

HISTORY OF FOUNDATION AND DEVELOPMENT OF 'CADASTRAL SCIENCE' IN KOREA

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1. OUTLINE OF THE CADASTRAL SYSTEM IN KOREA

1.1. Establishment of the modern Cadastral System

1) Build up of Cadastral Administrative Organization

- **Cadastral Division in the Ministry of Home Affairs(1895)**

2) Enforcement of Land Survey Project

- **Land Survey Act (1910 ~1918)**

- **Object land**

- **Taxable land : Dry paddy, Rice Paddy, Housing Site, etc.**

- **Accomplishment**

- **The Cadastral Land Maps & Cadastral Land Books(No. of**

- Parcels : 19.1million, Area : 48,309km²**

3) Enforcement of Forest Survey Project

- **Chosun Forest Survey Act (1916 ~1924)**

- **Object land**

- **Non-taxable land : All land excluded from the Land Survey Project**

- **Accomplishment**

- **The Cadastral Forest Maps & Cadastral Forest Books(No. of Parcels : 3.5 million, Area : 161,754km²)**

- **Total Registered Parcels & Area(1910~1924)**

- **Parcel : 22.6 million, Area : 210,055km²**

1.2. Introduction of modern(new style) Cadastral System

- **Enactment of Cadastral Law (1950)**
- **Full Revision of Cadastral Law (1975)**
- **Modernization Project of Cadastral System(1976~1995)**
 - **Introducing the metric system & numerical surveying system**
 - **Registration of Owner's ID. No. in Cadastral Books**
 - **Computerization of Cadastral Books & Cadastral Maps, etc.**
- **Establishment of Alphanumeric D/B(31.4 million parcels, 1984)**
- **Construction of the nationwide online network(1990)**
 - **Central Gov.(Several Ministries) ←---→ MOHA. ←---→ 16 Provinces ←---→ 260 Municipalities**
 - **Civil services for copying & reading of Cadastral Books**

- **Establishment of National Land Information Center(NLIC.) in MOHA.(1995)**
 - **Integrated management of Cadastral Info.(34million parcels), Resident Info.(45 million persons) & Land Tax Info.(25million parcels) etc.**
- **Establishment of Graphic D/B(35 million parcels, 2003)**
 - **Operation of the Mapless & Bookless Cadastral System(2004)**
- **Enactment of the Special Law on Cadastral Resurvey(2011)**
 - **Accomplishment(2012~2018)**
Goal : 1,610,000 Parcels, Result : 489,000 Parcels (30.4%)

2. Foundation of ‘Cadastral Science’ & ‘Korean Society of Cadastre’

2.1. Publication of ‘Commentary Cadastral Science’ (1972)

- Author : Prof. Won, Y.H.(1915~1987)

- Main Contents :
 - Definition of Cadastre, Three Elements of Cadastre, Three Principles of Cadastral Law, Types of Cadastral Systems, Cadastral Record, Parcel, Boundary, Parcel No. Land Category, Area, Land Alteration, Land ownership, Cadastral Surveying, Revision History of Cadastral Law , etc.

2.2. Establishment of the 'Korean Society of Cadastre' (1976)

- **Purpose : Academic exchange of 'Cadastral Science', Development of Cadastral System, Publication of Academic Research Paper, etc.**
- **First President : Prof. Won, Y.H.**
- **Subcommittee : 9 committees including Cadastral Administration, Cadastral Regulation, Cadastral Survey, Land Evaluation, Cadastral History, etc.**

2.3. Publication of 'Principles of Cadastral Science'(1979)

- **Author : : Prof. Won, Y.H.(1915~1987)**
- **Main contents : Similar to 'Commentary Cadastral Science'**
 - **Added : Unique No. of land, Education/Research , Three Dimensional Cadastre, etc.**
 - **Deleted or integrated into other chapters : Land tax standard survey, Cadastral surveyor, Improvement of Cadastral System , Revision History of Cadastral Law, etc.**

