking through the past operational modes and innovating acts, adding numbers of small amounts of certificate of deposits increased bank savings. The interest incomes reached NT\$1,134,795 in 2010.



(2) Electrical Services

A. Equipment replacement enhance the efficiency

The chiller in the South Complex was replaced in May, 2010. From a comparison of the electricity usage from June to December in 2009 and 2010, about 210,000 kilowatt-hours was conserved. One of the evaporative condenser in the North Complex was replaced at the end of October, about 60,000 kilowatt-hours of electricity was conserved from November to December.

B. Improvement in administration to cut spending

In 2010, the maintenance work for the intelligent equipments was re-delegated from the external contractor to complete manual maintenance, which approximately saved NT\$2 million. The redundant properties were took stock and sold, which generated income over NT\$100,000. 4,603 shrubs and 7,250 flowers were planted, and all of them were self-raised, which approximately saved NT\$127,000.

C. Emergency response drill preventing damage from the unexpected

A flood drill was conducted to boost the responsiveness of the electrical maintenance staff and contractors. And two self-defensive fire drills were conducted in order to reinforce the staff's knowledge and skills in equipment operation and emergency response.



The evaporative condenser at the North Complex was replaced.
(photo supplied by Wu, Ching-Yun)



D. Achievements and Promotion of Energy Savings and Carbon Reduction

In 2010, several facility improvements and energy-saving policies were implemented. Comparison with 2009, the electricity usage was reduced 1,276,681 kilowatt-hours in 2010, which recorded a saving of 8.31%. By carried out the system of plumbing anti-drip inspection, the water usage was 82,312 cubic meters in 2010, reduced 545 cubic meters than in 2009, recording a decrease of 0.66%.

In the Go! LOHAS NSTM Activity, seven green museum promotional activities, including the tree donation activity, environmental protection and life DIY promotional campaign, the flea market, and everyday environmental protection activities, were conducted during the period of July to December.

E. Awards and Honors

The public restrooms of NSTM won first and third place in the Quality Public Restroom Campaign Recreational Facility Category 2010. On September 20, 2010, NSTM was commended as one of the 2009 outstanding institutions in the implementation of the Full-scale Government Agencies and Schools Energy-Saving and Carbon Emission Reduction Measures (No. Taiwan Social (III) 0990159019A).



NSTM's public restrooms won first and third place in the Quality Public Restroom Campaign Recreational Facility Category (photo supplied by Li,Chane-Wen)



(3) Information

A. Establishment of the Memory of NSTM Services

NSTM set up the Memory of NSTM area at the lobby, offering the visitor a novel museum experience. The facility enables the visitors to take and edit their special photos, users can download the photos through the NSTM network or send to private email boxes. No additional fee and no need for personnel on site, these can efficiently save on maintenance cost. From February to December after its establishment, a total of 6,805 persons-times have used this service.

B. Website Update

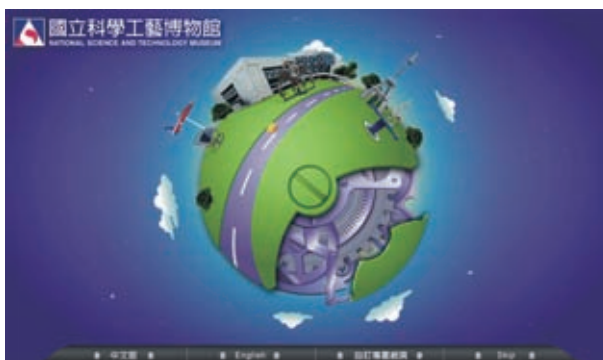
In 2010, the NSTM website entered into a full-scale update and the new version was launched on August 6. This new web portal offers more convenient operations and functions and meets the AA class of easy access standards. A total of 3,394 regular pages and 72 pages of special exhibitions were set up in this update operation.

C. Building an Information Security Management Committee

NSTM set up the Information Security Management Committee, which approved 62 cases in 2010, including 3 cases of information security policies, 25 cases of relevant information security operational procedures, and 34 operational forms. The Committee continues to set up effective information security methods and procedures to ensure the sustainability of the operations and lower the operational risks.

