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THE PAST, PRESENT AND FUTURE OF THE ICOAs

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Abstract: Thirty-one years after the founding of the International Conference on Oriental Astronomy (ICOA) we are finally here in the historical city of Samarkand for the 10th International Conference. As one of the founders of the ICOA, I recall many things about our past. However, my memories are fading, and most of my early colleagues have already passed away, so I think creating a record of what I know now would be best. The story begins at the time of the ICOA's founding and then covers what happened in various sites from ICOA-1 to ICOA-9, in chronological order. In addition, I wish to make some suggestions for the future of ICOA.

Keywords: ICOAs; Asian astronomical history; international contacts; conference proceedings.

1 THE PAST

1.1 Introduction

It is thirty-one years ago as I (Nha I.-S.) look back, so let me start my talk with the very early days of the formation of the ICOA (1991–1993).

It was the year of 1991 when I had my first and last sabbatical leave of absence from Yonsei University, where I worked for 24 consecutive years. At the beginning of that year I went to Gainesville, Florida, to visit the University of Florida where my friend Kwan-Yu Chen (Figure 1), who was a staff member in the Department of Astronomy. Chen and I met almost daily for three and a half months. Although my main purpose of visiting was to prepare a presentation for the IAU General Assembly in Buenos Aires, I suggested organizing an international conference to discuss topics on the History of Oriental Astronomy. He immediately agreed.

Kwan-Yu and I needed Professor Richard Stephenson (Figure 2) to organize the conference. At that time, he was on sabbatical leave from Durham University (UK) visiting Caltech. It was very primitive planning, but the title of the conference, "International Conference on Oriental Astronomy", was agreed upon by all three of us, and the main theme was to be "Oriental Astronomy from Guo Shoujing to King Sejong".

1.2 Contacts With Chinese Scholars

In October 1992 I was invited to the celebration of the 70th Anniversary of the Chinese Astronomical Society and the 710th Anniversary of the Beijing Observatory as one of the foreign guests. The late Professor Li Qibin was then the President of the Society and the Director of Beijing Observatory. During my visit, I suggested an international conference to several astronomers in Beijing. But they responded negatively simply because of the conference title, "From Guo Shoujing to King Sejong". During these conversations it was not possible to reach

Figure 1: The late Professor Kwan-Yu Chen, 1930–2006, and Ellen Chen (photograph: Nha Sarah).

deeper level of understanding because of a mutual lack of communication. Opinions were exchanged from both sides in broken English because neither side could speak the other country's language.

One evening at midnight an excellent idea came to my mind: to meet some well-known historians in Beijing together with a good interpreter who could fully translate my suggestion

Figure 2: Professor Richard Stephenson and his wife Ellen, in 2011 (photograph: Wayne Orchiston).

to them. Fortunately, I met an excellent person who could accomplish this. He was a Korean–Chinese named Professor Wu Xijing (吳熙敬), who was a researcher at the Institute of the History of Natural Sciences in Beijing. Wu (Figure 3) was born in China but spoke both Korean and Chinese fluently.

The very next day at Professor Wu's suggestion I invited five leading Chinese historians to one of the high-class restaurants in Beijing. They were: Bo Shuren (Institute of the History of Sciences), Chen Meidong (Institute of the History of Sciences), Chen Jiujing (Institute of the History of Sciences), Cui Shiju (The Old Astronomical Observatory), and Cui Zhenhua (the Science Museum in Beijing).

The meeting was successful and all seven of us came to the same conclusion: that we would have the conference in Seoul the following year with the title I had suggested, "Oriental Astronomy from Guo Shoujing to King Sejong".

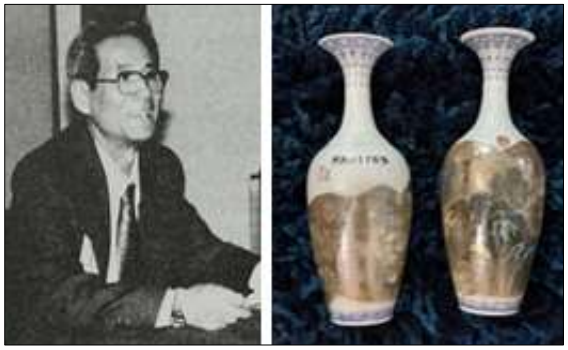

Figure 3: The late Professor Wu Xijing (1936–1994) on the left, while on the right are two souvenir vases that commemorate the founding of Beijing Observatory (photographs: Nha Il-Seong).

