



Report year:  
**2018**

**Annual Report\* of IGCP Project No. 637**

**\*NOTE: MAXIMUM LENGTH OF THE TEXT REPORT IS 5 (FIVE) PAGES (starting from question 1). SINGLE SPACE, 12 POINT FONT. REPORTS EXCEEDING THIS LENGTH WILL BE RETURNED TO THE AUTHOR(S) WITH THE REQUEST OF REDUCING THE TEXT TO THE ABOVE STANDARD.**

**Send to UNESCO and IUGS**  
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Stan.Finney@csulb.edu  
by 01/12/2018

**A LIST OF PUBLICATIONS HAS TO BE ADDED AS AN ANNEX.**

**\*REMINDER: IF THIS IS THE FINAL YEAR OF YOUR PROJECT, PLEASE SUBMIT A REVIEW ARTICLE ABOUT YOUR PROJECT TO THE IUGS JOURNAL 'EPISODES'.**

The scientific information in this report will further be used for publication on the IGCP website hosted at UNESCO (please feel free to attach any additional information you may consider relevant to the assessment of your project).

**IGCP project short title:** Heritage Stone Designation

**Duration:** Five years

**Please tick this box if the report is for a Project on extended term (OET):**

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**Project leader(s):**

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Same as above

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**Date of submission of report:** 1<sup>st</sup> of December, 2018

**Signature of project leader(s):**

## Guidelines for Annual Report

Please use the following headlines to report the present status and scientific achievements of your project (write N/A where not applicable) and explain abbreviations you use in your report.

1. **Website address(es) related to the project** [www.globalheritagestone.com](http://www.globalheritagestone.com)

### 2. **Summary of major past achievements of the project**

At present 105 correspondents (10 more than last year) from 31 countries are actively involved in the project. Our correspondents are committed to various activities when requested, such as paper reviews and GHSR proposal reviews, so they are not only contacts in the list of correspondents.

- Several publications were brought out elaborating our achievements:

- A Geological Society Special Publication (SP407, 2015) entitled “Global Heritage Stone: Towards International Recognition of Building and Ornamental Stones” was published.
- A special issue on Heritage Stones was published in “Episodes” (June 2015).
- A stone heritage book on east and South East Asia was compiled and edited in 2016.
- A special issue on Heritage Stones was published in “Geoscience Canada” in 2016.
- Lola Pereira was invited to publish in a special volume, “Geoscience of the Built Environment 2016 Edition”. It was published by the journal “Geosciences”.
- A Special Issue on “Natural Stone and Architectural Heritage” has been opened for paper submission for the journal Sustainability (Impact Factor: 2,075). The issue will include contributions from the I Workshop on Heritage Stones and EGU 2019 session on heritage stones

### 3. **Achievements of the project this year only**

#### 3.1. *General scientific achievements*

*(Meetings are not considered as scientific achievements, they should be listed under heading 3.3.)*

During 2018 we were able to review and designate seven new global heritage stones: Maltese Globigerina Limestone, Jacobsville Sandstone, Lede stone Welsh Slate, Piedra Mar del Plata, Kolmården serpentine marble, and Lioz limestone. The IUGS EC also approved a design for ratified Heritage Stone Resources for posters to be placed with local government agencies or communities and for educational purposes.

#### 3.2. *List of IGCP project meetings/symposia and IGCP related meetings/symposia with exact attendance (if possible) and number of countries*

- Global Stone Congress 2018 (24-April/2-May, 2018)
  - 170 participants from 12 countries
- I Workshop on Heritage Stones (2-4 of October, 2018)
  - 49 participants from 16 countries

#### 3.3. *Educational, training or capacity building activities related to the IGCP project and IGCP project participants.*

Early career researchers were part of the organizing committee of the I Workshop on Heritage Stones. Some of them had participated in an ERASMUS Intensive Program on Geoheritage, under the guidance of the leader of the meeting that made a call to recruit them for the organization of the Workshop.