D. Setting up the Information Boards

To provide the museum visitors with instant information of the activities and events, Information Boards have been set up on the major routes inside the museum. In 2010, a total of 28 Information Boards were installed.



The whole-new website of NSTM was launched into operation
(photo supplied by Chang Chien, Chih-Ting)

VI Fund Utilization

(1) Annual Balance

In 2010, NSTM received at a total of NT\$376,968 thousand in revenue. The main sources of revenue include grants from social education institutions (NT\$232,746 thousand or 61.74% of the total revenue) and self-raised funds (NT\$144,222 thousand or 38.26% of the total revenue). In which, the largest sum of revenue came from school-museum co-op projects (NT\$75,416 thousand or 20.01% of the total revenue) and the second largest revenue came from service revenues (NT\$25,003 thousand or 6.63%). The remaining revenue sources are asset utilization and royalties (NT\$23,078 thousand or 6.12%) and revenue from promotional education (NT\$7,865 thousand or 2.09%). The operational costs and expenditure came to a total of NT\$453,210 thousand, accounting for 120.23% of the total revenue. The balance of this year's finances shows a deficit of NT\$76,242 thousand. This is mainly due to the practice that asset depreciation and amortization are required to be listed as part of the operational funds. In the aspect of revenue, NSTM raised 38.26% of the total funds independently in 2010.

2010 Final Accounts

Unit: thousand NT dollars

Accounts	Annual Budget	Final Accounts of this Year	Final Accounts of Last Year
	Amount	Amount	Amount
Business Revenues	286,865	351,455	318,642
Service Revenues	35,410	25,003	24,604
Exhibition Halls	19,550	17,191	14,687
IMAX® 3D Theater	15,860	7,812	9,917
Collaborative Education Revenues	10,799	75,416	48,624
Education Promotion Revenues	7,910	7,865	9,217
Subsidies for the Development of Social Educational Institutes (A)	232,746	232,746	222,552
Other Subsidies		10,425	13,645
Other Revenues	16,159	25,513	21,677
Interest Revenues	500	1,136	954
Revenues for Assets Usage and Loyalty	15,429	23,078	20,135
Penalties for Contract Breaking (including indemnities)	50	501	72
Miscellaneous Revenues	180	798	516
Total Revenue (B)	303,024	376,968	340,319
Business Costs and Fee	366,764	453,210	451,375
Service Costs	195,405	223,490	245,111
Collaborative Education Costs	10,799	71,567	46,888
Education Promotion Costs	7,910	5,753	6,658
Management and General Administration Expenses	152,650	152,400	152,718
Total Expenditures	366,764	453,210	451,375
Surplus (Shortage-)	-63,740	-76,242	-111,056
Current Account of Governmental Subsidies(A)/(B)	76.81%	61.74%	65.40%
Current Account of Self-raised Fund 1-(A)/(B)	23.19%	38.26%	34.60%
Self-raised Income	70,278	144,222	117,767

(2) Budget & Final Account of Capital

In the fiscal year of 2010, NSTM executed a capital budget of NT\$60,473 thousand (fixed asset construction, renovation, and expansion). The government subsidized the expenditure in the amount of NT\$50,434 thousand and NSTM raised NT\$10,039 thousand independently.

Unit: thousand NT dollars

Item	Allocated Budget	Final Accounts in this Year
Improvement of Construction for Fixed Assets	11,591	60,473
Governmental Subsidies	1,527	50,434
Self-raised Fund	10,064	10,039

(3) The Annual Budget and Final Accounts of Revenue after Implementation of the Operating Fund System by Year

Unit: thousand NT dollars

Item Year	Budget					Final Accounts				
	Total	Subsidies for Social Educational Institutes	%	Self-raised Fund	%	Total	Subsidies for Social Educational Institutes	%	Self-raised Fund	%
2007	285,366	219,208	76.82	66,158	23.18	321,744	219,208	68.13	102,536	31.87
2008	290,529	222,682	76.65	67,847	23.35	339,550	222,682	65.58	116,868	34.42
2009	292,280	222,552	76.14	69,728	23.86	340,319	222,552	65.39	117,767	34.61
2010	303,024	232,746	76.81	70,278	23.19	376,968	232,746	61.74	144,222	38.26