During the following year (1993) I made two visits to China and extended my contacts to various researchers in other cities (e.g. see Figure 4). I explained about the conference and why it was limited to just the two centuries from the thirteenth century (Guo Shoujing of the Yuan Dynasty in China) to the fifteenth century (King Sejoung of the Joseon Dynasty in Korea).

1.3 Contacts With Japanese Scholars

In the meantime, I reported the progress on organizing the conference to Professor Kiichiro Hurukawa (Figure 5) in Tokyo and I suggested he encourage many Japanese scholars to participate. He agreed without hesitation, but suggested that first I should contact Professor Ichiro Hasegawa (Figure 5), since he was the most acknowledged Japanese person in this field at that time.

By doing this, the three countries agreed to set up the basis of the conference. With that

Figure 4: Me (on the right) with the late Professor Xi Zezong, 1927–2010? (photograph: Nha Il-Seong).

accomplishment, I was ready to organize the Scientific Organizing Committee and I invited Richard Stephenson to join me as Co-Chair. As a result, the first conference was held at Yonsei University in October 1993 (see Figure 6). In this group photograph, we can find some familiar faces.

Table 1: Participants of ICOA-1 who had died prior to ICOA-10 in October 2024.

Astronomical Historians	Nationality
Bo Shuren	China
Kwan-Yu Chen	USA
Chen Mei-dong	China
Ichiro Hasegawa	Japan
Michiko Hasegawa	Japan
Kiichiro Hurukawa	Japan
Li Qibin	China
Minewo Nishiyama	Japan
Yae Nishiyama	Japan
Yoshiro Okada	Japan
Ellen Stephenson	Britain
Wu Xijing	China
Xi Zezong	China
Xu Zhen-tao	China
Yi Shitong	China
Yu Kyung-Loh	Korea

1.4 Deceased Colleagues

At this time (October 2024), it is sad to note that 16 out of the 69 people who participated in ICOA-1 have already passed away (Table 1).

Figure 5 (left & right)): Professors Ichiro Hasegawa and Kiichiro Hurukawa (photographs: Nha Il-Seong).

Figure 6: A group photograph of those at ICOA-1, in Seoul (South Korea) in 1993.

2 FROM ICOA-1 TO THE PRESENT DAY

2.1 The Evolution of the ICOAs

The history of Oriental Astronomy has long been attractive to both astronomers and historians for its rich astronomical records and its unique cosmological perceptions. However,

> The field got an important boost when the First International Conference on Oriental Astronomy (abbreviated to ICOA-1) was held in Seoul, Korea in 1993, and it was decided this initiative should be carried forward. From October 16 to 18 1995, the ICOA-2 was held in the beautiful city of Yingtan, Jiangxi Province, China. (Quoted from the Preface of ICOA-2, which was edited by Kwan-Yu Chen and Sun Xiao-chun.)

Table 2: The ten ICOAs.

ICOA (No.)	Date (month, year)	Location (city, country)	Reported attendance
1	October 1993	Seoul South Korea	69
2	October 1995	Yingtan China	55 (group photograph)
3	October 1998	Fukuoka Japan	87
4	August 2001	Nanyang China	119 (group photograph)
5	October 2004	Chiang Mai Thailand	66
6	July 2008	Townsville Australia	26
7	November 2010	Tokyo Japan	66
8	March 2014	Hefei China	70
9	November 2016	Pune India	88
10	October 2024	Samarkand Uzbekistan	45

Thus far ten ICOAs have been held, and these are summarized in Table 2 and group photographs are shown in Figures 7–13.[1] These ICOAs have been held in seven different countries in the Asian–Oceanic region: China (3 times), Japan (twice), and once each in Australia, India, Korea, Thailand and Uzbekistan.[2]

Since the first ICOA there have been two notable developments that we should mention:

(1) The initial East Asian (China–Japan–Korea) geographical focus of the ICOAs has expanded significantly since 2004, and ICOAs now embrace the Middle East, South Asia (particularly India), Southeast Asia, and Oceania (Australia and New Zealand).
(2) The thematic focus of ICOAs has also expanded, to include papers on Applied Historical Astronomy, archaeoastronomy, ethnoastronomy, the development of astrophysics and solar physics, and the history of radio astronomy.

2.2 Conference Proceedings

We are proud of having our proceedings published, without missing a single issue. These are listed in chronological order in Table 3, and the front covers of the books themselves are depicted in Figure 14.