#### 3.4. *List of countries involved in the project (please \*indicate the countries active this year and make the distinction between:*

Albania	Austria	Chile
Algeria	Belgium	China
Argentina*	Brazil*	Colombia*
Armenia	Cambodia	Croatia
Australia*	Canada	Cyprus

Czech Republic	Malawi	Slovenia*
Denmark	Malaysia	South Africa
Egypt	Malta*	Spain*
Finland	Mexico	Sweden*
France	Morocco*	Switzerland
Germany*	New Zealand	Thailand
Greece	Netherlands	Timor Leste
Hungary	Norway*	Turkey
India*	Panama	UK
Indonesia	Papua New Guinea	USA*
Ireland	Portugal*	Uruguay
Italy*	Romania*	Vietnam
Japan	Russia	
Korea		

3.5. *Participation of scientists from developing countries, and in particular young and women scientists: exact number and please describe how this project specifically benefited women scientists, young scientists and/or scientists from developing countries*

Seven researchers from developing countries (as stated by UNESCO 2017) attended the I Workshop on Heritage Stones. Four of them were female researchers and they all had an active role as participants. One was also an invited speaker and participant of a round table session. From the seven researchers, five were partially funded with IGCP resources.

	<i>Total number of scientists</i>	<i>Number of male scientists</i>	<i>Number of female scientists</i>
<i>Number of participating scientists</i>	49	25	24
<i>Number of young scientists/students (&lt;35 years old)</i>	11	6	5
<i>Number of scientists from developing countries</i>	7	3	4

3.6. *List of the publications (including maps) of this year*

***a) could not have been published if not for this project and acknowledged as an IGCP project***

Proceedings of I Workshop on Heritage Stones  
[https://issuu.com/home/published/compilacion\\_abstract\\_reducido](https://issuu.com/home/published/compilacion_abstract_reducido)

*b) related to this project*

- Freire-Lista, D and Fort, R. (2018) Historical City Centres and Traditional Building Stones as Heritage: Barrio de las Letras, Madrid (Spain). Geoheritage. <https://doi.org/10.1007/s12371-018-0314-z>
- Navarro, R., Pereira, D., Gimeno, A. del Barrio, S. (2018) Influence of natural carbonation process in serpentinites used as construction and building materials. Construction and Building Materials 170, 537–546
- Pereira, D., González Neila, C., del Arco, A. (2018) Salamanca, city of Stone and Heritage. Diputación de Salamanca.
- Pereira, D. (2018) Natural Stone and World Heritage: Salamanca, Spain. Taylor and Francis (ed.)

Proceedings of the Global Stone Congress 2018  
[https://1drv.ms/b/s!Ai38zqcXGdM\\_h4swDsGLEw5JibAC\\_w](https://1drv.ms/b/s!Ai38zqcXGdM_h4swDsGLEw5JibAC_w)

*c) did you publish in Episodes during the project's duration or plan to do so?*

We have published a Special Issue and several papers in different issues since we started our project. We aim to keep publishing in Episodes and plan to propose another Special Issue at the end of the IGCP.

*3.7. Activities involving other IGCP projects, UNESCO programmes, IUGS Commissions or Task Groups or others*

Our IGCP activities are linked to the IUGS Heritage Stones Subcommittee. We are in touch with other IUGS Commissions, like COGE, exchanging useful information for both.

*3.8. Scientific Legacy: Is there a need for storage of publications, field data, and other results of the project? Do you have a clear vision concerning where the data would be stored and who will be the custodian?*

The main achievement/outcome of our IGCP is the designation of heritage stones as Global Heritage Stones Resource. The list of designated stones as well as potential candidates is maintained and updated in the HSS web page, that has a specific space dedicated to IGCP-637.

*3.9. What tangible improvements has your project obtained? (Besides publications, we are interested to hear about improvements to research, scientific contacts, policy implications, etc.)*

The designation of GHSR has put our group in contact with different stakeholders. For example, the designation of Villamayor Sandstone triggered the collaboration of HSS with the council of Villamayor, as a result a poster (as roll-up) was handed to the village related to the designated stone during our I Workshop on Heritage Stones (annexed to this report). Also, the I Workshop on Heritage Stones, organized under the umbrella of IGCP-637 resulted in an increase in the number of collaborators in the project. Also several IGCP participants are collaborating in different projects related to natural stones in various contexts.

*3.10. What kinds of activities in respect to the benefit of society and science outreach has your project undertaken?*

An important outcome of our project is that we have started to communicate with stakeholders and decision-makers emphasizing the need to use the proper/suitable (and original if possible) stone in the restoration of historic buildings, mainly in World Heritage Sites and Cities. This project also aims at providing the information on proper characterization of the heritage stones so as to promote their use in construction and restoration. Outreach publications and collaborations for web pages have been prepared by members of our IGCP group.