Data source: the annual budget and final account reports

(4) The Annual Budget and Final Accounts of Expenses after Implementation of the Operating Fund System by Year

Unit: thousand NT dollars

Item Year	Budget					Final Accounts					
	Total	Ordinary Expenditure	%	Equipment Expenditures	%	Total	Ordinary Expenditure Personnel Fee	Ordinary Expenditure	%	Equipment Expenditures	%
2007	303,964	285,166	93.82	18,798	6.18	534,471	116,781	347,698	86.90	69,992	13.10
2008	335,070	290,246	86.62	44,824	13.38	518,767	117,709	344,815	89.16	56,243	10.84
2009	302,051	291,997	96.67	10,054	3.33	551,295	119,405	331,970	81.88	99,920	18.12
2010	376,828	366,764	97.33	10,064	2.67	513,683	121,574	331,636	88.23	60,473	11.77

Data source: the annual budget and final account reports





Calendar of Events



Calendar of Events

No.	Date	Category	Summary	Reporting Office
1	Jan. 5th	Other	The American Visitor Studies Association interviewed the Museum's researcher, Chi-Hsiang Wang from the Technology Education Division, and the interview was published on the People Column of the Association's 2010 January eNewsletter.	Technology Education Division
2	Jan. 10th	Activities	The annual work review for the volunteers was hosted by the museum's volunteer administration.	Visitor Services Division
3	Jan. 23rd-Apr. 11th	Exhibitions	The National Science Council, Institute of Astrophysics of the National Taiwan University, and Delta Electronics jointly sponsored the 2009 Science Season. The Science and Technology Museum took on the mission to bring the special exhibition of "400 Years of Heaven Gazing", which was held at Special Exhibition Hall III, to the museum.	Exhibition Division
4	Jan. 28th	Conferences	NSTM hosted the "The Conference of 2010 Sharing Technological Innovation and Cooperative Exchange between the both Straits' sides of the Museums". The organizer invited Professor Xiang-Yi Li from the China International Council of Museums to Taiwan to speak in this event.	Collections and Research Division
5	Jan. 30th	Activities	The Visitor Services Division hosted the " Kids Super Show ".	Visitor Services Division
6	Jan. 31st	Conferences	NSTM joined the Science Monthly 40th Anniversary Planning Council, National Cheng Kung University, Taiwan Association for Promoting Public Health, and National Sun Yat-Sen University to organize the "Public Science Lecture Series". Internationally renowned expert on viruses, President of National Cheng Kung University, Dr. Michael Ming-Chiao Lai, started the event with a speech entitled, "Unlocking the Myth of H1N1 Virus" at the opening ceremony.	Technology Education Division
7	Feb. 1st-28th	Other	NSTM teamed up with the Love Kaohsiung News Net to organize the Coupon for Gift Activity. Gift coupons are published in the " KRT Sightseeing Brochure".	Visitor Services Division
8	Feb. 20th-21st	Activities	NSTM joined the ESUN Robot Association to host the "2009 FLL(FIRST LEGO® League) Competition Tryout in Taiwan". A total of 32 teams and 342 contestants participated in this event and 8 teams were selected to represent Taiwan for the Open International Championship held at the Kaohsiung Arena in May.	Technology Education Division
9	Feb. 22nd	Activities	The Personnel Office organized the Chinese New Year celebration activities.	Personnel Office