Figure 7: A group photograph of those at ICOA-2, in Yingtan (China) in 1995.

Figure 8: A group photograph of those at ICOA-3, in Fukuoka (Japan) in 1998.

Figure 9: A group photograph of those at ICOA-4, in Nanyang (China) in 2001.

Figure 10: A group photograph of those at ICOA-5, in Chiangmai (Thailand) in 2004.

Figure 11: A group photograph of those at ICOA-7, in Tokyo (Japan) in 2010.

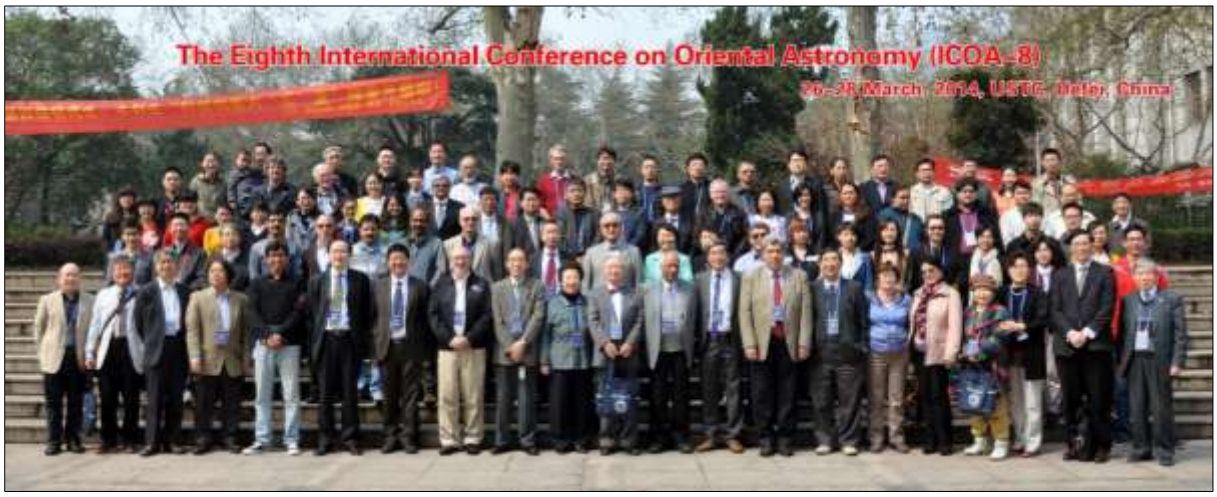

Figure 12: A group photograph of those at ICOA-8, in Hefei (China) in 2014.

Figure 13: A group photograph of those at ICOA-9, in Pune (India) in 2016.

Table 3: ICOA Proceedings

ICOA No.	Reference (including ISSN or ISNB Number)
1	Nha, I.-S., and Stephenson, F.R. (eds.), 1997. *Oriental Astronomy From Guo Shoujing to King Sejong*. *Proceedings of an International Conference Seoul, Korea, 6-11 October 1993*. Seoul, Yonsei University Press. PP. xii + 401. ISBN: 89-7141-418-9.
2	Chen, K.-Y., and Sun, X. (eds.), 2006. *Frontiers of Oriental Astronomy*. Yingtan, Chinese Science and Technology Press. Pp. 251. ISBN: 7-5046-2849-2.
3	Hirai, M. (ed.)., 2000. *Proceedings of the Third International Conference on Oriental Astronomy*. Fukuoka, Fukuoka University of Education. Pp. xiii + 273. No ISBN listed.
4	Xi, Z., Strom, R., and Liu, Y., (eds.), 2006. *Proceedings of the Fourth International Conference on Oriental Astronomy and Symposium on Zhang Heng*. Nanyang, Academic Forum of Nandu. Pp. xxiii + 298. ISSN: 1002-6320.
5	Chen, K.-Y., Orchiston, W., Soonthornthum, B., and Strom, R. (eds.). 2006. *Proceedings of the Fifth International Conference on Oriental Astronomy*. *Held in Chiang Mai, Thailand, 4-8 October, 2004.* Chiang Mai, University of Chiang Mai. Pp. 184. ISBN: 974-672-003-1.
6	Orchiston, W., Nakamura. T., and Strom, R. (eds.), 2011. *Highlighting the History of Astronomy in the Asian-Pacific Region*. *Proceedings of the ICOA-6 Conference.* New York, Springer. Pp. xvi + 660. ISBN: 978-14419-8160
7	Nakamura, T., Orchiston, W., Sôma, M., and Strom, R. (eds.), 2011. *Mapping the Oriental Sky. Proceedings of the Seventh International Conference on Oriental Astronomy*. Tokyo, National Astronomical Observatory of Japan. Pp. 262. No ISBN listed.
8	Orchiston, W., Sule, A., and Vahia, M. (eds.), 2019. *The Growth and Development of Astronomy in India and the Asia-Pacific Region*. *ICOA-9, Pune, India, 15-18 November 2016*. New Delhi, Hindustan Book Company, and Springer Singapore. Pp. lx + 527. ISBN: 978-981-13-3644-7.
9	Shi Y., and Chu, F.L. (eds.), 2022. *Astronomical Heritages in Asia-Pacific Areas: Proceedings of the Eighth International Conference on Oriental Astronomy*. Hefei, University of Science and Technology of China. Pp. [x] + 311. ISBN: 978-7-312-05036-7.
10	Ehgamberdiev, S., Orchiston, W., Shi, Y., Chen, G., and Wang, B.(eds.), 2025. Ulugh Beg 630th Anniversary Issue. Proceedings of the ICOA-10 Meeting on Patrons and Patronage in Middle Eastern and Asian–Oceanic Astronomy. *Journal of Astronomical History and Heritage*, 28(2), 315–550. ISSN: 1440-2807.