Author & Cover of 'Cadastral Science' Book



The Founder of Cadastral Science, prof. Won, Y.H.(left), 'Commentary Cadastral Science'(1972, p.498. middle), 'Principles of Cadastral Science'(1979, p.552. Right)

3. Development and Education of 'Cadastral Science'

3.1. Publications of related books of 'Cadastral

Science' in Korea(1972~2018, about 30 books)

Publication Year	Author	Book Title	Publisher	Remarks
1972	Won, Y.H.	'Commentary Cadastral Science'	Bomoon Publishing Co.	
1979	Won, Y.H.	'Principles of Cadastral Science'	Hongik Publishing Co.	
1982	Kim, G.S.	'Introduction to Cadastral Administration'	Sinla Publishing Co.	
1993	Park, S.P. & 2 Others	'Introduction to Cadastral Science'	Hyeongseol Publishing Co.	
1998	Kim, N.S. & 2 others	'Cadastral Science'	Gigongsa	E,Q.
2001	Ryu, B.C.	'Newest Cadastral Science'	Gunwoong Publishing Co.	
	JI, J.D.	'Understanding of Cadastre'	Gimundang	
2004	Lee, B.G.	'Principles of Cadastral Science'	Samji Publishing Co.	E,Q.

Publication Year	Author	Book Title	Publisher	Remarks
2006	Ryu, B.C.	'Newest Cadastral Science'(1st Edition)	Gunwoong Publishing Co.	
2006	Kim, Y.H.	'Cadastral Administrative Theory'	Sungrim Publishing Co.	E,Q.
2007	Lim, H.C.	'Cadastral Science'	Uyong Publishing Co.	
2008	Hwang Bo, S.W. Lee, S.H.	'Cadastral Public Administration'	Bomyeong Books	
	Kim, S.J & 3 Others	'Introduction to Cadastral Science'	Ilil Publishing Co.	
2008	Lee, W.M. & 3 others	'Newest Cadastral Science'	Donghwagisul	E,Q.
2011	Cho, J.G. & 1 other	'Cadastral Science'	Cadastral Edu	E,Q.
2015	Kim, Y.H. & 3 others	'Cadastral Science'	Hwasumog	E,Q.
2016	Ahn, B.G. & 3 others	'Cadastral Science Commentary'	Yemunsa	E,Q.
2017	Ryu, B.C.	'Cadastral Science'(2nd Edition)	Buyonsa	
2018	KLGIC	'General Remarks of Cadastral Science'	KLGIC	
2019	Kim, S.J. & 1 other	'Core Cadastral Science'	Aendeul Books Publishing Co.	E,Q.

※ EQ ; Including exam. & questions for the employment of public officials, KLGIC & Cadastral Technical Qualification

3.2. Main contents of 'Cadastral Science' in Korea

- **Basic Theory of 'Cadastral Science' & 'Cadastral Science'**
- **History of Foundation & Development of 'Cadastral Science'**
- **Knowledge Classification of 'Cadastral Science'**
- **Types of Cadastral Records & Registration Information**
- **Land Registration**
- **Cadastral Surveying**
- **Land Evaluation**
- **Land statistics**
- **Cadastral Computerization, CIS/LIS/GIS**
- **Foreign Countries Cadastral System, etc.**

3.3. Main ‘Cadastral Science’ Books in Korea

Book Title	Introduction to Cadastral Science	Newest Cadastral Science	General of Cadastral Science
Author	Park, S.P. & 2 other	Ryu, B.C.	KLGIC
Publication Year	1993	2001	2018
Publishing Company	hyeongseol Publishing Co.	Gunwoong Publishing Co.	KLGIC
No. of Pages	500	568	606
Contents	Chap. 1~8	Chap. 1~12	Chap. 1~7

※ ‘Commentary Cadastral Science(1972)’ & ‘Principles of Cadastral Science(1979)’ are include

Cover of Main 'Cadastral Science' books(Korea)



Introduction to Cadastral Science(1973,p.500.left), Newest Cadastral Science (2001,p.568.middle), General of Cadastral Science (2018, p.606.right)

3.4. Education of 'Cadastral Science' in Korea

(New Established Department of Cadastral Science)

1) Junior College

- Since 1977 : Myungji, Singu, chungchang Junior College, etc.