No.	Date	Category	Summary	Reporting Office
10	Feb. 28th	Activities	NSTM organized the 2010 Lantern Festival promotion activities.	Visitor Services Division
11	Mar. 3rd	Other	NSTM began implementation of the National-class Museum Sustainable Nano-technology Collection Archiving Mechanism Establishment Program.	Collections and Research Division
12	Mar. 9th	Other	"Open Storage" test operations.	Collections and Research Division
13	Mar. 17th	Exhibitions	"Taiwan Sustainable Campus Traveling Exhibition" press conference was held at the National Taiwan Science Education Center; Minister of Education, Qing-Ji Wu, was present at the tree planting ceremony.	Exhibition Division
14	Mar. 19th- 20th	Conferences	NSTM hosted the "Workshop of the Technology Innovation Competition and Research Outcomes". Professor Yao-Ming Chu and Professor Chiao-Ling Yang of the National Kaohsiung Normal University and Professor Shi-Jer Lou of the National Pingtung University of Science and Technology were invited to speak at the event.	Technology Education Division
15	Mar. 24th	Activities	NSTM organized a series of "Open Storage Conservation Workshops".	Collections and Research Division
16	Mar. 26th	Other	Over 40 representatives of the "2010 Cross-Strait Science Communication Forum" and the National Science Council visited NSTM.	Technology Education Division
17	Mar. 27th- Apri. 4th	Activities	NSTM hosted 14 Communities Film-Watching Activities.	Visitor Services Division
18	Mar. 29th	Activities	NSTM hosted the outstanding volunteers award ceremony.	Visitor Services Division
19	Mar. 29th	Activities	NSTM hosted the outstanding volunteers award ceremony.	Visitor Services Division
20	Apr. 17th- Apr. 25th	Exhibitions	NSTM teamed up with the Promotion Office for NSC Energy Education Project of the National Science Council to host the "Energy Education Project Festival", which was held at the fourth floor corridor.	Technology Education Division
21	Apr. 20th	Other	Two designs developed by the Museum- the "Toy: Automatic Bamboo Gun" and "Survival Device: Multi Purpose Tent" were approved for patents of new designs by the Intellectual Property Office of the Ministry of Economic Affairs.	Technology Education Division



No.	Date	Category	Summary	Reporting Office
22	Apr. 20th- Oct. 31st	Exhibitions	The Formosa Tea Special Exhibition was held on the first floor Star of the Universe Plaza.	Exhibition Division
23	Apr. 25th- May 3rd	Exhibitions	NSTM co-hosted "The 50th Primary and High School Science Fair" with Education Bureau of Kaohsiung City Government., which was held at the Special Exhibition Halls II and III.	Exhibition Division
24	Apr. 29th- 30th	Activities	NSTM joined the Nanotechnology Human Resource Development Program Office of the National Science Council to host the "2010 Nanotechnology Education Promotion Festival", which was held at the South Complex auditorium and meeting rooms.	Technology Education Division
25	May 3rd	Other	The Personnel Office organized the "Farewell Director Party" and "New Director Inauguration Ceremony". Guests to this party witnessed handover of the post from the departing director, Chung-Wu Hsieh to the new director, Shiunn-Shyang Chen.	Personnel Office
26	May 5th	Activities	The Kaohsiung Golden Age Association teamed up with NSTM to host the Mother's Day Carnival- " The Warm-Heartedness of May", which was held at the museum's first floor lobby.	Visitor Services Division
27	May 8th	Activities	The Holiday Art Festival was held at the first floor lobby. Students and teachers of Kaohsiung Municipal Kaisyuan Primary School were invited to perform the " Lucky 99-Student and Teacher's Show ".	Visitor Services Division
28	May 18th	Activities	NSTM hosted the "518 International Museum Day" celebrations.	Visitor Services Division
29	May 24th	Activities	The Personnel Office organized the employees education and training activities, entitled "Communication and Motivation". Director, Shiunn-Shyang Chen, gave a seminar to the staff of the museum.	Personnel Office
30	May 29th- Sep. 12th	Exhibitions	NSTM co-hosted " Da Vinci-The Genius " with the United Daily News Group; the event was held at the Museum's Special Exhibition Halls II and III.	Exhibition Division
31	May 29th- Jun. 13th	Activities	Three Creative Teaching Materials Design Workshops for Disease Prevention were held in Kaohsiung, Taichung and Taoyuan respectively.	Exhibition Division
32	Jun. 8th- Aug. 8th	Exhibitions	NSTM co-hosted the 2010 Happy Ocean Winners Road Show with the National Geographic Channel, showcasing the selected documentary films from the National Geographic Channel's 2010 Happy Ocean Vignette Contest. The event was held at the first floor east corridor.	Exhibition Division