*3.11. What kind of public information (media reports, etc.) has your project generated? And how do you evaluate their impact?*

*Due to the celebration of the I Workshop on Heritage Stones during the 800<sup>th</sup> anniversary of the University of Salamanca, many media reports were published in local papers, university of Salamanca and other institutions web pages, IUGS Social Media... Following are some links:*

- <https://saladeprensa.usal.es/node/115647>
- <https://saladeprensa.usal.es/node/115673>
- <https://www.lagacetadesalamanca.es/salamanca/2018/10/02/restauraciones-anos-70-peligrar-titulo/249817.html>
- <http://www.villamayor.es/noticias/villamayor-sigue-presente-en-el-viii-centenario-con-su-piedra-i-workshop-on-heritage-stones.html>
- <https://www.salamanca24horas.com/albums/view/58800/i-workshop-on-heritage-stones>
- <https://www.facebook.com/iugspage/posts/the-i-workshop-on-heritage-stones-at-salamanca-from-2nd-to-4th-october-was-a-big/1682162815256984/>

Also, the online Global Magazine for Architecture, Art and Design with Natural Stone published an article with the achievements of the IGCP:

<https://www.stone-ideas.com/64790/global-heritage-stone-resource-ghsr/>

3.12. *Project highlight: Select one realization that happened during your project this year that you would like to see highlighted on the UNESCO-IGCP website (for example the publication of a book, the release of documentary, a very high profile publication (level Science or Nature), the unique find of a fossil, etc. You should provide a short text in layman's terms (max. 400 words) and a nice picture or video link, etc. which we can use for the IGCP website.*

2018 has to be highlighted for two important achievements:

- Firstly, we have celebrated our I Workshop on Heritage Stones at Salamanca.
- Secondly, we have published the first book of the Book Series *Natural Stone and World Heritage*, edited by CRC Press (Taylor and Francis). This first book is dedicated to Salamanca, a World Heritage Site since 1988. It is the first of twelve different books that will be published from 2018 to 2022, with the recognition of IGCP-637 as main trigger for the initiative, involving several of the IGCP participants from different countries.

#### 4. Activities planned

##### 4.1. General goals

The main goal for next year is to tighten the objectives of the IGCP-637, advancing the designation of stones from all over the world as GHSR. Our aim is to include more stones from emerging countries where this resource has not been considered as important as it should, mainly in the field of preservation of Heritage.

##### 4.2. Tentative list of specific meetings and field trips (please list the participating countries)

*The most important meeting scheduled for 2019 will be at EGU 2019, Vienna, where we already have proposed a session:*

ERE7.2/EOS11.2, Conveners: Dolores Pereira, Gurmeet Kaur and Maria Heloisa Frascá.  
Heritage Stones: construction and restoration materials for sustainable development.

#### 5. Project funding requested

\$US10,000 per year to assist attendance at the heritage stones meetings, mainly by researchers from low-income countries, female and young researchers.

#### 6. Request for extension, on-extended-term-status, or intention to propose successor project

We request extension, after the support in 2018, for one more year.

#### 7. Financial statement (\$ USD only)

*The IGCP Scientific Board would like to be informed how the IGCP funds were used.*

Please see the specific financial file for statement of 2018 IGCP-637 expenditure.

#### 8. What additional funding besides the IGCP seed funding has your project obtained thanks to the IGCP label? Please estimate the budget received for meetings, research or other and identify the source.

Leader of the I Workshop on Heritage stones received support from various institutions to cover some activities of the workshop: University of Salamanca, USAL 800<sup>th</sup> anniversary office, Berkeley minera, Villamayor city council. Some participants received funding to attend the meetings, either by their own institutions or through research money from local, regional or

national projects. Some funding from IUGS was used to cover travelling expenses of some HSS members to attend the 2018 meetings.

The ABIROCHAS (Brazilian Association of Natural Stone Industry) supported the participation of part of the board of the Heritage Stone Subcommission.

**9. Did all project leaders and participants inform their respective IGCP/IUGS National Committees?**

*Did you as project leaders encourage all project participants to inform their respective IGCP/IUGS National Committees? Did you inform the IGCP/IUGS National Committees of the countries where you had activities (meetings, workshops, capacity building activities, etc.) this year?*

*If not, please explain why?*

*As project leader, I have requested all participants to inform their respective national committees. Many of them confirmed passing on the information to their respective committees.*

**10. Attach any information you may consider relevant**

**Attachments** (check the box if document is attached or included):

- Financial statement
- Meeting report(s)
- Publication list
- Other

<input checked="" type="checkbox"/>
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