2) University

- Since 1978 : Kangwon, Cheongju, Mokpo Univ., etc.

3) Graduate School

- Since 1984 : Master's degree course of Cadastral Science :
Cheongju, Mokpo Univ., etc.
- Since 1997 : Doctor's degree course of Cadastral Science :
Myungji, Kyungil Univ., etc.

4) Vocational high school

- Since 1997 : 8 schools opened, but nowadays closed

Installation status of 'Department of Cadastral Science' In Univ.

Established Year	School Name	Department Name	School Year	Master's course	Doctor's course
1979	Cheongju Univ.	Department of Land Management	4	○	○
1985	Mokpo Univ.	Department of Land Administration	4	○	○
1998	Kyungil Univ.	Department of Real Estate & Cadastral Science	4	○	○

3.5. Education on ‘Cadastral Science’ in Foreign Countries

1) Educational Institutions related to ‘Cadastral Science’

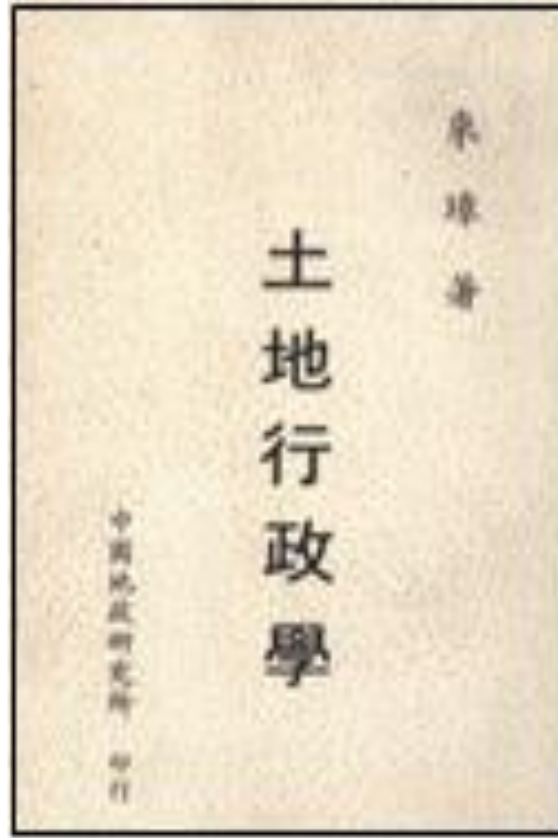
- Australia : Univ. of Melbourne**
- Canada : Univ. of Calgary , Univ. of Brunswick**
- France : L’Ecole Nationale du Cadastre(ENC. → ENFP.)**
- Germany : Hanover Univ., Stuttgart Univ.**
- Netherland : Delft Univ., ITC.**
- Swiss : SSPO.**
- Taiwan : Land Reform Training Institute(LRTI. → ICLPST.), etc.**

2) School Subjects related to 'Cadastral Science'

- Theorie de Cadastre, Cadastral Studies
- Cadastral Management , Cadastral System
- Technique de Cadastre, Cadastral Survey
- Loi Cadastrale, Cadastral Regulations
- Land Administration
- Cadastral Information Management, CIS/LIS/GIS
- History of Land System, Real Estate Registration System, etc.