No.	Date	Category	Summary	Reporting Office
33	Jun. 15th	Exhibitions	The "OPEN--Ceramics Collection Exhibition" was held at the second floor Cafe Gallery; a total of 46 (sets) ceramic works of the Museum's collection were showcased in this event.	Exhibition Division
34	Jun. 17th	VIP	Associate President of St. Louis Science Centre, Ms. Marti Cortezto, visited the museum.	Visitor Services Division
35	Jun. 22nd	VIP	Education legislator, Mr. Zhi-Hsiung Hwang visited the museum.	Visitor Services Division
36	Jun. 30th	VIP	Education legislator, Ms. Ting-Fay Chen visited the museum.	Visitor Services Division
37	Jun. 30th	Other	The Personnel Office completed the 2010 elections for the "Recruitment and Evaluation Committee", "Professional Employee Assessment Committee" and the 2010-2011 "Sexual Harassment Appeals Committee".	Personnel Office
38	Jul. 1st	Activities	The 2010 Summer Intern Recruitment Seminar was held at NSTM.	Personnel Office
39	Jul. 1st 2010- Jun. 30th 2011	Exhibitions	The Museum used its exhibit planning capability and the concept of resource reuse to consolidate the existing interactive exhibits of the Museum into the "Science Train" special exhibitions, which was brought to the General Science Hall at the Little Ding-Dong Science Park for an one-year exhibition.	Exhibition Division
40	Jul. 2nd	VIP	Mr. Chiou-Shing Yang, Mayor of Kaohsiung County, visited "Da Vinci The Genius Exhibition".	Visitor Services Division
41	Jul. 2nd- Nov. 21st	Exhibitions	The "Greenery in New Kaohsiung: an Exhibition on Energy Saving and Carbon Reduction" exhibition was held at the fourth floor. The Director of the Museum, Director of Kaohsiung City Bureau of Environmental Protection, Director of Taipei County Bureau of Environmental Protection, representatives from environmental protection organizations were present at the opening ceremony and press conference held on July. 2nd.	Visitor Services Division
42	Jul. 5th- Jul. 8th	Activities	The activity of "2010 Infectious Diseases Prevention or Control Summer Camp for High School Students" was held at the College of Medicine, National Taiwan University.	Exhibition Division
43	Jul. 6th- Aug. 1st	Exhibitions	The "Nanoscience in Life" exhibition was held at the fourth floor corridor.	Technology Education Division
44	Jul. 9th	VIP	Ju Chen, Mayor of Kaohsiung City, visited "Da Vinci The Genius Exhibition".	Visitor Services Division



No.	Date	Category	Summary	Reporting Office
45	Jul. 10- Aug. 31st	Activities	The summer vacation promotional activities-" Lucky Lottery" was held at the NSTM.	Visitor Services Division
46	Jul. 12th- Dec. 31st	Exhibitions	The " Special Collection of National Science & Technology Museum " was held at the the first floor west corridor of the Museum.	Exhibition Division
47	Jul. 12th- Jul. 15th	Activities	NSTM hosted the "2010 Infectious Diseases Prevention or Control Summer Camp for High School Students " at Tzu Chi University.	Exhibition Division
48	Jul. 13th- Jul. 15th	Activities	NSTM organized a team to compete in the "2010 Education Cup Badminton Championships" and won third place.	Personnel Office
49	Jul. 24th	Activities	NSTM teamed up with the Pingtung Forest District Office (Forestry Bureau, ,COA,EY) and the Tzu Chi Foundation to organize the "Go!LOHAS NSTM Activity " series activities. The tree donation ceremony, " Green homes - all set", was held under the shades at Pingdeng Road outside of the Museum.	Secretariat
50	Jul. 24th	Activities	The " Kids Super Show" events wasere held at NSTM.	Visitor Services Division
51	Jul. 31st- Aug. 31st	Exhibitions	" Reconstruction of Love and Hope-Typhoon Morakot Post-Disaster Reconstruction 1st Anniversary Exhibition" was held at the first floor corridor of the Museum. Several honorable guests, including Premier Tun-Yi Wu and Secretary-General Zhong-Sen Lin, attended the opening ceremony on August 1st.	Exhibition Division
52	Aug. 7th	Activities	NSTM teamed up with the Kaohsiung City Tzu Chi Foundation Sanmin Wake Team to organize the "Go!LOHAS NSTM Activity " series activities. The " Green Living DIY", was held under the shades at Pingdeng Road outside of the Museum.	Secretariat
53	Aug. 8th	Exhibitions	"2010 Science Season Climate Change Exhibition" was held at B1 Special Exhibition Hall I. Special guests, including Minister of Education Ching-Ji Wu and Vice Chairman of the National Science Council Mr. Wen-Chang Zhang, attended the opening ceremony.	Exhibition Division
54	Aug. 8th	Other	Assistant researcher, Ju-Ching Li, of the Exhibition Division received the 2010 Outstanding Educator Award from the Ministry of Education and the affiliated institutions.	Personnel Office



