Universal Multiple-Octet Coded Character Set UCS

ISO/IEC JTC1/SC2/WG2/IRG N2224

Date: 2017-06-20

Source:	TCA
Title:	Proposal on 2 TCA's UNCs for Chemical Terminology to URO+
Meeting:	IRG #48, Bundang, Gyeonggi-do, Republic of Korea
Status:	Member's submission
Actions required:	To be considered by IRG
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Reference:	IRG N2198 UNC Proposal from China

In the document IRG N2198, China requests to add 3 G-source ideographs into UCS, in order to name 3 new chemical elements. The National Academy of Educational Research (NAER) of the Ministry of Education (MOE) had announced a news of updating the list of chemical elements on April 5th, 2017, shown as Figure 1.

Fig. 1: NAER's news of updating the list of chemical elements

NAER's whole list of chemical elements can be found from the following URL:
http://terms.naer.edu.tw/terms/manager_admin/new_file_download.php?Pact=FileDownLoad&button_num=g1&source_id=84&Pval=1932

NAER's whole list of chemical elements includes 4 newest chemical elements, shown as

Figure 2. And there no existing any encoded T-source ideograph can used as the Chinese names of the chemical elements “tennessine (Ts)” and “oganesson (Og)”.

English name	Chinese name	atomic order	symbol	phonetics	read as
nihonium	鉨	113	Nh	ㄋㄧˇ	你
moscovium	鏌	115	Mc	ㄇㄛˋ	莫
tennessine	【石+田】	117	Ts	ㄊㄧㄢˊ	田
oganesson	【气+奥】	118	Og	ㄠˋ	澳

Fig. 2: 4 newest chemical elements

Due to the situation, TCA request IRG to process those 2 ideographs 砿(【石+田】) and 氪(【气+奥】) as UNCs.

According the table 2 in IRG N2198, the code chart we suggest like Table 1:

Table 1: part of the code chart

HEX	C	J	K	V
xxxx 气 84.12	氪 GCE-118	氪 T5-xxxx		
yyyy 石 112.5	砿 GCE-117	砿 T4-xxxx		

ISO/IEC JTC 1/SC 2/WG 2/IRG

PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS

FOR ADDITION OF CJK UNIFIED IDEOGRAPHS TO THE REPERTOIRE OF ISO/IEC 10646

Submitters are reminded to:

1.Fill in all the sections below.

2. Read the Principles and Procedures Document (P & P) available at http://appsrv.cse.cuhk.edu.hk/~irg/irg/irg45/IRGN2092PnPv8.pdf

for guidelines and details before filling in this form.

3. Use the latest Form from

http://appsrv.cse.cuhk.edu.hk/~irg/irg/irg45/IRGN2092PnP_BlankDataFile.xls

See also http://appsrv.cse.cuhk.edu.hk/~irg/irgwds.html **for the latest *Unifiable Component Variations.***

A. Administrative

1. **IRG Project Code:**	IRGN2224
2. **Title:**	TCA's Proposal on 2 TCA's UNCs for Chemical Terminology to IRG #48
3. Submitter's Region/Country Name:	TCA
4. Submitter Type (National Body/Individual Contribution):	Individual Contribution
5. Submission Date:	2017-06-21
6. Requested Ideograph Type (Unified or Compatibility Ideographs)	Unified Ideographs
If Compatibility, does the submitter have the intention to register them as IVS (See UTS #37) with the IRG's approval? (Registration fee will not be charged if authorized by the IRG.)	No
7. Proposal Type (Normal Proposal or Urgently Needed)	Urgently Needed
8. Choose one of the following:	
This is a complete proposal	Yes
(or) More information will be provided later.	