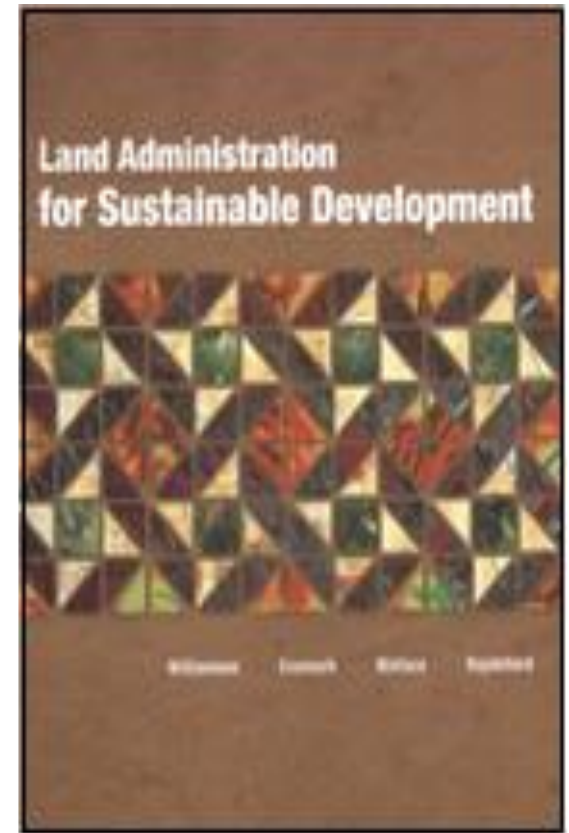
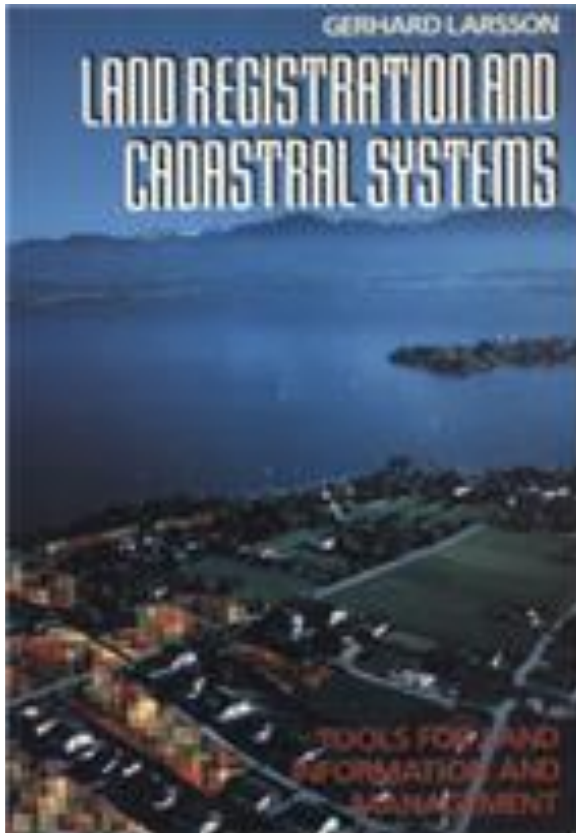
※ There was no School Subject of 'Cadastral Science'(지적학, 地籍學)

Cover of Main 'Cadastral Science' related books(Eastern)



Cadastre of Japan(1st edit. 2011, p.196. left), Land Administration in Taiwan (1981, p.442. middle), Cadastral management of China(2008, p.368. right)

Cover of Main 'Cadastral Science' related books(Western)