No.	Date	Category	Summary	Reporting Office
55	Aug. 8th- 15th	Activities	NSTM organized the Smile Angels Election Campaign.	Personnel Office
56	Aug. 11th	VIP	Yue-Gong Wang, Deputy Director of the Palace Department, The Palace Museum, Mainland China, visited the museum and gave a speech.	Collections and Research Division
57	Aug. 12th	Conferences	NSTM joined the Science Monthly 40th Anniversary Planning Council, the National Museum of Marine Biology, National Sun Yat-Sen University, and the Marine Development and Education Foundation to host the "Conference of Science Education for the Adults"	Technology Education Division
58	Aug. 12th	Other	The Kaohsiung Motor Vehicles Office, Directorate General of Highways, MOTC Ministry of Transportation and Communications organized the Parent and Children Day activities. Families of the employees visited the exhibition halls and watched the IMAX 3D movie.	Visitor Services Division
59	Aug. 14th	Activities	NSTM teamed up with the Kaohsiung City Bureau of Environmental Protection to organize the "Consumer choice of environmentally friendly, the earth changed for the better" event, which was held at the outdoor plaza.	Secretariat
60	Aug. 14th	Other	"Taiwan Semiconductor Manufacturing Co., Ltd. (TSMC)" organized the Parents and Children Day activities. Families of the employees visited the exhibition halls and watched the IMAX 3D movie.	Visitor Services Division
61	Aug. 18th	Other	Deputy Director, Hsieh Tsu Tsai, joined the museum.	Personnel Office
62	Aug. 20th	Other	The NSTM 2009 Annual Report was published in the e-book form (no printed version), which set the precedence of the Museum's publications.	Collections and Research Division
63	Aug. 20th	Conferences	NSTM organized the "Dialogue of Science and Poetry-History of Eastern and Western Science Series", which was supported and sponsored by the Committee for History of Science, Academic Sinica, Taipei.	Collections and Research Division
64	Aug. 20th	Activities	The 2010 NSTM Family Day event was held at the museum.	Personnel Office
65	Aug. 21st	Activities	NSTM co-organized the Southern Taiwan Preliminary Round, WORLD ROBOT OLYMPIAD 2010 (organized by ESUN Robot Association). A total of 84 teams and 302 players/coaches signed up for this event.	Technology Education Division
66	Aug. 21st- 22nd	Conferences	NSTM teamed up with Shu-Te University and Kaohsiung Astronomical Society to organize 2010 The 1st Conference of Astronomical Education in Taiwan.	Technology Education Division