B. Technical – General

1. Number of ideographs in the proposal:	*2*
2. Glyph format of the proposed ideographs: (128x128 Bitmap files or TrueType font file)	*Both*
If Bitmap files, are their file names the same as their source references?	*Yes*
If TrueType font file, are all the proposed glyphs put into BMP PUA area?	*Yes*
If TrueType font file, are data for source references vs. character codes provided?	*Yes*
3. Source references:	
Do all the proposed ideographs have a unique, proper source reference (member body/international consortium abbreviation followed by no more than 9 alphanumeric characters)?	Yes
4. Evidence:	
a. Do all the proposed ideographs have a separate evidence document which contains at least one scanned image of printed materials (preferably dictionaries)?	Yes

b. Do all the printed materials used for evidence provide enough information to track them by a third party (ISBN numbers, etc.)?	Yes
5. Attribute Data Format: (Excel file or CSV text)	*Excel*

C. Technical - Checklist

Understanding of the Unification Principles	
1. Has the submitter read ISO/IEC 10646 Annex S and does the submitter understand the unification principles?	*Yes*
2. Has the submitter read the "Unifiable Component Variations" (contact the IRG technical editor through the IRG Rapporteur for the latest version) and does the submitter understand the unifiable variation examples?	*Yes*
3. Has the submitter read the IRG PnP document and does the submitter understand the 5% Rule?	*Yes*
Character-Glyph Duplication (http://www.itscj.ipsj.or.jp/sc2/open/pow.htm contains all the published ones and those under ballot)	
4. Has the submitter checked that the proposed ideographs are ***not unifiable*** with any of the unified or compatibility ideographs of the latest version of ISO/IEC 10646?	*Yes*
If the checking has been done against an earlier version of ISO/IEC 10646, please specify the version? (e.g. 10646:2012)	ISO/IEC 10646:2014(E)
5. Has the submitter checked that the proposed ideographs are ***not unifiable*** with any of the ideographs in the amendments, if any, of the latest version of ISO/IEC 10646?	*Yes*
If yes, which amendment(s) has the submitter checked?	
6. Has the submitter checked that the proposed ideographs are ***not unifiable*** with any of the ideographs in the proposed amendments, if any, of ISO/IEC 10646?	*Yes*
If yes, which draft amendment(s) has the submitter checked?	
7. Has the submitter checked that the proposed ideographs are ***not unifiable*** with any of the ideographs in the current working M-set and D-set of the IRG? (Contact IRG chief editor and technical editor through the IRG Rapporteur for the newest list)	*Yes*
If yes, which document(s) has the submitter checked?	WS2015
8. Has the submitter checked that the proposed ideographs are ***not unifiable*** with any of the over-unified or mis-unified ideographs in ISO/IEC 10646? (See Annex E of the IRG PnP document).	*Yes*
9. Has the submitter checked whether the proposed ideographs have any ***similar ideographs*** in the current standardized or working sets mentioned above?	*Yes*
10. Has the submitter checked whether the proposed ideographs have any ***variant ideographs*** in the current standardized or working sets mentioned above?	*Yes*
Attribute Data	
11. Do all the proposed ideographs have attribute data such as the Kangxi radical code and stroke count?	*Yes*
12. Are there any simplified ideographs (ideographs that are based on the policy described in 簡化字總表) among the proposed ideographs?	*Yes*
If yes, does the proposal include proper simplified/traditional indication flag for each proposed ideograph in the attribute data?	*Yes*
13. Do all the proposed ideographs have the document page number of evidence documents in the attribute data?	*Yes*
14. Do all the proposed ideographs have the proper Ideographic Description Sequence (IDS) in the attribute data?	*Yes*
If no, how many proposed ideographs do not have the IDS?	
15. If the answer to question 9 or 10 is yes, do the attribute data include any information on similar/variant ideographs for the proposed ideographs?	*Yes*

16. Do all the proposed ideographs contains the total stroke count(kTotalStrokes)[1]?	*Yes*

[1] The IRG understands that kTotalStrokes can be ambiguous and subject to different interpretations. The IRG takes no responsibility to check the correctness of the submitted attribute data.