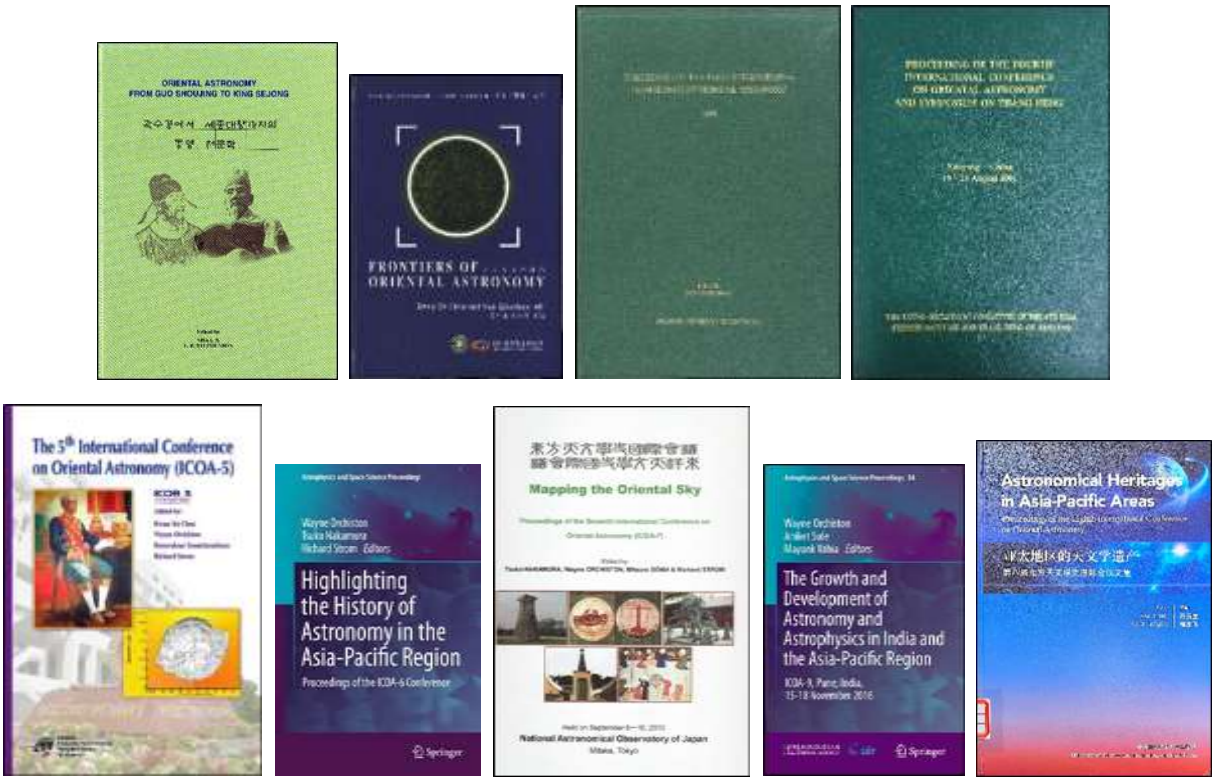

Figure 14: The front covers of the first nine ICOA volumes in chronological order, showing their relative sizes.