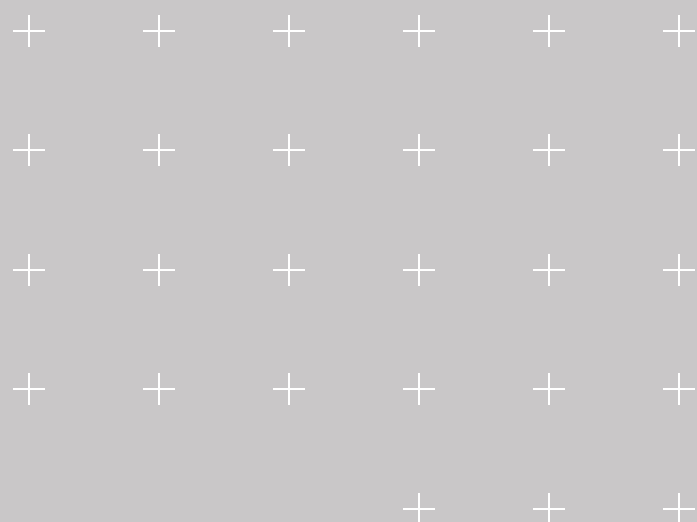
No.	Date	Category	Summary	Reporting Office
67	Aug. 28th	Activities	In coordination with the Ministry of Education's 2010 Grandparents' Festival, NSTM organized the campaign "Connect Generation's Emotion".	Technology Education Division
68	Aug. 31st	Activities	The Personnel Office conducted the "2010 Ministry of Education and Affiliated Institutions Temporary Staff Recruitment and Utilization Southern Region Public Hearing Conferences".	Personnel Office
69	Sep. 4th- Sep. 17th	Exhibitions	Amida Society Mr. Wei-Ching Wu Calligraphy Exhibition was held at the first floor west corridor of the Museum.	Exhibition Division
70	Sep. 7th- 8th	Activities	Students and Teachers from Kaohsiung and Pingtung County who were relocated due to Typhoon Morakot visited the Museum and participated in the "Love, Gratitude, and Learning" activities; Minister of Education, Qing-Ji Wu gave a speech at the event.	Visitor Services Division
71	Sep. 9th- 19th	Exhibitions	"Dance of Smelting- Cross-Strait Joint Exhibition of Works By Bin-Ren Zhu Feng-Chen Yang", sponsored by Yuyu Yang Museum and The Bin-Ren Zhu Copper Carves The Artistic Museum, was held at the lobby of the Museum.	Exhibition Division
72	Sep. 11th- Oct. 6th	Exhibitions	NSTM joined the Centers for Disease Control to organize the Disease Prevention Mobile Museum at the remote areas of Kaohsiung County and Pingtung County and the Morakot affected areas.	Exhibition Division
73	Sep. 13th	Activities	The Personnel Office organized the employee education and training program-"Enhance Communication, Policy Promotion, Execution, and Responsiveness for the Public Office Workers"; Deputy Director, Hsieh-Tsu Tsai, conducted a seminar in this event.	Personnel Office
74	Sep. 18th	Activities	NSTM teamed up with Kaohsiung City Tzu Chi Foundation Sanmin Wake Team I to organize the "Go!LOHAS NSTM Activity " series everyday environmental protection activities. The event was held at the corridor in front of the souvenir shop.	Secretariat
75	Sep. 24th	Activities	The "2010 Ministry of Education and Affiliated Institutions Public Service Personnel Asset Declaration Seminar" was held at the Museum.	Personnel Office
76	Sep. 25th	Activities	NSTM teamed up with Kaohsiung All Grace Wholistic Care Association, Calligrapher Mr. Wei-Ching Wu, and Kaohsiung Municipal Tsoying Senior High School Dance Fantasy to organize the "Go!Lohas NSTM Activity " Flea Market event, which was held at the Triangular Hall of the Museum.	Secretariat