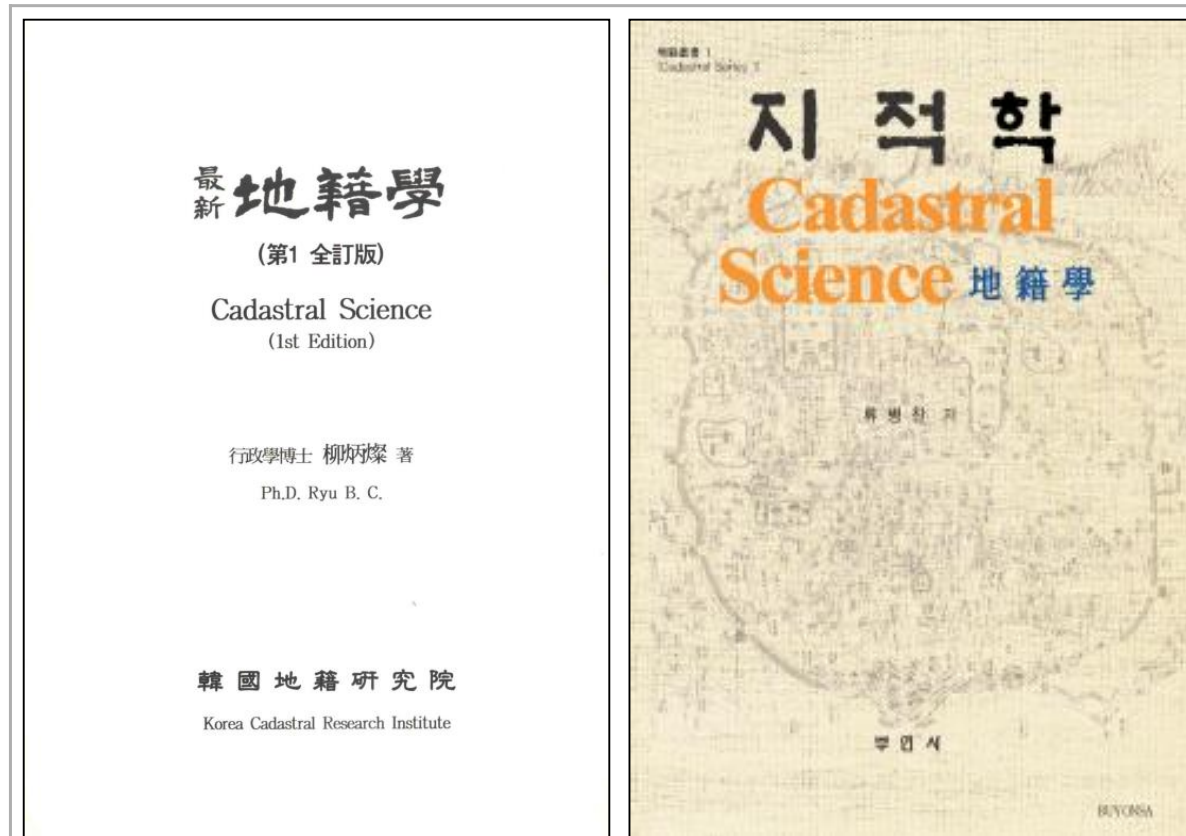


Land Registration and Cadastral Systems(1996, p.176. left), Land Administration (1999, p.170. middle), Land Administration for Sustainable Development(2010, p.488. right)