2.3 The ICOAs Gain International Recognition

Let us take just six examples:

(1) The ICOA papers are all presented in English (which is seen as important by most of those who attend).
(2) Registration fees are low and local expenses are reasonable. Most of the hosting LOCs have been successful in fund-raising.
(3) Accompanying families are happy, and faithfully support our academic activities.
(4) There has been exceptional hospitality, especially in China and Thailand, for which we are all grateful.
(5) Since the ICOAs were launched, most of the Presidents of IAU Commission 41 (History of Astronomy), and its successor C3, have been directly involved in ICOA's, which is clear evidence of worldwide recognition. These Presidents were: Professor S.M. Razaulla Ansari (India)+, Dr. Suzanne Débarbat (France)+, Professor Rajesh Kochhar (India)+, Professor Il-Seong Nha (South Korea), Professor Wayne Orchiston (Thailand), Professor Clive Ruggles (Britain), Professor F. Richard Stephenson (Britain) and Professor Xiaochun Sun (China). Those who are no longer with us are marked by crosses.
(6) The fact that Professors Stephenson and Orchiston were both awarded the LeRoy Doggett Prize for Historical Astronomy by the American Astronomical Society and specifically for their contributions to Asian astronomy, is further evidence of the international recognition of the ICOAs.[3]

3 FUTURE DIRECTIONS

There are many dreams and hopes for our future, but these are subject to change by many of us.

3.1 The Missing Countries

There are many countries in our region that are not represented at ICOA conferences, including Mongolia, North Korea, South–East Asian countries such as Myanmar, Pakistan, Afghanistan, Iraq, Israel, Syria, etc. If we could invite just one scholar from each of these countries to each future ICOA the range of historical resources available to us would be vastly broadened.

3.2 Hosting the ICOAs

Future ICOA meetings in the Middle East region are urgently needed, where there is a wealth of astronomical heritage for us to research. Iran, for example, has attempted to host ICOA meetings on several occasions in the past but without success.

3.3 The ICOA Proceedings

There is no single style found among the proceedings of the first ten ICOAs (see Figure 14).

Three different paper sizes have been used: A4 (four books, and for ICOA-10 this journal), B5 (three books) and Quad Large (two books). Two of the books were published (and distributed) by Springer, but all the other proceedings were published and marketed locally (in China, Japan, South Korea and Thailand). Some covers are decorative and appealing, while others are very 'basic'. Collectively, these books contain no indication of 'corporate branding'—so that ICOA proceedings are instantly recognizable—and maybe this is something that can be looked at in the future (unless we think that it is already too late).

3.4 A Home Page and a Logo

We must set up an ICOA home page and maintain it. Originally, Kwan-Yu Chen prepared one, and he passed it over to the second author of this paper. For a while she made an effort to collect relevant information, but due to technical issues there was a loss of data. For some time, Dr. Mitsuru Sôma also tried to independently maintain an ICOA home page.

We also need a logo, and a symbol that is instantly-identifiable and that we can use on various occasions.

3.5 A Central Office, and By-Laws

I initially set up an ICOA office in South Korea, but it failed because of financial difficulties. We certainly need such an office, and the manpower and funding to maintain it if we are to continue the ICOAs.

4 CONCLUDING REMARKS

Future planning is essential so that the ICOAs offer a primary opportunity for those researching the history of astronomy in the huge Asian–Oceanic region to come together and present their latest findings and build international collaborations. During the COVID epidemic many of us became adept at attending 'Zoom' conferences, seminars and lectures, and there is merit in now running 'hybrid conferences'.

That said, we must be careful with our scheduling of ICOAs, so that they do not clash and compete with other established meetings such as IAU General Assemblies, and the IAU Asia–Pacific Regional Meetings (which typically include education and outreach but do not always offer sessions on history and heritage). It is important not to 'flood the marketplace' given the increasing expense of international travel for those wishing to attend conferences in person.

We also need to recognize that some scholars prefer more localized history of astronomy conferences, like the Silk Road Series, those history and heritage conferences hosted at the National Astronomical Observatory of Japan by Drs. Mitsuru Sôma and Kyotaka Tanikawa, and the History and Heritage Working Group conferences of the Southeast Asian Astronomy Network. These local conferences have their place, but should be seen as part of a broader geographical initiative led by the ICOAs.