No.	Date	Category	Summary	Reporting Office
77	Sep. 30th, 2010- Jan. 9th, 2011	Exhibitions	NSTM co-sponsored the "Tibet- Treasures from the Roof of the World" exhibition with the United Daily News Group, which was held at Special Exhibition Halls II and III of the Museum.	Exhibition Division
78	Oct. 9th	VIP	Master Shing Yun of Fo Guang Shan and Master Miao Leh of Pu Shyan Temple visited the "Tibet-Treasures from the Roof of the World" and climate change exhibitions.	Visitor Services Division
79	Oct. 12th- 14th	Conferences	NSTM teamed up the Graduate Institute of Museum Studies, Fu Jen Catholic University and the Museum Computer Network, Taiwan Chapter to organize the "2010 Workshop of Functional Assessment and Integration of Collection Management Systems "; a total of 2 seminars were held in Taipei and Kaohsiung respectively.	Collections and Research Division
80	Oct. 20th- 22nd	Conferences	NSTM joined the National University of Education and National Taiwan Museum to organize the "International Symposium on Museum Management"; a total of 2 forums were held in Taipei and Kaohsiung respectively.	Collections and Research Division
81	Oct. 29th- 30th	Activities	NSTM teamed up with Kaohsiung City Bureau of Education to organize the " Kaohsiung City 29th Primary and Secondary Science Fair"; the opening ceremony was jointly hosted by Ching-Hwa Tsai, Director of Kaohsiung Bureau of Education, Xun-Xiang Chen, Director of the Museum, and Xie-Zu Cai, Deputy Director. A total of 39 junior high schools and 88 elementary schools set up 127 science game booths in this event.	Technology Education Division
82	Nov. 11th	VIP	Dr. Shogo Kawakami, Honorary Professor of Aichi University Japan Director of Gamagori Museum of Earth, Life, and the Sea, visited the Museum.	Visitor Services Division
83	Nov. 14th	Activities	NSTM celebrated its thirteenth anniversary; a series of events were held from November for celebration, which was themed upon concept of " Lohas Museum, Energy Conservation Life".	Visitor Services Division
84	Nov. 16th	Activities	The "2010 Second Half Energy Conservation Community Activity " was held at he museum.	Visitor Services Division
85	Nov. 20th	Activities	NSTM teamed up with the Kaohsiung City Tzu Chi Foundation Lingya Wake Team to host the "Go!LOHAS NSTM" everyday environmental protection activities, which was held at the corridor in front of the souvenir shop.	Secretariat
86	Nov. 29th	Other	NSTM participated in the "2010 Outstanding Social Education Organization" award (Ministry of Education) and won the group award.	Personnel Office



No.	Date	Category	Summary	Reporting Office
87	Nov. 29th	Other	NSTM participated in the "2010 Educational Film Competition" organized by the National Institute of Educational Resources and Research and won the Selection of Honor Award.	Personnel Office
88	Nov. 29th	Other	NSTM was selected by Kaohsiung City Environmental Protection Agency as one of the top three organizations to have outstanding management of the public toilets.	Personnel Office
89	Dec. 7th	VIP	Vice Director, Mr. Sun Hong of China Technology Department-Hong Kong, Macau Branch, and his party visited the museum's Air Navigation and Aeronautics Exhibition, Taiwanese Industrial History Center, and Open Storage.	Visitor Services Division
90	Dec. 14th- 24th	Exhibitions	NSTM teamed up with the American Institute in Taiwan, Kaohsiung City Government, and National Sun Yat-Sen University to host "U.S.-Taiwan Clean Energy Forum & Exhibition ". President Ying-Jiour Ma presided over the opening ceremony in person.	Exhibition Division
91	Dec. 18th	Activities	NSTM teamed up with the Kaohsiung City Tzu Chi Foundation Zuoying Wake Team to host the "Go!LOHAS NSTM" everyday environmental protection activities, which was held at the corridor in front of the souvenir shop.	Secretariat
92	Dec. 24th	Other	The Personnel Office organized the Office Chief Handover Ceremony; the departing chief, Hsiu-Chin Tsai handed over the official seal to the new chief, Liang-Chuan Wang.	Personnel Office
93	Dec. 25th	Activities	NSTM organized the Christmas series events at Cosmo Star; activities include: "When Santa Meets the Robot" and " Eastern Broadcasting Company Celebrate Christmas Party".	Visitor Services Division
94	Dec. 30th 2010- Mar. 31st 2011	Exhibitions	"Intelligent Taiwan Turn for Future" exhibition, which was organized by The Institute for Information Industry, was held at the first floor east corridor.	Exhibition Division
95	Dec. 31st	Exhibitions	The Utilization of Water Resources Exhibition Hall was expanded with an " Exhibit for Water Saving Implementation".	Exhibition Division



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