4. Giving the English name 'Cadastral Science'

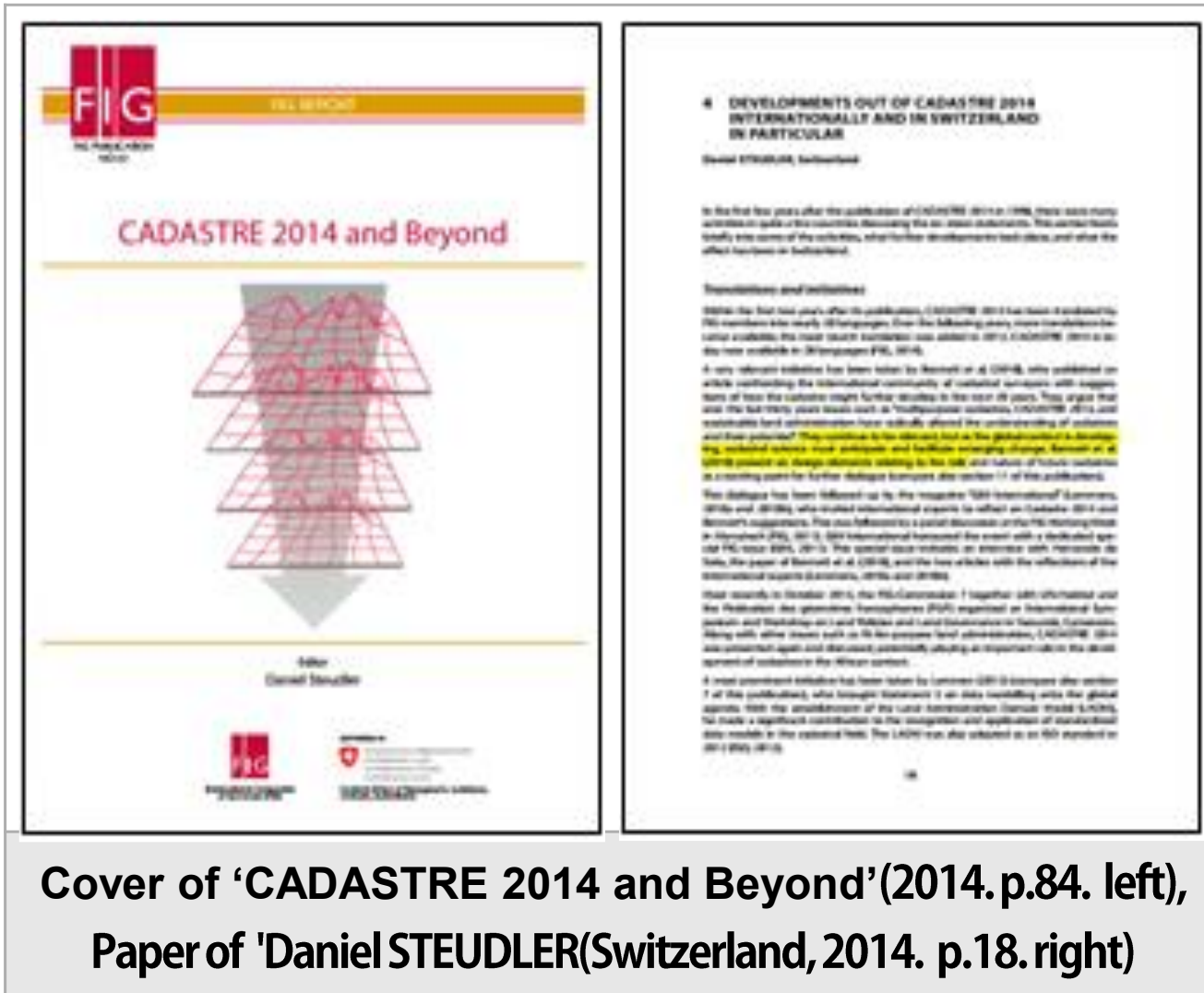
- 1972 : Foundation of 'Cadastral Science' by Prof. Won, Y.H.
- Since 1977 : New Establishment of 'Department of Cadastral Science' in Junior College, Univ.
- Since 1984 : New Establishment of Master's & Doctor's degree course in Graduate School
 - ※ 지적학(地籍學) : Various names such as "Cadastre, Theory of Cadastre, Principles of Cadastre, Cadastral Studies" etc.
- 2006.2 : Giving a English name as the 'Cadastral Science' by Prof. Ryu, B.C.(Through the 'Newest Cadastral Science' book(1st edit.)
 - ※ 'Cadastral Science' : Used in Book Name, School Subject Name, Academic Name, Search Site, etc.