That said, clear guidelines need to be established by the ICOA Executive Committee of the geographical territory of the ICOA meetings. Where should our western boundary be located? Obviously Uzbekistan sees merit in participating in ICOAs (and hosting a meeting) but should the ICOAs embrace Georgia and Armenia, and would we be comfortable attending an ICOA meeting in Turkey? For our purposes, where does 'Asia' and the 'Middle East' end and 'Europe' begin?

These and other issues need to be addressed by Professor Shuhrat Ehgamberdiev and his ICOA Executive Committee.

Very recently I received an e-mail from Dr. Tsuko Nakamura (a former President of the ICOA Executive Committee). He had some serious suggestions about the promotion of the ICOAs that he wishes to raise. I look forward to discussing this topic with him and Professor Ehgamberdiev soon.

5 NOTES

1. Unfortunately, no group photograph was taken during ICOA-6.
2. Note that ICOA-6 originally was scheduled for Iran but the hosts withdrew at the last minute. Australia then offered to run ICOA-6 on short notice rather than cancel it, and the inadequate lead-in time and the lack of support funding explain the very modest attendance (in fact, many of those present were part-time history of astronomy PhD students studying extramurally at James Cook University in Townsville, and their thesis supervisors). Nonetheless, this conference was associated with the largest ICOA conference proceedings of all (see Table 3, with more than 250 pages alone devoted to early Australian radio astronomy.
3. This award is regarded by many as the world's leading award for History of Astronomy.

6 ACKNOWLEDGEMENTS

We are grateful to Professor Wayne Orchiston for helping with the revision of this paper.

Emeritus-Professor Nha Il-Seong was born in Moosan (Korea) in 1932, and has BS and MS degrees from the Yonsei University (Seoul, Korea) and a PhD from the University of Pennsylvania (Philadelphia, USA). He is an Emeritus-Professor at Yonsei University.

His main research interests are the photometric study of close binary stars, comets and meteors, but he also has an interest in the history of astronomy in the Far Eastern region. He has published numerous papers and books on modern astronomy and on the history of astronomy, including *Oriental Astronomy from Guo Shoujing to King Sejong* (1997, co-edited by F.R. Stephenson), *History of Astronomy in Korea* (2000; in Korean), *The Story of Lunar and Solar Eclipses* (2002, co-authored by Lee Jung Bok; in Korean), *Astronomical Instruments and Archives from the Asia-Pacific Region* (2004, co-edited by W. Orchiston, F.R. Stephenson and S. Débarbat), *Acceptance of Western Science in Korea* (2004; in Korean), *Murals of Four Holy Animals* (2008, co-authored by S.L. Nha; in Korean, Japanese and English), *History of Cosmology in Korea* (2016; in Korean), *Meeting Galileo after 400 Years* (2017: in Korean), *History of World Calendars and Calendar-Making* (2017, co-edited by W. Orchiston and F.R. Stephenson), *Introductions of Science Classics Volumes 1–3* (2019–2022, in Korean), *Catalogue of Oriental Star Maps* (2024, co-authored by S.L. Nha; in Korean) and *Masterpieces of the Oriental Star Maps* (2024, co-authored by S.L. Nha; in Korean).

Emeritus-Professor Nha is a former President of IAU Commission 41 (History of Astronomy); a former Chairman of the IAU Working Group on Historical Instruments; and is the founder of the ICOA series of Asian history of astronomy conferences. He also is on the Editorial Board of the *Journal of Astronomical History and Heritage*. In 1999 the IAU named minor planet 8895 'Nha' in his honour. At present, he is working on the study of early Korean scientists.

Sarah Nha was born in Philadelphia (USA) in 1971, and has BSc and MS degrees from Yonsei University and completed her PhD courses in Chungbuk National University in South Korea. Her Masters thesis was on the eclipsing binary star, Zeta Aurigae.

She formerly worked at several colleges in Seoul as a part-time instructor and was a Research Associate of the Korea Meteorological Association in Seoul and also has established the website for the IAU Historical Instruments Working Group. She is now the Director of The NHA Il-Seong Museum of Astronomy in Yecheon, South Korea.

Her major field of interest is the history of astronomy in the Far Eastern region and now she is deeply involved in restoring old historical star maps and old calendars. She has published many research papers and books. Her latest work was a book, in Korean, about old star maps from Korea, China, and Japan; the English version of this book is about to be published.