Cover of 'Cadastral Science' books (written in Korean, English & Chinese characters)



'Newest Cadastral Science(1st edition, 2006.2. p.662. left),
'Cadastral Science(2nd edition, 2017, p.660. right)

'CADASTRE 2014 and Beyond'



Cover of 'CADASTRE 2014 and Beyond'(2014.p.84. left),
Paper of 'Daniel STEUDLER(Switzerland,2014. p.18. right)

5. Publication of 'Cadastral Science' in China

- Book title : 地籍學(Cadastral Science)
- Author : Prof. Im, J.G.(Renmin Univ. of China)
- Publication year : 2006.10.
- Publishing company : Science Publishing Co.
- No. of pages : 360
- Main Contents : Land Property Rights, Cadastral Survey, Land registration, Land statistics, Modernization of cadastral management and analysis of benefits, Foreign Countries Cadastral System, etc.
 - ※ Cadastral System : Including Land Registration, Land Price Evaluation, Land Statistics, Land Information System, etc.

Author & Cover of 'Cadastral Science' book (written in Chinese & English characters)



Prof. Im, J.G. (left), Cadastral Science(2006.10. p.360. right)

6. Conclusion

6.1. Summary

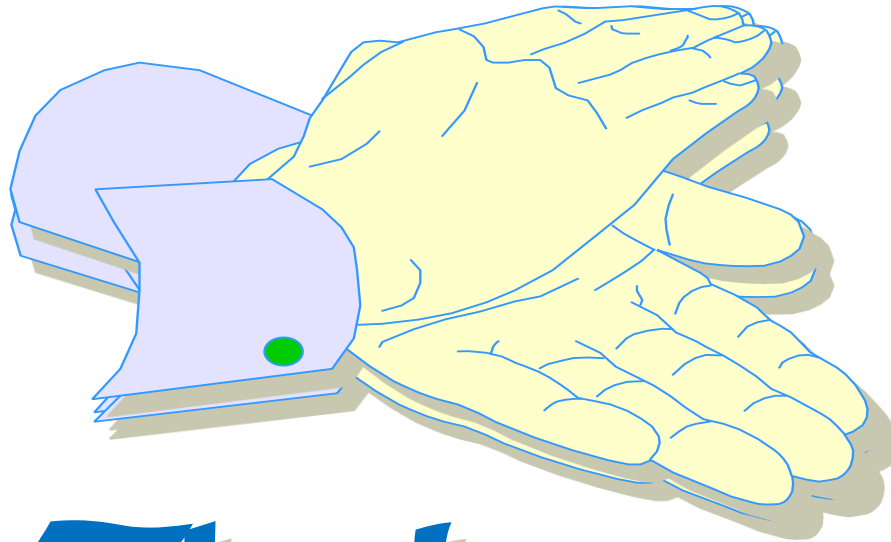
- 1972 : Prof. Won, Y.H. of Korea, Publication of ‘Commentary Cadastral Science’(World’s first)
 - Founder of ‘Cadastral Science’
- 1972~2018 : Published about 30 books related to ‘Cadastral Science’
 - The establishment of basic theory and academic system of ‘Cadastral Science’ is in progress

- Since 1977 : New Establishment ‘Department of Cadastral Science’ in Junior College & Univ.(World’s first)
- Since 1984 : New Establishment of Master's & Doctor’s degree course in Graduate School
- 2006.2. : Prof. Ryu, B.C. of Korea, Publication of ‘최신지적학’ (Newest Cadastral Science’(1st edition)
 - ‘지적학’ : gave the English name of ‘Cadastral Science’(World’s first)
- 2006.10. : Prof. Im, JG. of China, Publication of ‘地籍學’
 - ‘地籍學’ : The same English name was given as a ‘Cadastral Science’(World’s second)

6.2. Suggestion

- 1) Establishment of basic theory and academic system of 'Cadastral Science' should be continuously**
- 2) Register the term of 'Cadastral Science' in famous dictionaries such as Encyclopedia Britannica**
- 3) Develop 'Cadastral Science' as a core academic in the Cadastral field through the international academic exchange**

The End.



Thank you.

Good luck to all of the Cadastral People.